

MINOLTA SR-T 102



OWNER'S MANUAL



Your Minolta SR-T 102 is designed and built to give you greater speed and ease of operation and handling.

Both F-number and shutter speed set are visible in the viewfinder. A new-type "micro-split" finder screen aids rapid, accurate focusing. Besides the recognized advantages of full-aperture, through-the-lens metering, this camera features the exclusive Minolta CLC ("Contrast Light Compensator") system for most satisfactory exposure in virtually all lighting situations.

In addition to this better exposure-metering and viewing system, the Minolta SR-T 102 has features that make it handle easier and more responsively.

Multiple exposure capability and a direct-contact "hot shoe" are among the other advanced features of this new camera.

Before using your SR-T 102 for the first time, read this manual carefully all the way through — or at least all the sections needed to cover your own photographic requirements. In this way, you can take good pictures and begin to realize the full potential of your Minolta right from the start.

CONTENTS

NAMES OF PARTS	2
MAJOR FEATURES	4
SPECIFICATIONS	5

PREPARATIONS BEFORE TAKING PICTURES

Inserting the mercury battery	7
Checking the battery power	9
Loading film	10
Setting the ASA number (film speed)	14
ASA/DIN converting scale	14

TAKING PICTURES

TTL with CLC: A new exposure measuring system	15
Setting the correct exposure	16
Shutter speed and aperture settings	18
Focusing the camera	20
Holding the camera	21

TAKING FLASH PICTURES

Attaching flash unit	23
Setting correct exposure	24

MORE ADVANCED GUIDES

Depth of field

Lens aperture controls	
depth of field	25
Depth-of-field table of MC Rokkor-X 50mm F1.4 and F1.7 lens (in feet) ...	27
Depth-of-field table of MC Rokkor-X 50mm F1.4 and F1.7 lens (in meters) .	28
Depth-of-field table of MC Rokkor-X 58mm F1.2 lens (in feet)	29
Depth-of-field table of MC Rokkor-X 58mm F1.2 lens (in meters)	30
Checking the effects of depth of field .	31
Mirror lock-up control	32
Self-timer	33
Infrared index	34
Film plane index	34
MULTIPLE EXPOSURES	35
UNLOADING EXPOSED FILM	35
CHANGING LENSES	37

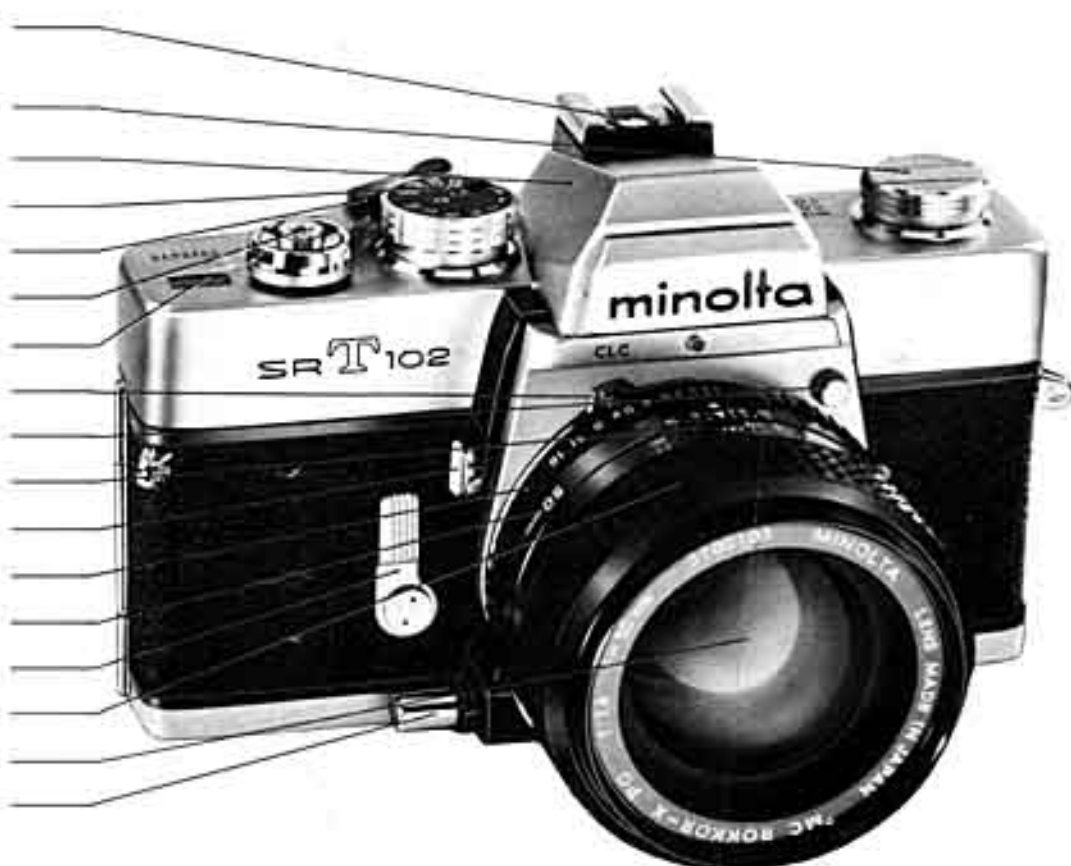
USING OTHER THAN MC (METER-COUPLED) LENSES

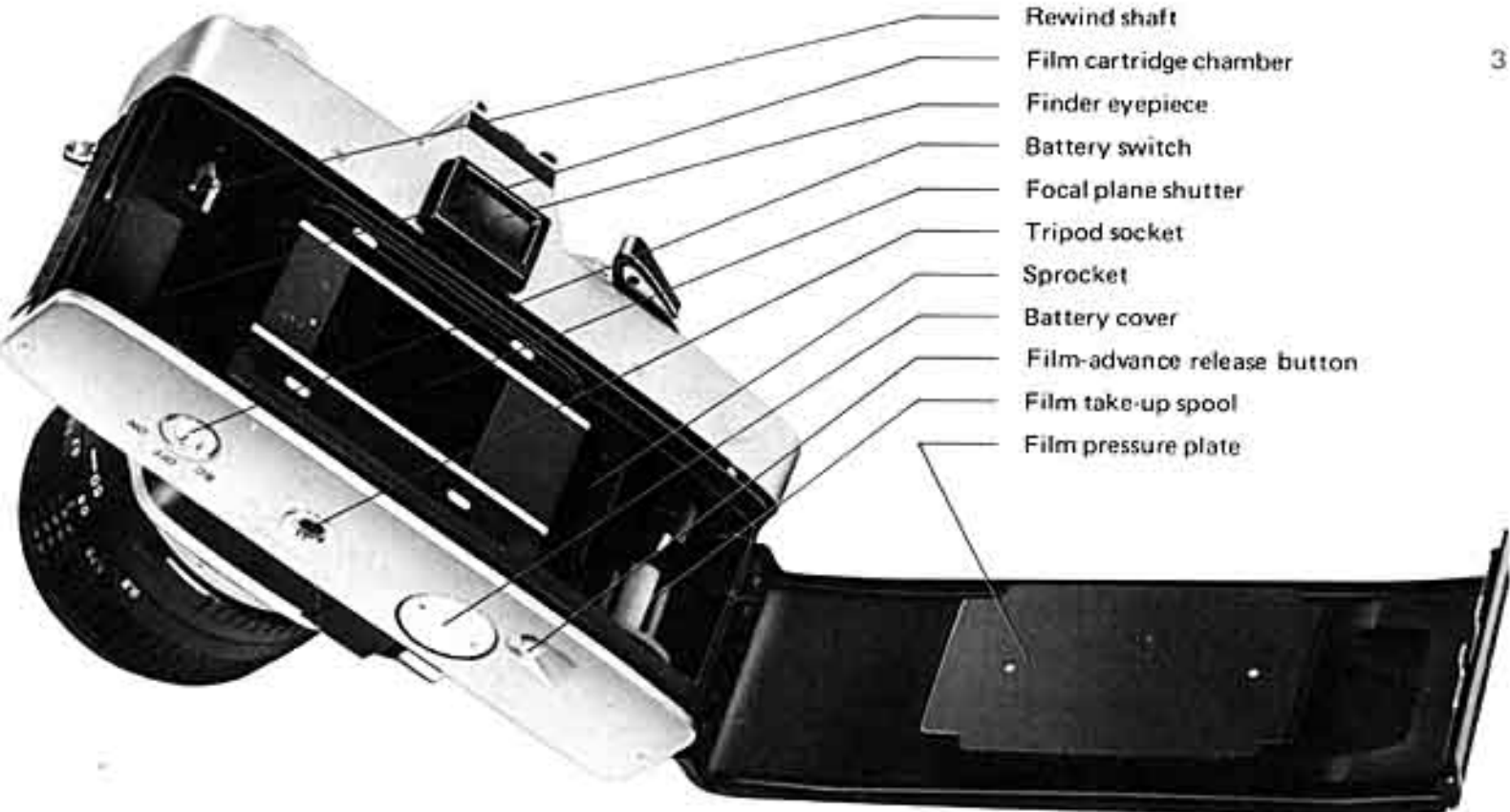
Auto Rokkor Lenses	39
Manual preset Rokkor Lenses	40

CARE AND STORAGE

NAMES OF PARTS

Hot shoe	
Film rewind crank and back cover release knob	
Pentaprism	
Shutter and ASA speed dial	
Film advance lever	
Shutter release button	
Exposure counter	
Meter coupler	
Lens release button	
Depth-of-field scale	
Mirror lock-up button	
Diaphragm ring	
Distance scale	
Self-timer lever	
Focusing ring	
Rokkor-X lens	
Diaphragm stop-down button	





MAJOR FEATURES OF THE MINOLTA SR-T 102

1. Better Through-the-Lens Exposure System

- Exposure readings are taken with the lens at full aperture for greatest metering accuracy and best viewing and focusing.
- Since only light to strike the film is measured, there is no need to compensate for filters, greater-than-normal lens extension, etc.
- The exclusive CLC metering system combines advantages of spot and averaging types to yield optimum exposure even in high-contrast lighting situations.

2. "Information-Center" Viewfinder

- Meter and follower needles in the viewfinder show correct exposure setting at a glance.
- Both shutter speed and F-number set are visible without taking eye from finder.
- A new focusing aid employing a split-image spot with a microprism band facilitates focusing virtually any kind of subject.

3. Multiple-Exposure Capability

Creative possibilities are greatly expanded

by the 102's ability to make multiple exposures simply and positively.

4. Direct-Contact "Hot Shoe"

This accepts either cordless units or conventional ones with cords.

5. World-Renowned Minolta Lenses

- Compact, newly computer-designed Celtic lenses are your thrifty choice.
- The wide range of Rokkor-X lenses offer top quality with exclusive Achromatic coating.

These and other MC lenses permit full-aperture TTL operation, while any other interchangeable Minolta SLR lens ever made can be used with the stop-down method.

6. Complete System Accessories

A full line of quality Minolta and adapted Leitz accessories makes for maximum versatility with the 102.

—35mm single-lens-reflex camera with through-the-lens exposure metering—

Standard lens MC Rokkor-X 50mm F1.4 (F1.7 or 58mm F1.2) equipped with meter coupler

Composition: 7 elements in 5 groups

Coating: Achromatic coating

Angle of view: 47° with 50mm lens (41° with 58mm lens)

Diaphragm: Fully automatic

Diaphragm scale: (1.2), 1.4, (1.7), 2.2, 2.8, 4, 5.6, 8, 11, 16 with equal-space and intermediate click F-stops

Filter/shade mount: ϕ 55mm, screw-in

Lens mount: Minolta bayonet mount

Shutter Focal-plane type

Speeds: B, 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/125, 1/250, 1/500, and 1/1000 sec.

Selector dial: Single, non-spinning, equal-space, click stop dial

Sync. terminal: Single terminal with X/FP selector switch

Self-timer: Time adjustable, 10 sec. maximum delay

Film advance Lever type, quick advance winding with shutter cocking and double exposure prevention

Winding method: Single-or multiple-stroke, with 20° free clearance

Winding angle: 150°

Frame counter: Automatic resetting counter showing number of exposed frames

Film rewinding: Rapid rewinding with crank

Frame size: 36 x 24mm

Film: Standard 35mm film, 12, 20, or 36 exposures

Viewfinder Real-image type through fixed, eye-level pentaprism; exposure-control needles (follower system), battery check mark, shutter speed scale, and F-number visible in finder

Focusing screen: Mat Fresnel with a ϕ 2.5mm central horizontally oriented split-image spot surrounded by a micropism band 1.5mm wide

Exposure meter Through-the-lens metering system

Exposure meter: Contrast light compensator (CLC) with two CdS cells on the pentaprism

Measurement: Measuring at full aperture coupled to shutter speed, aperture and film speed setting

Control: Follower-needle system viewed in the finder

Working range: EV 3 to EV 17 with ASA 100 film

Diaphragm button: Depth-of-field preview button for MC (Meter-Coupled) Lenses; measuring (stop-down) button for other than MC lenses

Film speed range: ASA 6 – 6400, DIN 9 – 39

ASA setting: On shutter speed dial; built-in ASA/DIN conversion scale on camera back

Battery: 1.35v mercury battery, Mallory PX-625 or equivalent

Switch: ON, OFF, and battery check switch on base of camera

Focusing Bright-screen with micro-split and fine ground glass

Focusing distance: 50cm (1.75 ft.) to infinity

Focusing method: Direct helicoid focusing with infrared index

Mirror Oversize quick-return mirror with lock-up device

Others Built-in accessory hot shoe

Size and weight Body only

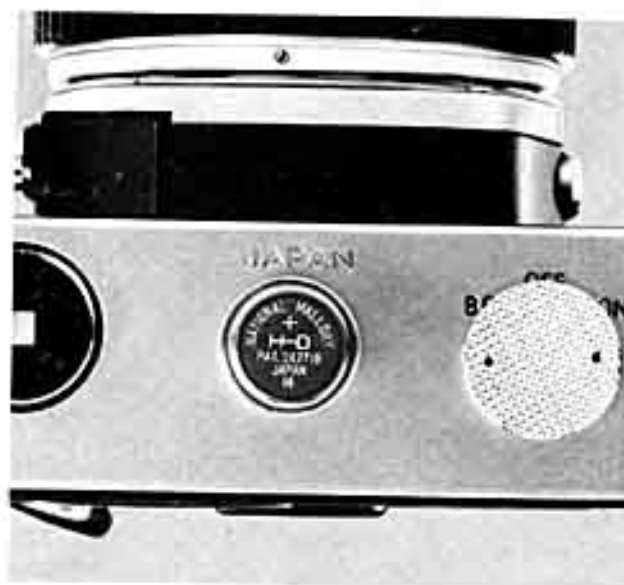
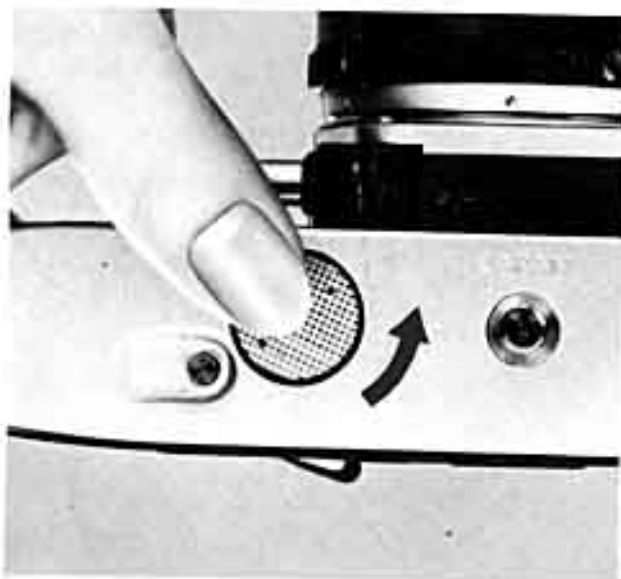
Width 145mm (5-3/4"); Depth 47.5mm (1-7/8"); Height 95mm (3-3/4"); 710g (25 oz.)

(All the illustrations in this manual are with the F1.4 standard lens. There is, however, no fundamental difference in use between this and the other interchangeable MC Rokkor, Celtic, or Rokkor-X Lenses.)

PREPARATIONS BEFORE TAKING PICTURES

Inserting the mercury battery

1. The Minolta SR-T 102 uses a 1.35v, button-shape mercury battery for photographic applications (Mallory PX-625, PX-13, Eveready EXP-625, EPX-13 or equivalent).
2. To install, remove the battery chamber cover with your thumb by turning it counterclockwise. Place the battery in the chamber with its plus side out and replace the cover.



8



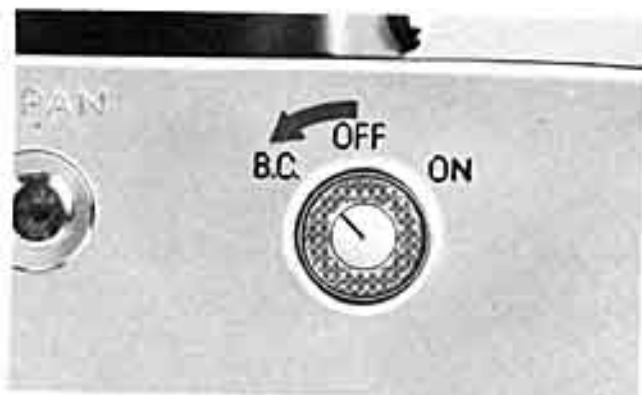
CAUTION:

- Do not touch the battery terminals with moist or dirty hands, as this can cause them to deteriorate and make the battery inoperative.
- Do not discard a mercury battery in a fire or break it up.
- When the camera is not being used, it is advisable to turn the battery switch on the base of the camera to the "OFF" position.
- If the camera is not to be used for over a month, remove the battery and store it in a dry, cool place.
- Before putting the battery back in the camera, clean both sides of the battery and the contact lead of the battery chamber with dry cloth.

Checking the battery power

The battery checker is designed to check the output of the mercury battery. By taking a few seconds to check battery output before starting each new roll of film, and particularly when using the camera after it has been stored for an extended period of time or a new battery has been inserted, you can avoid poor exposure due to insufficient electric power.

1. Turn the battery switch on the base of the camera to the "B.C." position.



2. If the indicator needle points to the battery check mark as shown in the picture, the battery can be regarded as functioning properly.

CAUTION:

- Do not leave switch setting at battery check position as the continuous high battery drain will cause the battery to go "dead" in a few hours.

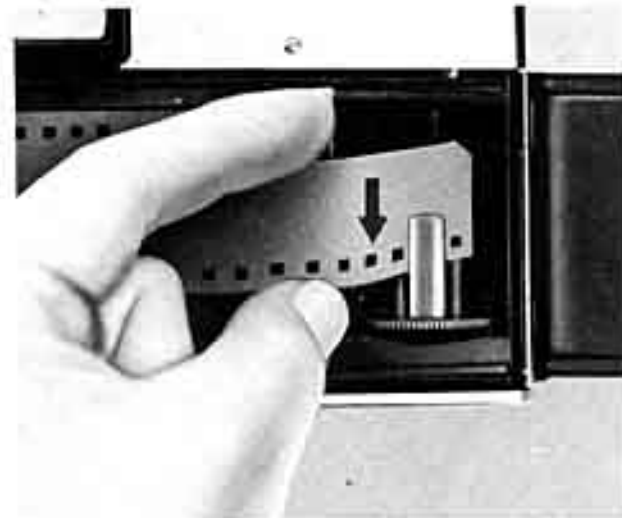


Loading film

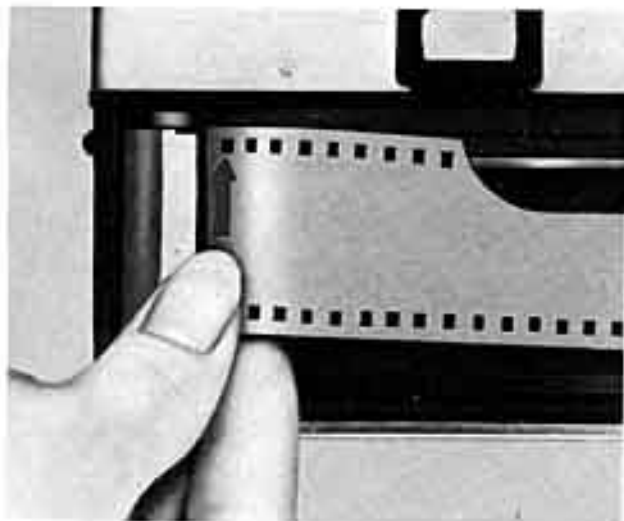
1. Raise the back cover release knob (which also incorporates the film rewind knob) until some resistance is felt. With a slight additional pull, the back cover will automatically "pop" open.



2. Insert the film leader into a slot in the film take-up spool as shown.



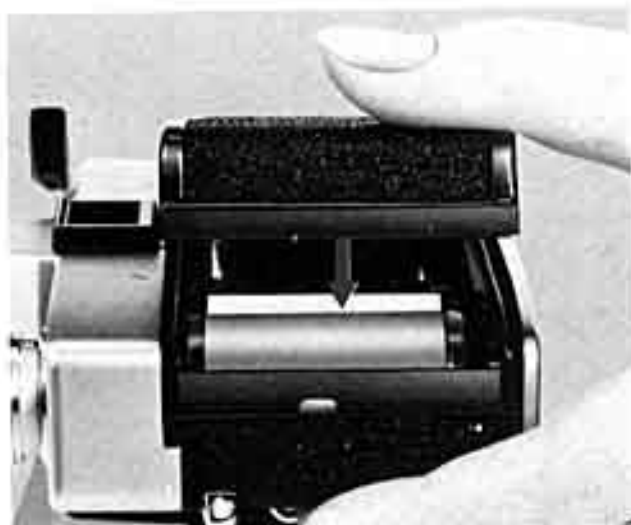
3. Place the film cartridge into the film cartridge chamber and push the back cover release knob all the way down. (When inserting the film cartridge, its projecting center drum must be placed in a downward position.)



4. Operate the film advance lever in several short strokes until the film has begun to wind firmly around the take-up drum and both sides of the film perforations are securely engaged with the teeth of the sprocket gear. If the film advance lever locks during this procedure, press the shutter release button and then continue.



5. Close the camera back once you are certain that the film is winding securely on the take-up spool and engaged with on both sprockets. Rotate the film rewind crank gently in the direction of the arrow to make sure that the film is flat against the pressure plate.



6. Advance the film and press the shutter release button. Repeat this action until the number "1" appears at the arrow mark in the exposure counter window.



NOTE:

- The frame counter indicates the number of pictures taken from 1 to 36.
- The film advance lever has a total "throw" of 170° ; of this distance, the first 20° have no effect on the film but are intended to provide a "free play" range through which the lever may be "offset" from the body for rapid shooting.
- When the camera back is opened, the counter automatically resets itself to the start (S) position.



14.

Setting ASA number (film speed)

Lift and rotate the shutter speed dial until the figure (6 to 6400) which corresponds with the ASA rating of your film is visible in the ASA window.

On the ASA dial the following figures are printed: 6 • 10 • 16 • 25 • 50 • 100 • 200 • 400 • 800 • 1600 • 3200 • 6400.

The dots (•) denote ASA 8, 12, 20, 32, 40, 64, 80, 125, 160, 250, 320, 500, 640, 1000, 1300, 2000, 2600, 4000, and 5200, respectively.



ASA/DIN conversion scale

To convert DIN film speed to the corresponding ASA value, use the conversion scale located on the back cover of the camera. (The inner numbers are DIN.)



TTL with CLC: A new exposure measuring system

The Minolta SR-T 102 camera has a through-the-lens measuring system with CLC meter.

Minolta's exclusive, revolutionary CLC "Contrast Light Compensator" promises better photographic results with multiple split exposure measuring system.

Under normal photo-taking conditions this new system gives excellent results; under other conditions, such as in high-contrast scenes, the CLC feature prevents possible photo failures.



Setting the correct exposure

When aiming the camera at your subject through the viewfinder, you will see the indicator needle moving. Once the indicator needle has stopped moving, turn the shutter speed dial and/or the diaphragm ring to align the follower needle (circle-tipped needle) with the indicator needle.



The shutter speed set is indicated in the viewfinder beneath the frame, while the F-number of the aperture set appears above the frame.



When the proper combination of aperture and shutter speed setting is made for correct exposure, the follower needle (which is coupled to the aperture, shutter speed, and ASA speed settings) will align with the indicator needle over a range of EV 3 through EV 17 at ASA 100. The EV range will vary with film speed.

It is a recommended procedure to set the shutter speed first (depending on the motion or lack of motion of your subject or the overall lighting) and to then adjust the aperture.

If the needle fails to move when the diaphragm ring is rotated, this signals a need to adjust your shutter speed setting.

Since F-number and shutter-speed indications as well as meter and follower needles are continuously visible in the viewfinder, you can make all exposure adjustments and know exactly the settings you are making without taking the camera away from your eye.

CAUTION:

- When setting the aperture first, be sure not to set the shutter speed between click stops.
- When the shutter speed is set slower than 1/30th sec., be extremely careful of camera motion while releasing the shutter. It is recommended that a tripod be used at speeds of 1/30th sec. or slower. For "Bulb" setting, a cable release should also be used.
- When using high-speed film, a shutter speed of 1/250th sec. is recommended for outdoor photography, and 1/30th sec. for indoor use.
- When photographing a group of people or a building requiring great depth of field, close down the diaphragm as much as possible. See the "depth of field" on page 25 for details.
- All metering should be done in horizontal position.

Shutter speed and aperture settings

The shutter speed (the period of time during which the shutter remains open) works in conjunction with the lens opening (aperture) to determine the amount of light striking the film. The higher the shutter speed, the more effectively it will momentarily "stop" the action of your subject.

To set shutter speed, simply rotate the shutter speed dial until the desired speed indication is aligned with the index on the camera body, or until it is centered between indicators on the shutter speed scale in the viewfinder.

The figure of B and 1 through 1000 on the shutter speed dial respectively indicate bulb action and shutter speeds from 1 to 1/1000th second. (At "B" the shutter will remain open until pressure is removed from the release button.)

The aperture setting controls the light reaching the film at any given shutter speed. In addition, it determines the "depth of field." (See page 25.)



The lens aperture ring is engraved with F-numbers from maximum aperture through 16. The lens opening is set by rotating this until the desired number is aligned with the index (• or ♦) or appears above the frame in the viewfinder.

When other conditions remain constant, light passing through a lens generally decreases 50 percent for every full-stop increase in F-number (for example, when the aperture number of a fast lens is increased from F5.6 to F8, the light passing to the film decreases by 50 percent).

As the aperture figure decreases, the light

F-No.	1.2	1.4	2	2.8	4	5.6	8	11	16
Theoretical Light Volume	3	2	1	1/2	1/4	1/8	1/16	1/32	1/64



passed increases. The theoretical relation between aperture and light volume is shown in the diagram. In practice, this varies somewhat at large of maximum apertures, but your SR-T 102 and MC Rokkor-X lenses have built-in compensation for this to give you most satisfactory exposure.

NOTE:

- "Click" stops are provided for half-stop aperture settings. Intermediate shutter speeds cannot be set.
- The figure "B" on the shutter speed dial is used when an exposure duration of over 1 second is required. The shutter will remain open while the shutter release is depressed.
- The red figure "60" on the shutter speed dial indicates the maximum shutter speed to be used in conjunction with electronic flash.
- Since light striking the film is affected by a combination of aperture and shutter speed, exposure can be adjusted by changing either or both of these settings.
- The shutter speed at which the camera is set can be seen from the scale visible below the frame in the viewfinder. With most lenses, the F-number set is displayed above the viewfield in the finder.

Focusing the camera

The focusing screen of the Minolta SR-T 102 has a central horizontally oriented split-image spot surrounded by a circular microprism band. You can choose either of these focusing aids according to the subject and your preference.

To focus using the split-image spot, look through the viewfinder and turn the focusing ring on the lens until the upper and lower images in the split-image spot are exactly aligned with no broken lines between them.

For microprism focusing, turn the ring until the image is no longer broken up but appears clear in the microprism band.

In focus



Out of focus

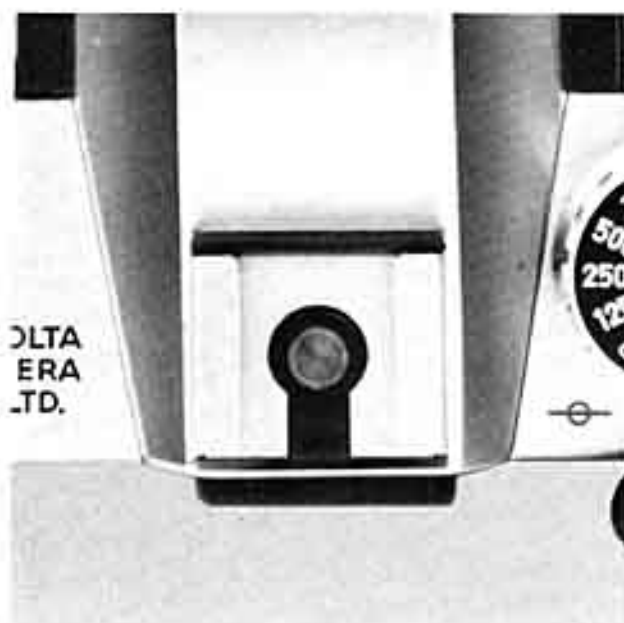


Attaching flash unit

Cordless clip-on flash units are connected by simply sliding them into the direct-contact "hot shoe" located on top of the pentaprism housing.

Sync. cords of either clip-on or bracket-type conventional units that have them must be plugged into the camera sync. terminal for operation.

23



24



Setting correct exposure

To determine the correct aperture for flash photography, get the "guide number" of the flash bulb you are using. Then make this simple computation:

$$\frac{\text{Guide Number}}{\text{Distance to Subject}} = \text{Aperture Setting (F-stop)}$$

For example, when flash bulb guide number is 80 (in feet) and the distance to the subject is 10 feet (with ASA 100 film, using shutter speed or 1/60th sec.),

$$\text{the F-stop is: } \frac{80}{10} = 8$$

NOTE:

- When using M-class flash bulbs, a shutter speed of 1/15th sec. or slower is recommended.
- Use "blue" flash bulbs generally for color photography.

Depth of field

Lens aperture controls depth of field

When the lens is accurately focused on a subject, there is a certain depth both in the foreground and the background which is also considered to be in focus. This area is known as the "depth of field."

The sharp focus area in the foreground is usually shallower than the sharp focus area in the background.

Depth-of field has the following characteristics which should be considered when pictures are composed:

- 1. As the lens aperture decreases, the area of sharp focus increases. As lens aperture increases, the area of sharp focus decreases.
- 2. As the distance from camera to subject is increased, so is the area of sharp focus.
- 3. A telephoto lens has a shallower depth of field than a wideangle lens.

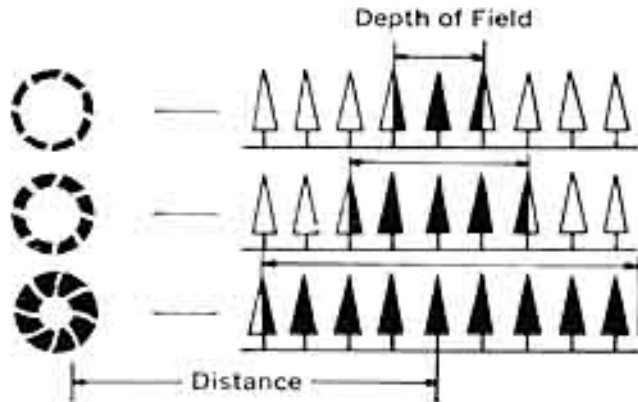
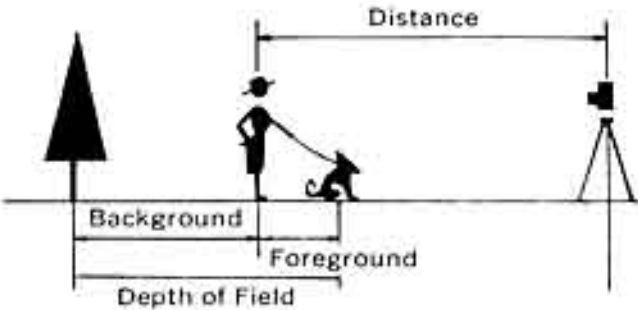
Full aperture opening



Small aperture opening



The depth-of-field scale engraved on lens barrel enables you to determine the depth of field in which focus will be acceptably sharp. For example, if you focus on a subject 15 feet away and use an F8 aperture, read the distance opposite the two figures 8. In this case the picture will be sharp from approximately 10 to 27 feet. (See page 27.)



Depth-of-field table of MC Rokkor-X 50mm F1.7 and F1.4 Lenses (in feet)

F No. Dist. (ft.)	1.4	1.7	2.8	4	5.6	8	11	16
∞	189' 10"	155' 3"	95'	66' 6"	47' 7"	33' 4"	24' 3"	16' 9"
30	35' 7" 25' 11"	37' 1" 25' 2"	43' 7" 22' 10"	54' 2" 20' 9"	80' 1" 18' 6"	83' 11" 15' 11"	13' 6"	10' 10"
15	16' 3" 13' 11"	16' 7" 13' 9"	17' 9" 13'	19' 3" 12' 4"	21' 8" 11' 6"	26' 10" 10' 5"	38' 2" 9' 4"	130' 6" 8'
10	10' 6 ³ / ₈ " 9' 6 ³ / ₈ "	10' 7 ¹ / ₈ " 9' 5"	11' 1 ¹ / ₂ " 9' 9 ¹ / ₈ "	11' 8 ¹ / ₄ " 8' 8 ¹ / ₈ "	12' 6 ³ / ₈ " 8' 3 ³ / ₈ "	14' 8 ¹ / ₈ " 7' 9 ³ / ₈ "	16' 7 ³ / ₈ " 7' 2"	23' 10 ¹ / ₈ " 6' 4 ¹ / ₄ "
7	7' 3" 6' 9 ¹ / ₈ "	7' 3 ¹ / ₈ " 6' 8 ¹ / ₈ "	7' 6 ¹ / ₄ " 6' 6 ¹ / ₂ "	7' 9 ¹ / ₄ " 6' 4 ³ / ₈ "	8' 1 ¹ / ₂ " 6' 1 ³ / ₄ "	8' 8 ¹ / ₈ " 5' 10 ¹ / ₈ "	9' 7 ¹ / ₈ " 5' 6 ¹ / ₈ "	11' 7 ¹ / ₈ " 5' 1 ¹ / ₄ "
5	5' 1 ¹ / ₂ " 4' 10 ³ / ₈ "	5' 1 ³ / ₄ " 4' 10 ¹ / ₄ "	5' 3" 4' 9 ³ / ₈ "	5' 4 ³ / ₈ " 4' 8 ³ / ₈ "	5' 6 ³ / ₈ " 4' 6 ¹ / ₈ "	5' 9 ³ / ₈ " 4' 4 ¹ / ₈ "	6' 2 ³ / ₈ " 4' 2 ³ / ₈ "	6' 11 ³ / ₈ " 3' 11 ³ / ₈ "
4	4' 2 ³ / ₈ " 3' 11 ¹ / ₈ "	4' 1 ¹ / ₈ " 3' 10 ¹ / ₈ "	4' 1 ³ / ₈ " 3' 10 ¹ / ₄ "	4' 2 ¹ / ₈ " 3' 9 ¹ / ₂ "	4' 3 ³ / ₈ " 3' 8 ³ / ₈ "	4' 5 ¹ / ₈ " 3' 7 ³ / ₈ "	4' 8 ³ / ₈ " 3' 5 ³ / ₈ "	5' 11 ³ / ₈ " 3' 3 ¹ / ₂ "
3.5	3' 6 ¹ / ₈ " 3' 5 ³ / ₈ "	3' 6 ¹ / ₈ " 3' 5 ³ / ₈ "	3' 7 ³ / ₈ " 3' 4 ³ / ₈ "	3' 8" 3' 4 ¹ / ₈ "	3' 8 ³ / ₈ " 3' 3 ³ / ₈ "	3' 10 ³ / ₈ " 3' 2 ³ / ₈ "	4' 1 ¹ / ₈ " 3' 1 ¹ / ₄ "	4' 3 ³ / ₈ " 2' 11 ³ / ₈ "
3	3' 7 ³ / ₈ " 2' 11 ¹ / ₂ "	3' 8 ³ / ₈ " 2' 11 ³ / ₈ "	3' 1" 2' 11"	3' 1 ³ / ₈ " 2' 10 ³ / ₈ "	3' 2 ³ / ₈ " 2' 10 ¹ / ₄ "	3' 3" 2' 9 ³ / ₈ "	3' 4 ³ / ₈ " 2' 8 ¹ / ₂ "	3' 6 ³ / ₈ " 2' 7 ¹ / ₈ "
2.5	2' 6 ³ / ₈ " 2' 5 ³ / ₈ "	2' 6 ¹ / ₈ " 2' 5 ³ / ₈ "	2' 6 ³ / ₈ " 2' 5 ³ / ₈ "	2' 6 ³ / ₈ " 2' 5 ¹ / ₈ "	2' 7 ³ / ₈ " 2' 4 ¹ / ₈ "	2' 8" 2' 4 ³ / ₈ "	2' 8 ³ / ₈ " 2' 3 ³ / ₈ "	2' 10 ³ / ₈ " 2' 2 ³ / ₈ "
2	2' 3 ³ / ₈ " 1' 11 ¹ / ₄ "	2' 3 ³ / ₈ " 1' 11 ¹ / ₄ "	2' 3 ³ / ₈ " 1' 11 ³ / ₈ "	2' 3 ³ / ₈ " 1' 11 ³ / ₈ "	2' 1 ³ / ₈ " 1' 11 ³ / ₈ "	2' 1 ³ / ₈ " 1' 10 ³ / ₈ "	2' 1 ³ / ₈ " 1' 10 ¹ / ₂ "	2' 2 ¹ / ₂ " 1' 9 ³ / ₈ "
1.75	1' 9 ¹ / ₈ " 1' 8 ¹ / ₈ "	1' 9 ¹ / ₈ " 1' 8 ¹ / ₈ "	1' 9 ¹ / ₈ " 1' 8 ¹ / ₈ "	1' 9 ¹ / ₈ " 1' 8 ¹ / ₈ "	1' 9 ¹ / ₈ " 1' 8 ¹ / ₈ "	1' 9 ¹ / ₈ " 1' 8 ¹ / ₈ "	1' 10 ¹ / ₈ " 1' 7 ³ / ₈ "	1' 10 ¹ / ₈ " 1' 7 ³ / ₈ "

Depth-of-field table of MC Rokkor-X 50mm F1.7 and F1.4 Lenses (in meters)

F No. Dist. (m)	1.4	1.7	2.8	4	5.6	8	11	16
∞	57.9	47.3	29.0	20.3	14.5	10.2	7.4	5.1
10	12.1 8.5	12.6 8.3	15.2 7.5	19.6 6.7	31.7 5.9	481.7 5.1	∞ 4.3	∞ 3.4
5	5.5 4.6	5.6 4.5	6.0 4.3	6.6 4.0	7.6 3.7	9.7 3.4	15.0 3.0	168.2 2.6
3	3.16 2.86	3.19 2.83	3.33 2.73	3.50 2.63	3.75 2.51	4.20 2.34	4.94 2.16	7.01 1.92
2	2.07 1.94	2.08 1.92	2.14 1.88	2.20 1.83	2.30 1.77	2.46 1.69	2.69 1.60	3.19 1.46
1.5	1.54 1.47	1.54 1.46	1.58 1.43	1.61 1.41	1.66 1.37	1.74 1.32	1.85 1.27	2.06 1.18
1.2	1.22 1.18	1.23 1.17	1.25 1.16	1.27 1.14	1.30 1.12	1.34 1.09	1.41 1.05	1.53 0.99
1.0	1.02 0.99	1.02 0.98	1.03 0.98	1.05 0.96	1.06 0.94	1.10 0.92	1.14 0.90	1.21 0.85
0.9	0.91 0.89	0.91 0.89	0.92 0.88	0.94 0.87	0.95 0.85	0.98 0.84	1.01 0.82	1.06 0.78
0.8	0.81 0.79	0.81 0.79	0.82 0.78	0.83 0.77	0.84 0.77	0.86 0.75	0.88 0.73	0.92 0.71
0.7	0.71 0.69	0.71 0.69	0.71 0.69	0.72 0.68	0.73 0.67	0.74 0.66	0.76 0.65	0.79 0.63
0.6	0.61 0.60	0.61 0.59	0.61 0.59	0.61 0.59	0.62 0.58	0.63 0.57	0.64 0.56	0.66 0.55
0.5	0.51 0.50	0.51 0.50	0.51 0.49	0.51 0.49	0.51 0.49	0.52 0.48	0.53 0.48	0.54 0.47

Depth-of-field table of MC Rokkor-X 58mm F1.2 Lens (in feet)

F No. Dist. (ft.)	1.2	2	2.8	4	5.6	8	11	16
∞	282' [∞]	171' [∞]	121' [∞]	85' [∞]	61' [∞]	43' [∞]	30' [∞]	22' [∞]
30	33' 6" 27' 2"	36' 3" 25' 7"	39' 9" 24' 1"	45' 11" 22' 4"	59' 20' 2"	98' 17' 9"	15' 2" [∞]	12' 8" [∞]
15	15' 10" 14' 3"	16' 5" 13' 10"	17' 1" 13' 5"	18' 1" 12' 10"	19' 9" 12' 1"	22' 9" 11' 3"	29' 10' 2"	47' 7" 9'
10	10' 4" 9' 8' ^{1/16} "	10' 7" 9' 6"	10' 10" 9' 3"	11' 3" 9'	11' 10" 8' 8"	12' 11" 8' 2"	14' 8" 7' 7"	18' 2" 6' 11"
7	7' 2' ^{1/16} " 6' 10' ^{1/16} "	7' 3" 6' 9"	7' 5" 6' 8"	7' 7" 6' 6"	7' 10" 6' 4"	8' 3" 6' 1"	8' 11" 5' 9"	10' 1" 5' 5"
5	5' 1' ^{1/16} " 4' 11' ^{1/16} "	5' 2" 4' 10"	5' 2" 4' 10"	5' 3" 4' 9"	5' 5" 4' 8"	5' 7" 4' 6"	5' 10" 4' 4"	6' 4" 4' 2"
4	4' 6' ^{1/16} " 3' 11' ^{1/16} "	4' 1" 3' 11"	4' 1" 3' 11"	4' 2" 3' 10"	4' 3" 3' 9"	4' 4" 3' 8"	4' 6" 3' 7"	4' 9" 3' 5"
3.5	3' 6' ^{1/16} " 3' 5' ^{1/16} "	3' 6' ^{1/4} " 3' 5' ^{1/4} "	3' 7" 3' 5"	3' 7' ^{1/2} " 3' 4' ^{1/2} "	3' 8' ^{1/4} " 3' 4"	3' 9' ^{1/4} " 3' 3' ^{1/4} "	3' 10' ^{3/4} " 3' 2' ^{1/4} "	4' 3' ^{3/4} " 3' 3' ^{3/4} "
3	3' " 2' 11' ^{1/16} "	3' " 2' 11' ^{1/2} "	3' " 2' 11' ^{3/4} "	3' 1" 2' 11"	3' 1' ^{1/2} " 2' 10' ^{1/2} "	3' 2' ^{1/4} " 2' 10"	3' 3' ^{1/4} " 2' 9' ^{1/4} "	3' 4' ^{3/4} " 2' 8' ^{1/4} "
2.5	2' 6' ^{1/16} " 2' 5' ^{1/4} "	2' 6' ^{3/2} " 2' 5' ^{3/4} "	2' 6' ^{1/2} " 2' 5' ^{1/2} "	2' 6' ^{3/4} " 2' 5' ^{3/4} "	2' 7" 2' 5"	2' 7' ^{1/2} " 2' 4' ^{3/4} "	2' 8' ^{1/4} " 2' 4' ^{1/4} "	2' 9" 2' 3' ^{1/2} "
2.25	2' 3' ^{1/8} " 2' 2' ^{1/16} "	2' 3' ^{1/4} " 2' 2' ^{3/4} "	2' 3' ^{1/2} " 2' 2' ^{1/4} "	2' 3' ^{3/4} " 2' 2' ^{1/2} "	2' 3' ^{3/4} " 2' 2' ^{1/4} "	2' 4' ^{1/4} " 2' 2"	2' 4' ^{3/4} " 2' 1' ^{1/2} "	2' 5' ^{1/2} " 2' 1"
2	2' 3' ^{1/8} " 1' 11' ^{1/16} "	2' 3' ^{1/4} " 1' 11' ^{3/4} "	2' 3' ^{1/4} " 1' 11' ^{3/4} "	2' 3' ^{1/2} " 1' 11' ^{3/4} "	2' 3' ^{3/4} " 1' 11' ^{1/2} "	2' 3' ^{3/4} " 1' 11' ^{1/4} "	2' 1' ^{1/4} " 1' 10' ^{3/4} "	2' 1' ^{3/4} " 1' 10' ^{1/4} "

Depth-of-field table of MC Rokkor-X 58mm F1.2 Lens (in meters)

F No. Dist. (m)	1.2	2	2.8	4	5.6	8	11	16
∞	86.0 [∞]	53.8 [∞]	38.0 [∞]	26.9 [∞]	19.1 [∞]	13.5 [∞]	9.6 [∞]	6.8 [∞]
10	11.3 9.0	12.2 8.5	13.5 8.0	15.8 7.3	20.8 6.6	37.7 5.8	4.9 [∞]	4.1 [∞]
5	5.3 4.7	5.5 4.6	5.7 4.4	6.1 4.2	6.7 4.0	7.8 3.7	10.2 3.3	18.1 2.9
3	3.10 2.90	3.17 2.85	3.24 2.79	3.36 2.71	3.53 2.61	3.81 2.48	4.29 2.31	5.22 2.11
2	2.04 1.96	2.07 1.93	2.10 1.91	2.15 1.87	2.22 1.82	2.32 1.76	2.48 1.68	2.79 1.57
1.5	1.52 1.48	1.54 1.46	1.56 1.45	1.58 1.43	1.61 1.40	1.67 1.37	1.75 1.32	1.88 1.25
1.2	1.22 1.19	1.22 1.18	1.23 1.17	1.25 1.16	1.27 1.14	1.30 1.11	1.35 1.08	1.42 1.04
1	1.01 0.99	1.02 0.99	1.02 0.98	1.03 0.97	1.05 0.96	1.07 0.94	1.10 0.92	1.14 0.89
0.9	0.91 0.89	0.91 0.89	0.92 0.88	0.93 0.88	0.94 0.87	0.95 0.85	0.98 0.84	1.01 0.81
0.8	0.81 0.79	0.81 0.79	0.81 0.79	0.82 0.78	0.83 0.77	0.84 0.76	0.86 0.75	0.89 0.73
0.7	0.71 0.70	0.71 0.70	0.71 0.69	0.71 0.69	0.72 0.68	0.73 0.67	0.74 0.66	0.76 0.65
0.6	0.60 0.60	0.61 0.60	0.61 0.59	0.61 0.59	0.61 0.59	0.62 0.58	0.63 0.57	0.64 0.56

Checking the effects of depth of field

MC Lenses are designed with a meter coupler which permits them to remain wide open during viewing, focusing, and exposure setting. In order to check your depth of field visually when using these lenses push the diaphragm stop-down button on the camera body after the aperture has been set.

When using other lenses designed for the Minolta SR-1, SR-3 or SR-7, use the preview button on the lens barrel or the camera's diaphragm button.

- When the diaphragm stop-down button is pushed, after you advance the film, the diaphragm closes down to the preset aperture and locks. When the button is pressed again, the diaphragm reopens fully.



Mirror lock-up control

The mirror lock-up control is used in conjunction with the Rokkor 21mm F4 or F4.5 ultra wideangle lenses. When activated, the mirror is locked in an "up" position to prevent it from coming into contact with the rear element of the lens which projects into the interior of the camera.

To operate, turn the mirror lock button downward (clockwise) until it stops. The distance of movement is approximately 135°.

The mirror will return to its usual operation when the lock button is returned to the red mark.

The mirror lock button operates independently of the shutter release and film advance and can, therefore, be activated at any time.

- When the mirror is locked in an "up" position, the exposure meter of the camera cannot operate.



Self-timer

The self-timer delays shutter release about 10 seconds from the time you press the self-timer release button. This allows time for you to get into the picture.

To operate, advance the film (this will automatically cock the shutter). Next, push the self-timer lever down (about 90°) and then press the self-timer release button. The self-timer is now operating, and the shutter will automatically be released after about 10 seconds.

NOTE:

- If the film has not been advanced, the self-timer lever will stop after returning about 45° and the shutter will not be released.
- You can override the self-timer mechanism by pushing the shutter release button either before or after the self-timer has been activated.



Infrared index

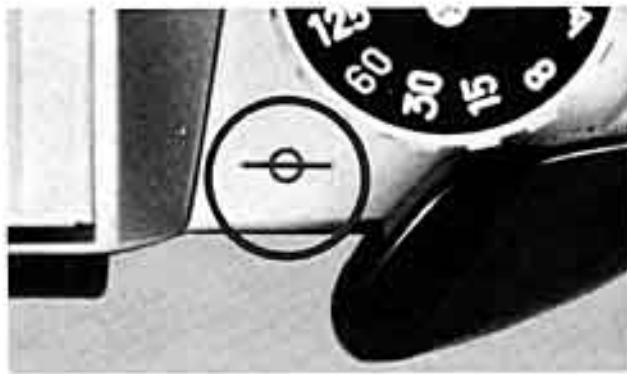
When using infrared film it is necessary to make an "infrared focus adjustment." After you have made your normal focusing adjustment, turn the focusing ring to the right to align the distance on the focusing scale with the red "R" mark on the depth-of-field scale. After this adjustment has been made you are ready to shoot.

- To determine correct exposure for infrared photography, consult the instructions enclosed in the film package.



Film plane index

The $\oplus$ symbol engraved to the left of the film advance lever shows the exact position of the film in the camera. It is used to precisely measure the distance from subject to film for close-up photography and photomacrography.



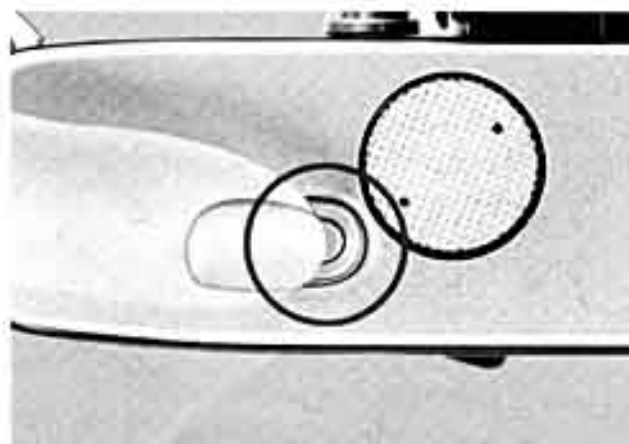
To intentionally make more than one exposure on a single frame of film:

1. Make the first exposure in the usual way.
2. Push the film-advance release button on the bottom of camera. (Do not continue depressing the button while film is being advanced.)
3. Operate the film-advance lever. This will cock shutter for the next exposure, but the film will not advance since the release button has been pushed.
4. Make your second exposure.
5. Then repeat steps 2 and 3 above as many times as desired to make further exposures.
6. After the last multiple exposure, advance film to the next frame in the usual way without pushing the advance-release button.

NOTE:

Exposure counter will advance as usual each time the film-advance lever is operated.

1. To rewind the film, depress the film-advance release button on the base of the camera. The button should remain depressed when you remove your finger. (If, however, it returns to its locked position, rewind the film for approximately 2 revolutions while depressing the button. Then actuate the film advance lever one full stroke without depressing the button and depress it again. This should lock button in the depressed position.)



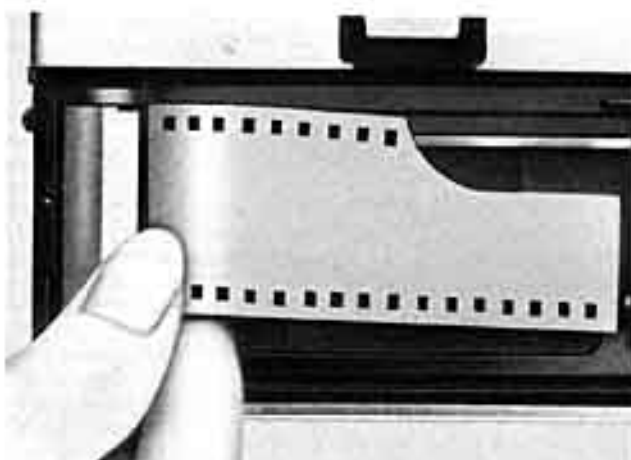
2. Lift the rewind crank and turn it clockwise. This will rewind the film into the magazine. When you feel a slight resistance, you have rewound nearly all the film and it has disengaged from the take-up spool. After one or two more turns you can assume all the film has been rewound into the magazine.



3. Now, pull the back cover release knob out to open the camera back and remove the film cartridge.

NOTE:

- The film-advance release button will automatically return to its original position as the film advance lever is activated.



CHANGING LENSES

Lenses can be changed even when the film has been advanced and the shutter cocked. To remove the mounted lens, push the lens release button down and rotate the lens counterclockwise until it stops. It can now be lifted out.

To mount a lens, insert it into the bayonet socket by lining up the red dot on the lens barrel with the red dot on the camera body. Now, turn the lens clockwise until it spots with a "click."

37



38

CAUTION:

- Touch nothing inside the bayonet mount while lens is removed.
- If the lens is left removed, replace it with a body cap to prevent dust from collecting on the mirror and shutter mechanisms.



USING INTERCHANGEABLE ROKKOR LENSES OTHER THAN MC LENSES

39

When using Rokkor Lenses designed for the Minolta SR-1, SR-3 or SR-7, which do not have a meter coupling pin, you must use the "stop-down measurement system" to set exposure.

With this system the indicator needle moves when the lens diaphragm is opened or closed and the follower (circle-tipped) needle is activated by the shutter-speed dial.

Auto Rokkor Lenses

- 1) Advance the film.
- 2) Press the diaphragm stop-down button (it will remain depressed).
- 3) Set the shutter speed.
- 4) Turn the diaphragm ring until the two needles are aligned. (The diaphragm can be set first.)
- 5) Press the diaphragm stop-down button again.
- 6) Focus and shoot.

- The diaphragm stop-down button will not operate if the film advance lever has not been advanced completely.
- When the diaphragm stop-down button is pressed the second time, the diaphragm reopens to maximum aperture.
- When the shutter is released, the diaphragm automatically closes down to the preset aperture and reopens.



40

Manual preset Rokkor Lenses

- 1) Set the shutter speed.
- 2) Set the maximum aperture of the lens, then close down until the two needles are aligned.
- 3) Release the shutter.

- It is not necessary to use the diaphragm stop-down button, with manual preset lenses.
- Compose and focus your picture before making your exposure setting.
- If you focus or compose your picture after making your exposure setting, and you do this by opening the lens to maximum aperture, be sure to close it down again to the proper point before you shoot.

NOTE:

- The indicator needle moves when the aperture is adjusted.
- The follower needle moves when the shutter speed is adjusted.



Do not touch the lens. If it becomes dirty, use a rubber ball blower to blow dust off its surface, then gently wipe its surface from the center outward with a lens cleaning cloth or tissue.

- Try to keep the lens clean. Brush it with a soft brush from time to time.
- Do not touch the mirror, but dust it with a soft brush.
- External camera surfaces may be cleaned with a silicon cloth.
- When storing the camera, set the distance scale to ∞ , release the shutter, and put the camera in its leather case.
- Do not drop or jar the camera.
- Do not store the camera in high temperature or humidity.
- When leaving the camera unused for a long time, remove the mercury battery from it.
- When storing the camera for a long period of time, put in original packaging with a small bag of drying agent, such as silica gel.

CAUTION:

- *Lens cleaning fluid should be used only when fingerprints or scum formation cannot be removed with lens tissue.*
In this case, use one drop only of lens cleaner on lens cleaning paper or a soft cloth and wipe the lens gently from its center toward the edge. Be sure not to drop the fluid directly on the lens.

We hope that you'll enjoy your Minolta camera.

If you have any questions, ask your Minolta dealer. He is knowledgeable in all aspects of photography, and he can help you with all of your photographic needs.

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