Minolta SR-1

—(model V)—

OWNER'S MANUAL

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THANK YOU VERY MUCH FOR BUYING YOUR MINOLTA SR-1 (model V)

Minolta Camera Company has a world-wide reputation for products based on new ideas. The Minolta SR-1 (model V) single lens reflex camera in particular was developed after many years of experience and highly technical research. Today, the Minolta SR-1 (model V) is recognized as a leader in international competition.

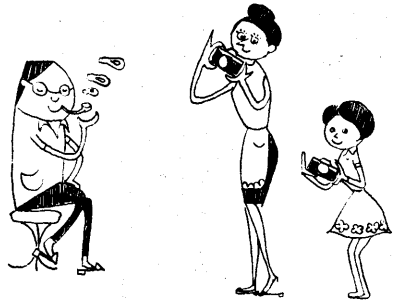
Please read this manual carefully before using your Minolta SR-1 (model V) so that you may effectively utilize its full potential. This manual is planned to help you realize the full potential of your Minolta SR-1. Won't you take a few minutes to read it carefully?

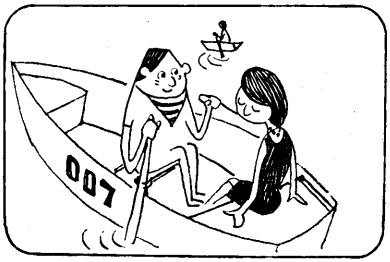
(All illustrations used in this booklet are with theF/1.8 lens. There is no fundamental difference in usage between the F/1.8 and F/2 lenses.)

CONTENTS

1. FEATURES OF THE SR-1 (model V)

Designed to meet the requirements of the world's most advanced photographers.





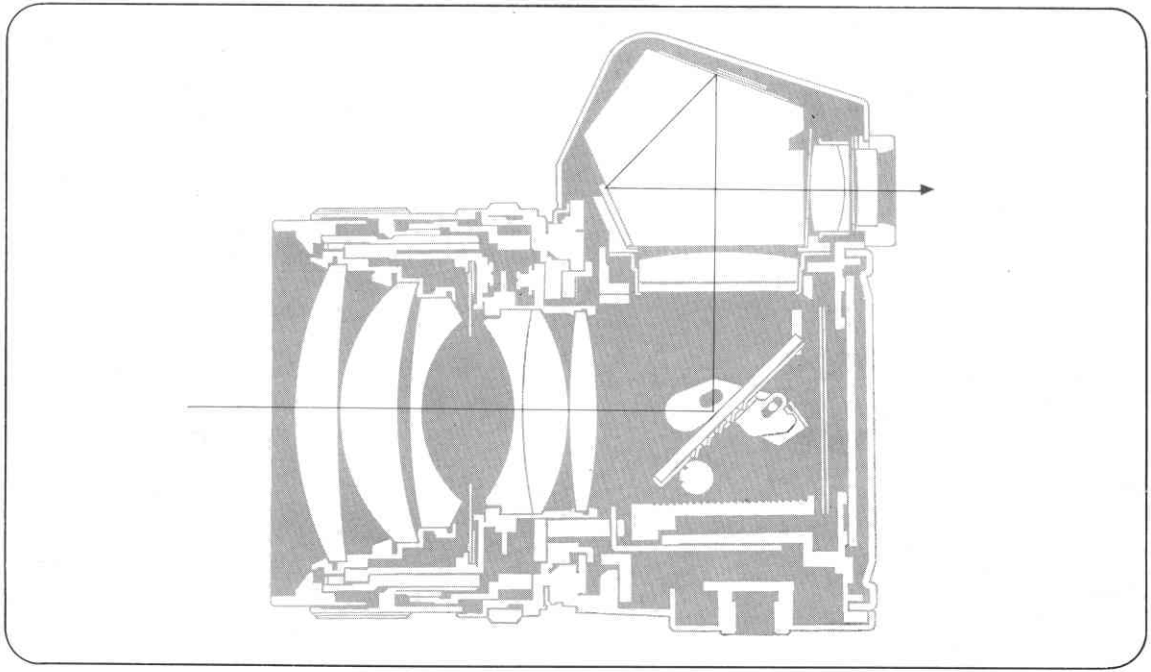
1. New Handling Ease

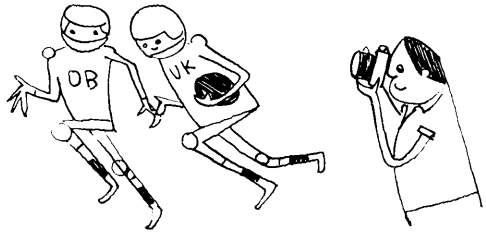
Minolta SR cameras have a long history and tradition, but are manufactured under a unique new production system coupled with superb technical skill. The SR-1 (model V) is very beautiful and compact in design and extremely light in weight. The shutter click is almost inaudible, the film advance lever is conveniently shaped and the shutter speed dial is easy to see and operate.

2. Extremely Bright and Accurate

Yours is a single lens reflex camera of the penta prism viewing type. The subject image and the vignetted background accurately appear on the negative as you see them through the viewfinder.

Through the lens viewing eliminates the need to crop in portraiture, close-up, copying and color slide photography. Through the lens viewing shows the precise area of coverage with different interchangeable lenses.





3. Quick Focusing

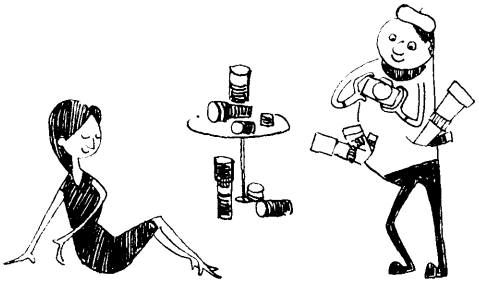
The SR-1 (model V) has a fine microprism for quick focusing. When the subject is not in focus, however, the entire viewing screen remains blurred.

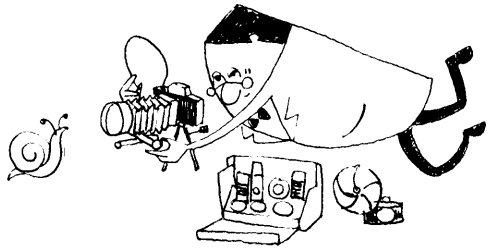
4. Ultra-Wide Angle Photography

The SR-1 (model V) has an independent mirror button. Press the button, and the mirror springs up. Then you can attach the Rokkor 21mm F/4.0 ultra-wide angle lens.

5. Detachable CdS Meter

A high-efficiency CdS meter (SR Meter V) is available for exclusive use with the SR-1 (model V). When it is attached to the meter shoe on the front of the SR-1, it becomes interlocked with the shutter speed dial. The SR-1 (model V) then becomes a camera of the needle indication type interlocked with the exposure meter. (It is recommended for those using SR Meter V to see p. 23)





6. World-Famous Rokkor Lenses

The stand Rokkor lens and other interchangeable Rokkor lenses from 21mm to 1000mm are available. The SR mount, used on all SR cameras for over eight years, ensures quick, accurate, and secure interchangeability of lenses with backlash or unsteadiness.

7. Complete System of Accessories

The SR best fulfills its superb potential when used with the complete system of special purpose accessories.

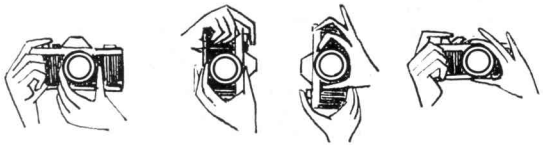
These accessories, made exclusively for Minolta SR cameras, permit a wide range of special effects in general photography and extend the versatility of your SR-1 (model V) to journalistic, sports, commercial, chemical, educational, industrial, and medical photography.

2. SPECIFICATIONS OF THE SR-1 (model V)

Type:	Single lens reflex with pentagon prism.
Film and frame size:	35mm film (20 or 36 exposures); 24 × 36mm.
Standard lens:	Auto Rokkor PF F/2.0-55mm, 6 elements in 5 groups or Auto Rokkor PF F/1.8-55mm, 6 elements in 5 groups.
Shutter	Focal plane shutter; single, non-rotating shutter dial. Speeds: B (Bulb), 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/125, 1/250 and 1/500 sec.
Exposure meter:	Detachable CdS exposure meter coupled with shutter speed and film speed. Acceptance angle is 30°. (Optional)
Meter working range:	EV2 - EV18 on ASA 100 film.
Film speed range:	ASA 6 - 6400, DIN 9 - 39.
Viewfinder and focusing:	Pentagon prism finder with fine microprism and Flesnel lens.
Reflex mirror:	Quick return system with mirror lock device.
Flash synchronization:	FP and X contact.
Film advance:	Single-stroke rapid wind lever. Rotary angle is 180°.
Film counter:	Automatic resetting film exposure counter.

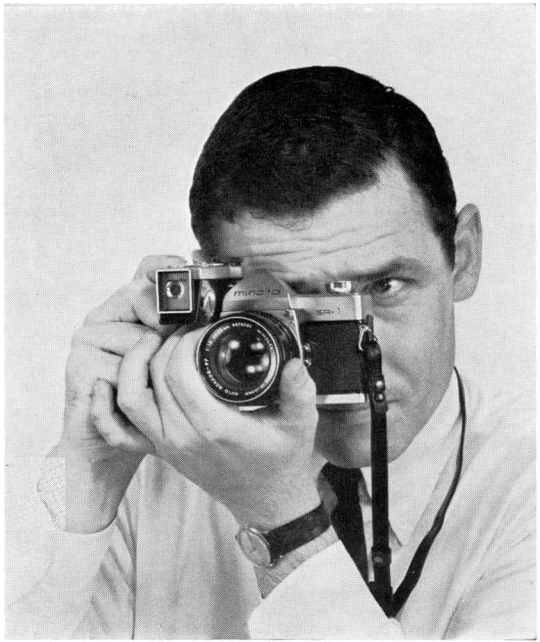
Others:	Rapid film-rewind crank.
	Built in self-timer.
	Bayonet type lens mount.
	Filter diameter: 52ϕ
Size and Weight:	5 - 3/4 $\times$ 3 - 1/2 $\times$ 1 - 7/8 inches. (145 $\times$ 88.5 $\times$ 47.5mm)
	21.2oz. (600g) Body only.

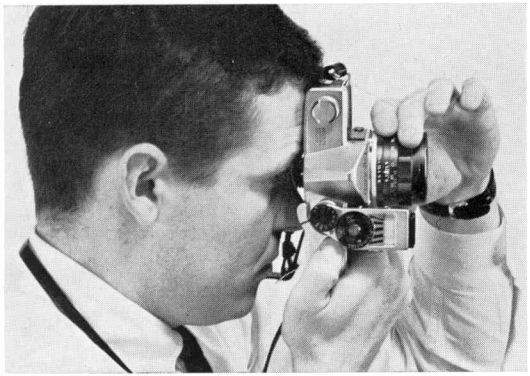
3. HOLDING THE CAMERA



A sharp picture can be obtained only when you hold the camera firmly. If you jar the camera, you cannot get a good picture. Practice holding the camera before loading the film.

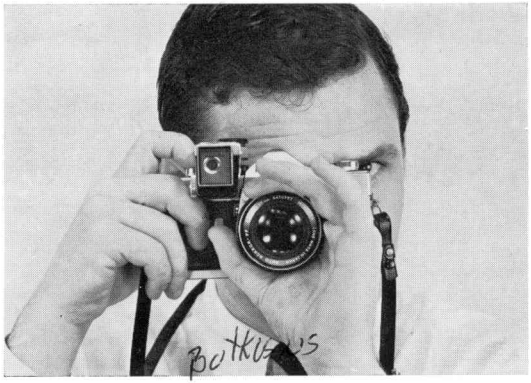
1. You can take a good picture by holding the camera horizontally with both hands. Press the camera firmly against your face and release the shutter gently.





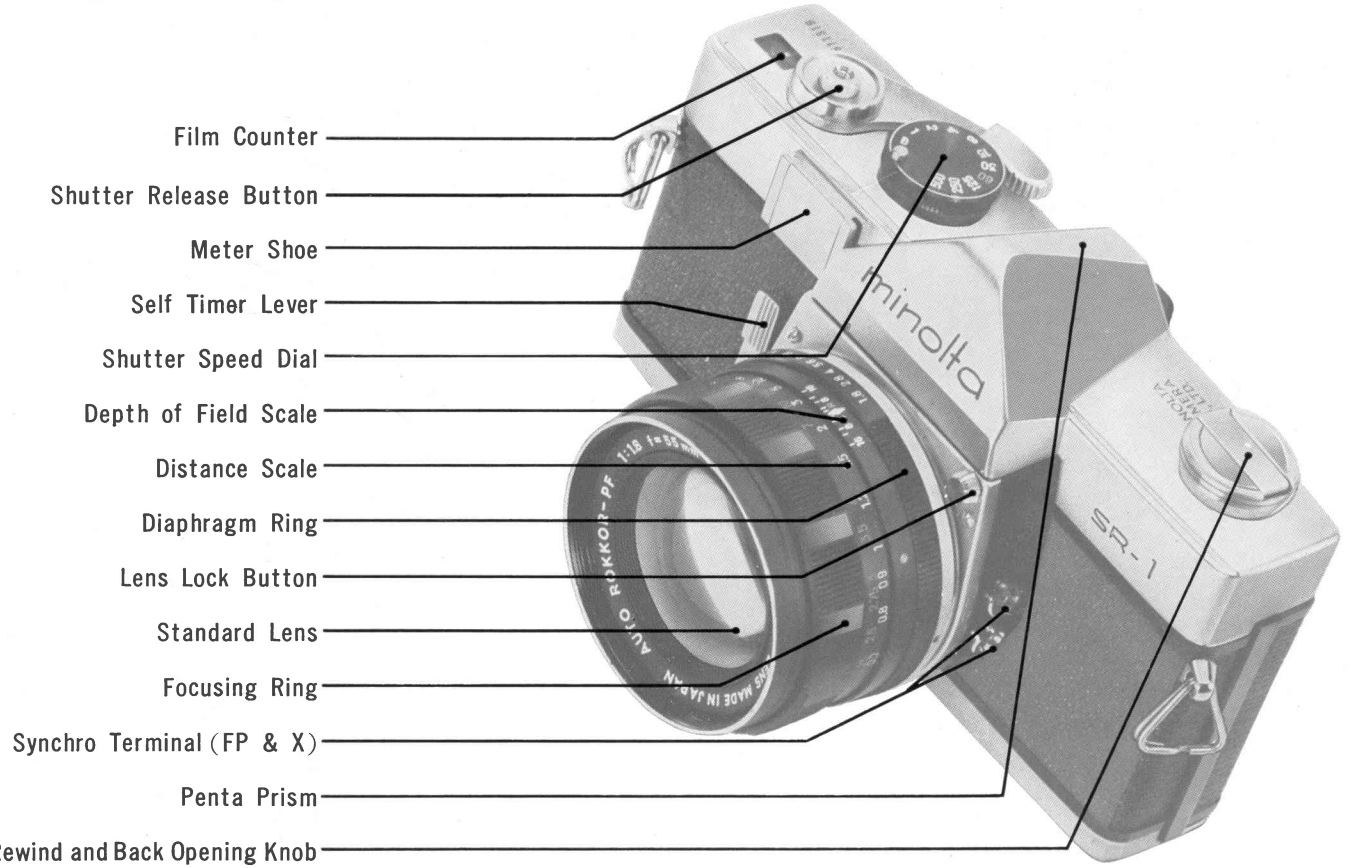
2. While holding the camera vertically, you may press the shutter release button with the thumb or forefinger as you like.

- Look into the viewfinder with the right eye to prevent the film advance from pressing your face.

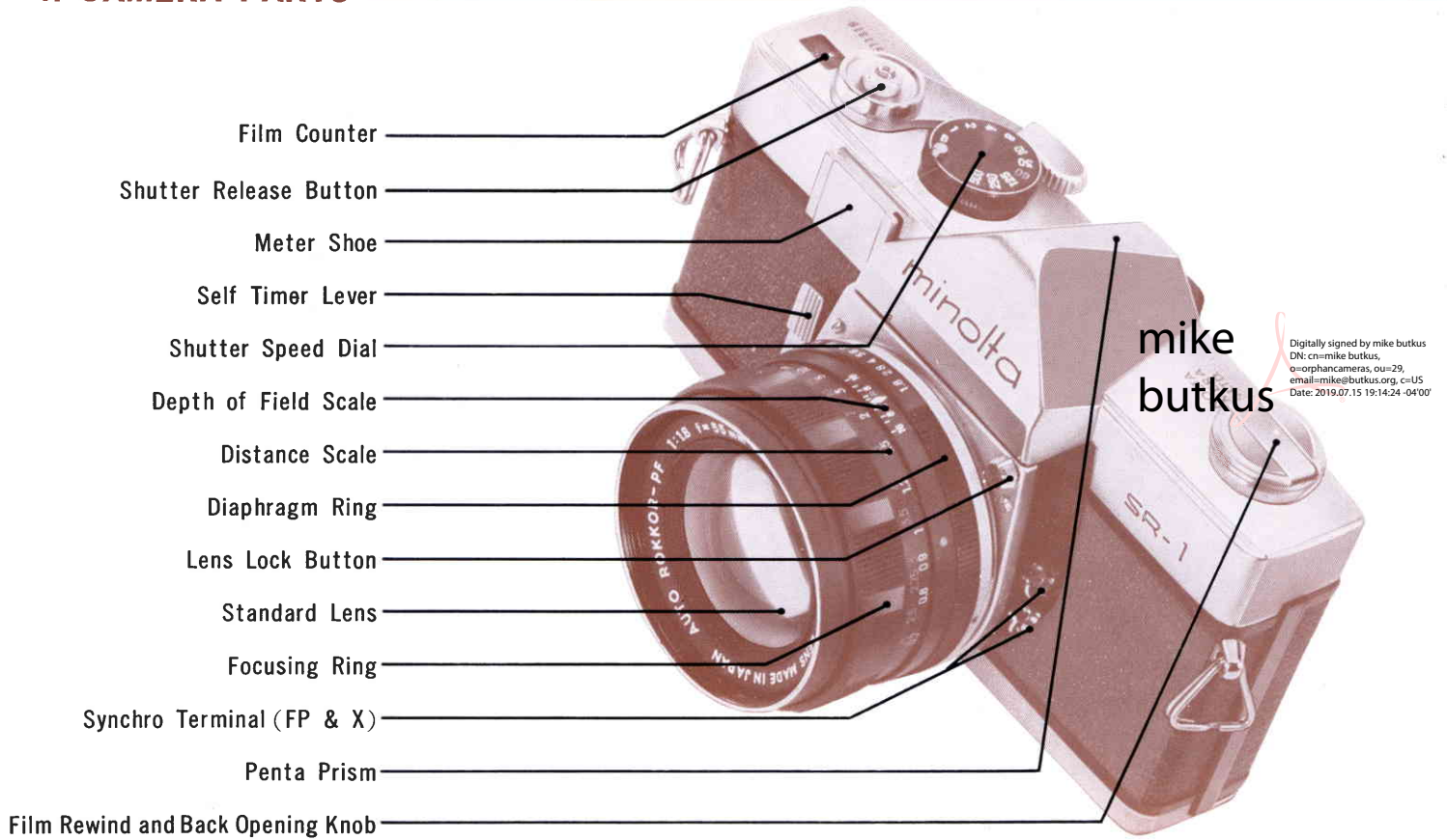


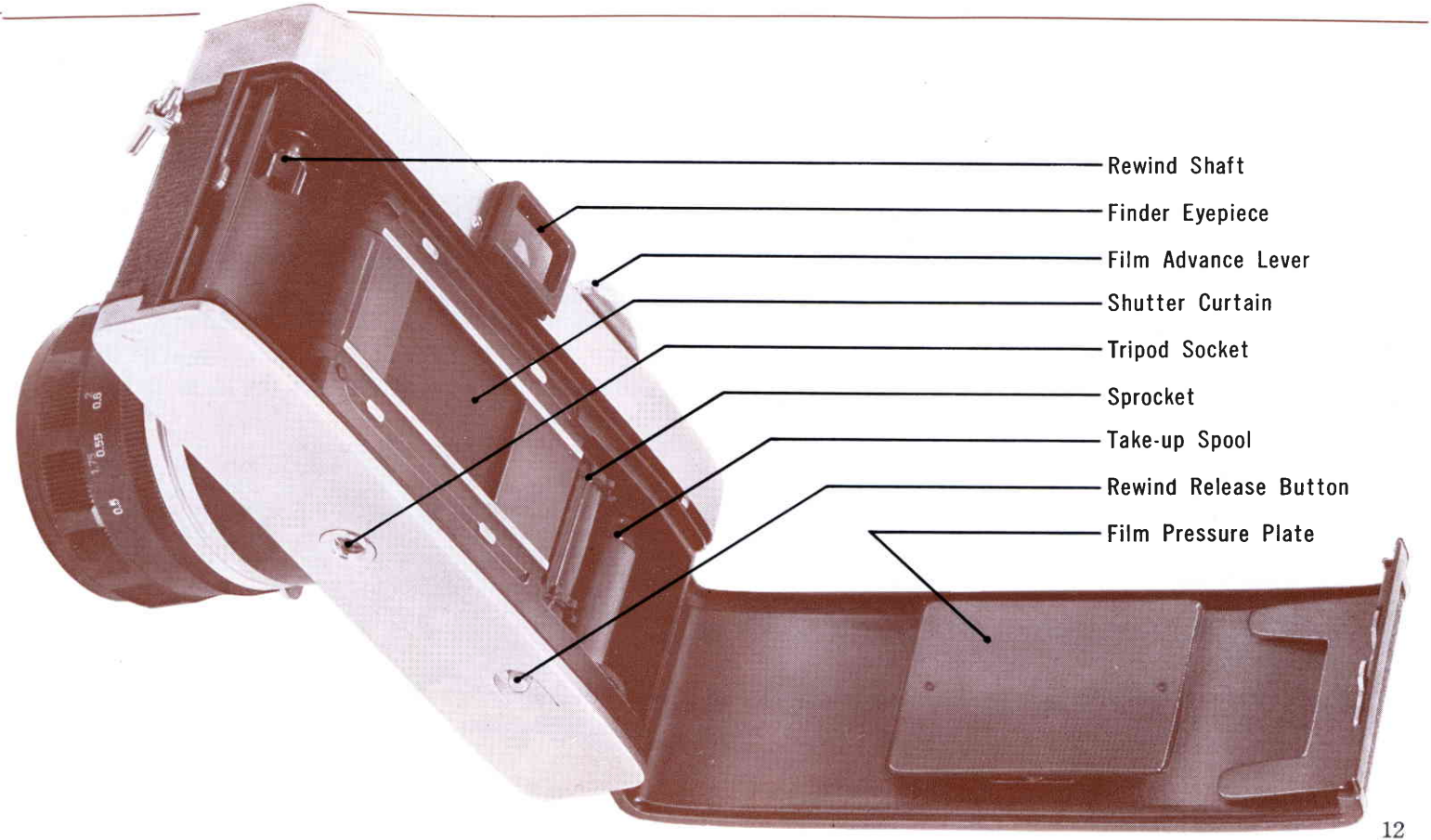
3. You may hold the lens with the left hand. Release the shutter with the right forefinger. You can set the focus and release the shutter very quickly. This method is worth trying.

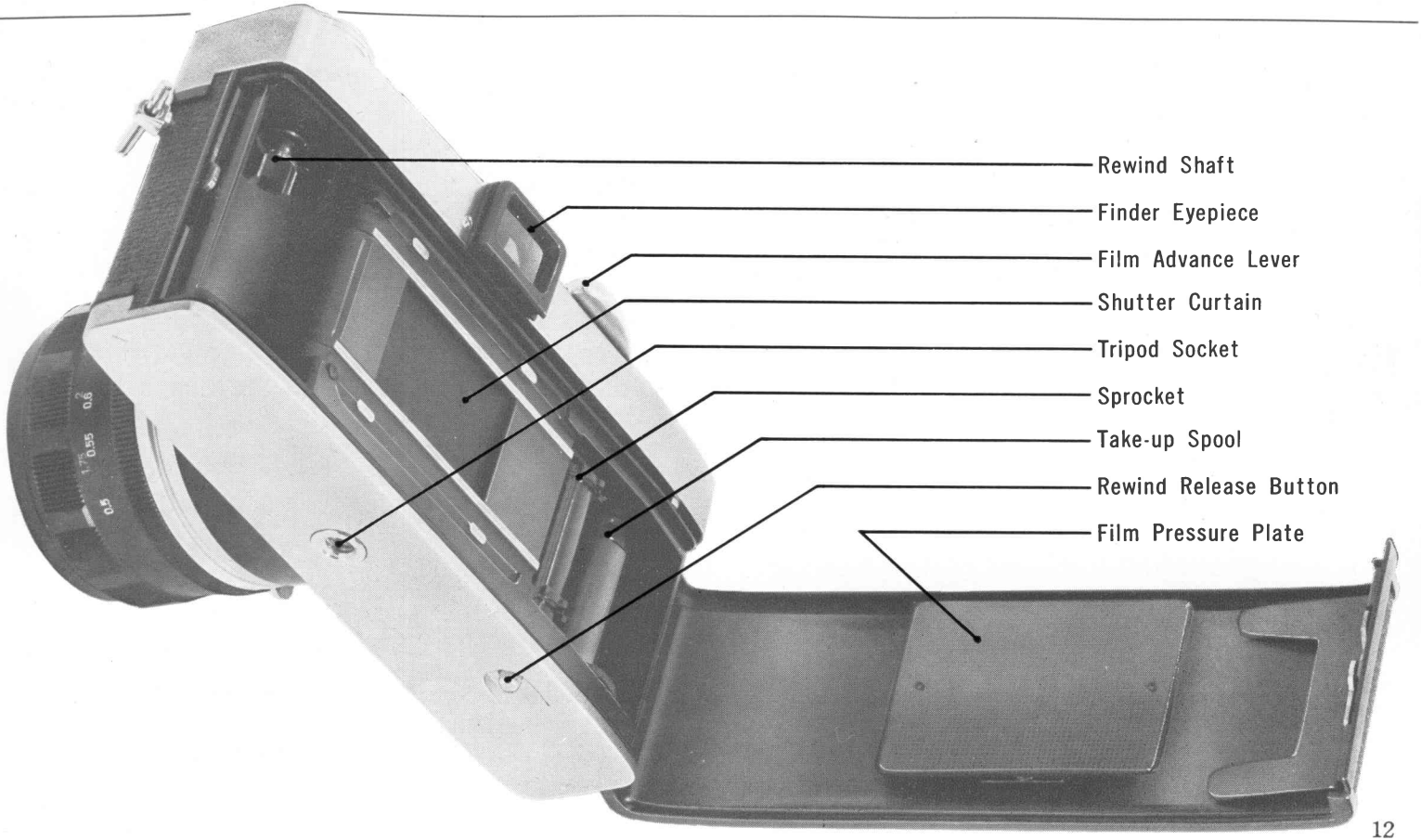
4. CAMERA PARTS



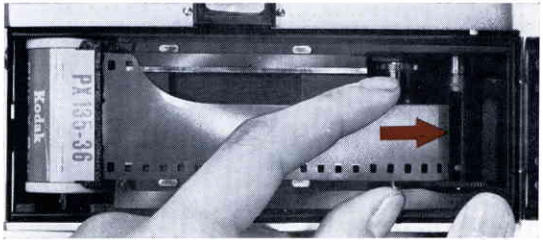
4. CAMERA PARTS



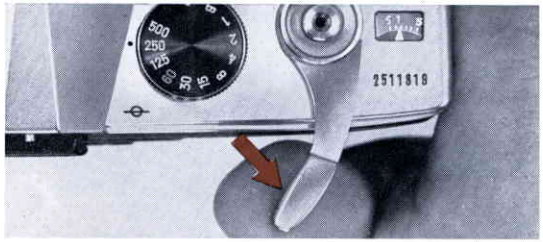

Rewind Shaft
Finder Eyepiece
Film Advance Lever
Shutter Curtain
Tripod Socket
Sprocket
Take-up Spool
Rewind Release Button
Film Pressure Plate



5. SIX BASIC STEPS



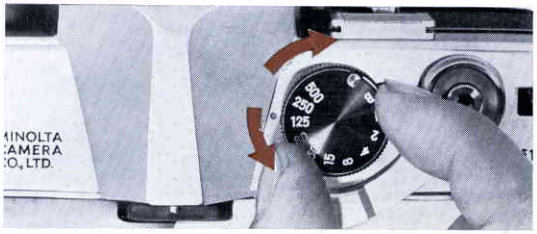
1. Open the camera back. Insert the film magazine into the chamber. The Minolta SR-1 uses standard 35mm magazine in 20 or 36 exposure rolls.



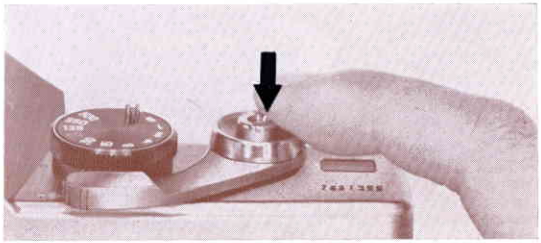
2. Turn the film advance lever until the figure 1 concides with the arrow in the film counter window.

4. Set the aperture.

5. Focus the lens.



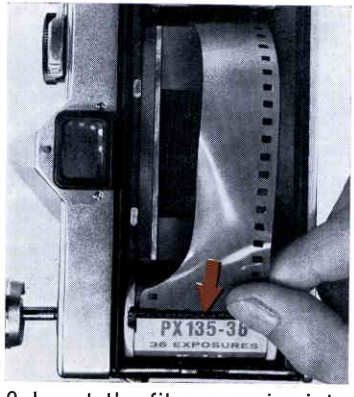
3. Set the desired shutter speed.



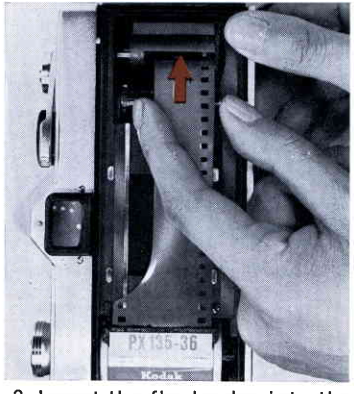
6. Compose your picture and release the shutter.

6. FILM LOADING *Always load or unload the film in subdued light.*

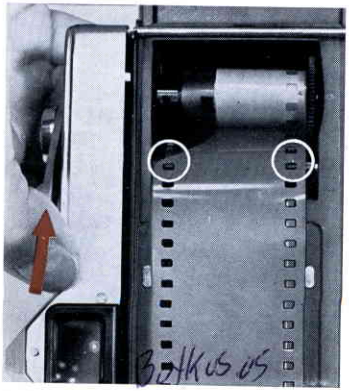
1. Lift the back cover knob (used as the film rewind knob too) until it stops. Then with a slight pull, the back cover snaps open. The film counter automatically returns to the start position (S).



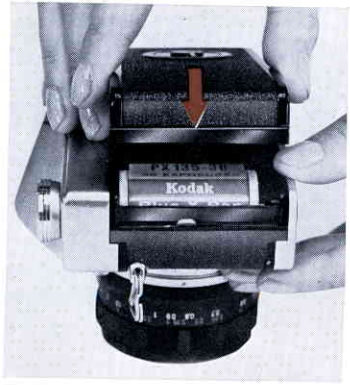
2. Insert the film magazine into the chamber, and push the back cover knob into its original position. (In this case, be sure to place the flat axis of the magazine on the upper side of the chamber first and then the projecting axis on the bottom side.)



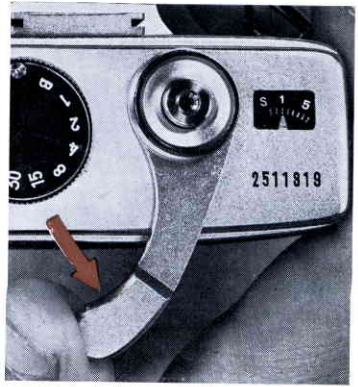
3. Insert the flm leader into the take-up spool in the direction of the arrow as shown in the picture.
   Caution: Do not touch the shutter curtain. Make sure the film perforations are engaged with the claw in the groove of the take-up spool.



4. Turn the film advance lever little by little until both sides of the film perforations are securely engaged with the sprocket gear. If, however, the lever stops halfway, press the shutter release button. The film then can be advanced again.



5. Close the camera back after making sure that all sprocket holes are completely and firmly engaged.

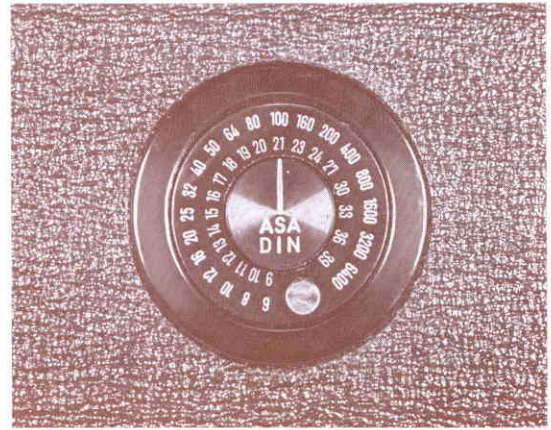


6. Turn the film advance lever until it stops; press the shutter release button. Repeat this action until the figure 1 appears next to the mark in the film counter window. Now the camera is ready to take a picture.

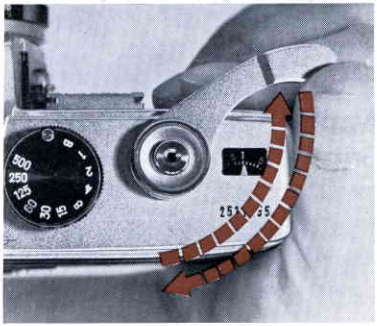
NOTE: To make sure that film is tightly seated against the pressure plate, turn the rewind handle in the direction of the arrow (slowly) until you feel slight tension.

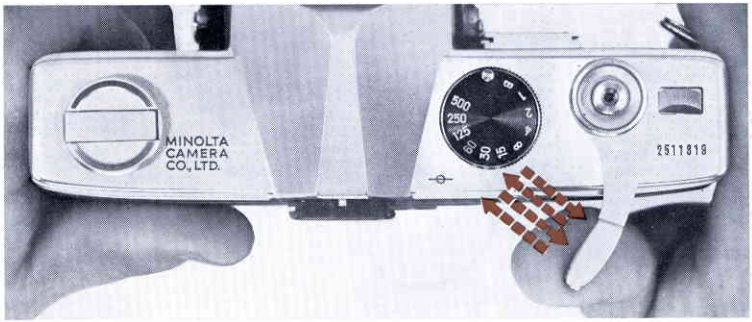
7. FILM SPEED SCALE

Set the film speed to the corresponding ASA graduation of the film speed dial. When converting a DIN speed to the corrosponding ASA speed or when bearing the film speed in mind, use this film speed scale. Turn the knob of the dial and set the film speed to the white pointer marked with ASA. In the case of the ASA 100 film for example, set the film speed as shown in the picture. (The inner graduations are for the DIN).



8. THE FILM ADVANCE LEVER

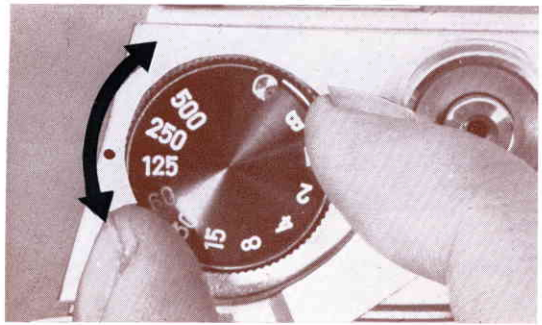




1. Be sure to turn the film advance lever until it stops completely. You may advance the film all at once or little by little.
2. When the film is advanced properly, the film rewind knob turns counter-clockwise. This acts as a double check on correct loading.

- When you start advancing the film, the rewind knob may not turn well if the film is loose inside the magazine.
- Turn the film advance lever until it stops completely. Otherwise, the shutter release button won't work.
- When the film advance lever is turned one completely, one frame of the film advances, one figure advances in the film counter window, the shutter is set. This automatically prevents double exposure.

9. SETTING SHUTTER SPEED



Turn the shutter speed dial, and set the desired speed at the red mark.

- You may turn the shutter speed dial in either direction, before or after the shutter is cocked.
- The figures of B and 1 through 500 on the shutter speed dial indicate the B position, or bulb, and shutter speeds of 1 second through 1/500 second.

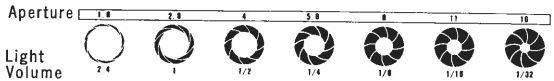
When setting the shutter speed, turn the dial until it stops with a click.

- Be sure not to use intermediate shutter speeds between any two graduations on the dial.
- The B position, or bulb, is used for exposure longer than one second. The shutter remains open as long as the shutter button is pressed down.
- The red figure of 60 indicates a shutter speed of 1/60 second for taking a picture with an electronic flash.

10. SETTING THE DIAPHRAGM

The diaphragm ring is marked with white figures ranging from 1.8 to 16 for a F/1.8 lens and from 2 to 16 for a F/2 lens. Turn the diaphragm ring so that the desired aperture figure (white) may coincide with the white dot.

- The diaphragm ring is used to adjust the light volume and the depth of field (see P.33).
- You may use intermediate aperture openings between any two F/stops.
- The larger the aperture figure becomes, the less light volume is permitted through the lens.
- The relations between the aperture and the light volume are shown in the diagram shown at the right. The light volume decreases by 1/2 for every one decrease in the F figures. Exposure can be set through the combination between the aperture opening and the shutter speed.
- When either the aperture opening or the shutter speed are shifted to their respective next graduations, the light volume increases by twice or decreases by 1/2.
- The diaphragm can be set either before or after turning the film advance lever.



11. DEPTH-OF-FIELD PREVIEW

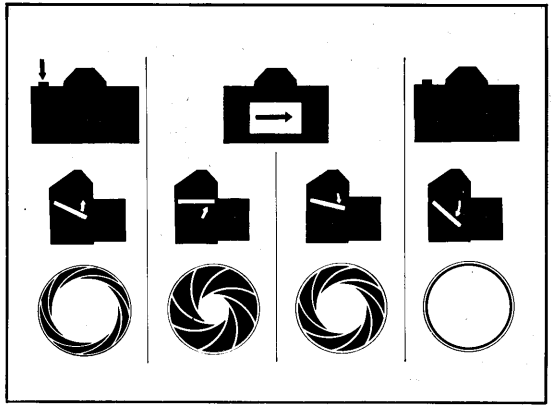
The viewfinder can be always looked into in the condition that as long as the diaphragm is wide open, the viewfinder remains at full brightness. This is always the case, because the diaphragm is automatic. When the diaphragm lever is pressed down in the direction of the arrow mark until it stops, however, the subject can be seen at the pre-set aperture. You can thus see well focused depth of field and the vignetted effects of the background.

12. COMPLETELY AUTOMATIC DIAPHRAGM

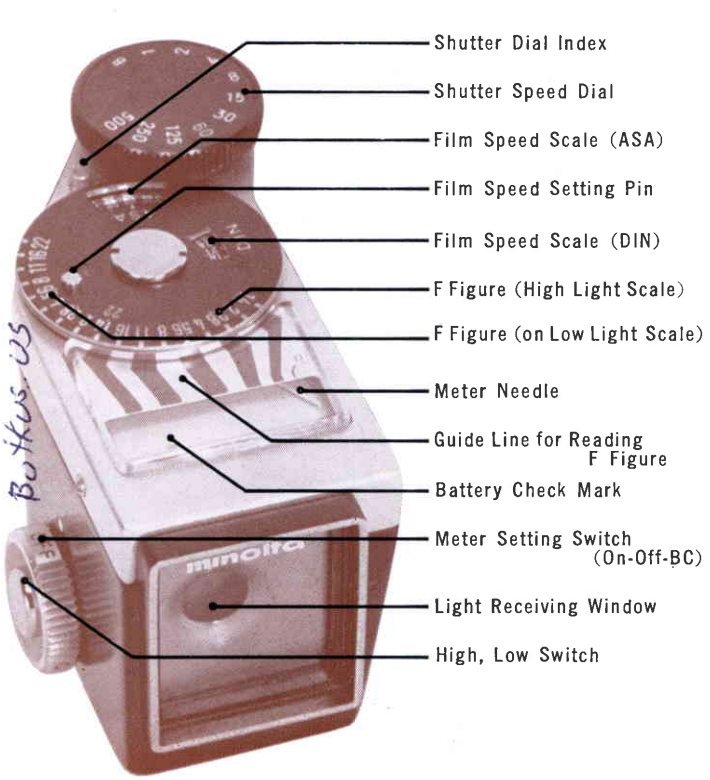
One of the outstanding features of the SR-1 (model V) is the completely automatic diaphragm setting device based on an original design of Minolta. You can quickly frame and focus with a bright field of view. When the shutter is released, the diaphragm is automatically closed to the pre-set aperture before the shutter opens, the shutter curtain closes and the diaphragm re-opens to full aperture. Therefore, you are always viewing with the diaphragm wide open and it is easier to

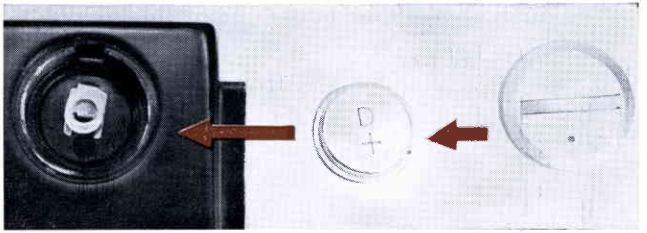
focus even in a dark area with this feature. It is necessary to open or close the diaphragm when taking pictures. You are therefore able to concentrate on taking pictures and letting the camera do all of the work.

When the shutter button is pressed, the folloinwg actions are performed automatically.



13. HOW TO USE THE SR METER V

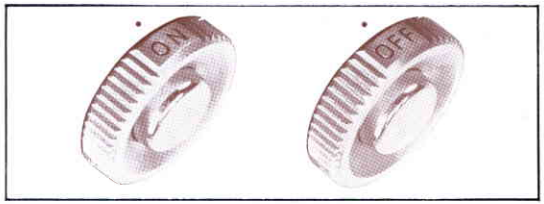




A exposure meter, coupled with the shutter speed dial, is available for exclusive use with the SR-1 (model V). The light meter is recommended for color photography and other wide variety of photography requiring accurate exposure.

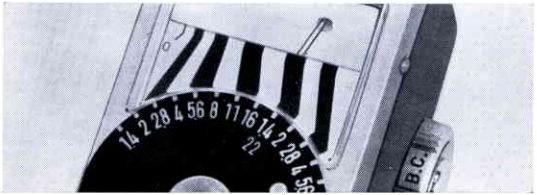
1. How to Put in the Mercury Battery

Put the mercury battery in the battery chamber. Turn the mercury battery cover on the base of the meter counter-clockwise until it releases.



a. Place the mercury battery so that the (+) plus side is facing you. Replace cover. Handle battery on the side since finger marks on the (+) side or the (−) side may harm the battery.
- Be sure not to confuse the (+) pole with the (−) pole.

b. Turn on the meter setting switch.
- When the meter is not used, turn off the switch.
- When the meter is left unused for a long time, take the mercury battery out of the battery chamber, and keep it at a dry place.

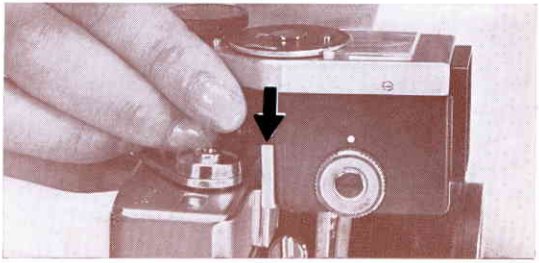


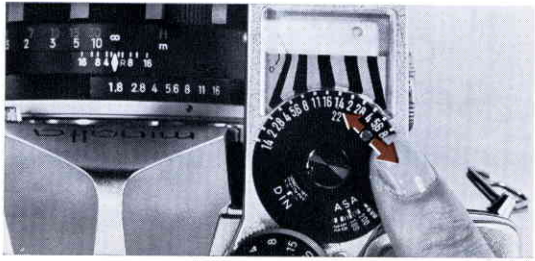
2. How to Use the Battery Checker.

Built into the SR Meter V is a battery checking position so the condition of the battery may be checked before using.

a. Turn and set the battery circuit setting switch to B.C.

b. When needle of the meter points at the check mark as shown in the picture, the battery has a very satisfactory voltage. If, however, the needle does not point at the check mark either the battery has been placed in the meter in the wrong position or the battery should be replaced.
- The mercury battery has a service life of about 15-18 months, during which it maintains a stable voltage. When its service life comes to an end, its voltage radically decreases.
- Replacement battery should be either a Mallory RM 625, Eveready E 626 or equivalent.





How to Attach the Meter

1. Push the meter clip into the meter shoe from above.
2. Turn the meter speed ring clockwise or counter-clockwise. The coupler then joins with the interlock pin on the shutter speed dial.

• The meter cannot be set to intermediate points between any two figures ranging from B to 500 on the shutter speed dial.

How to Use

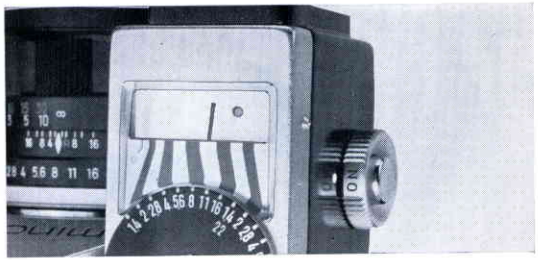
Set the film speed ($\frac{DIN}{ASA}$) to the film speed scale.

Turn the film speed setting pin on the diaphragm dialso that the figure of the used film speed may appear in the film speed setting window (ASA).

(The other film speed setting window (DIN) is for films with the DIN rating.)

1. Measuring for a Bright Subject

Turn on the film speed setting switch, and direct the meter towards the subject.

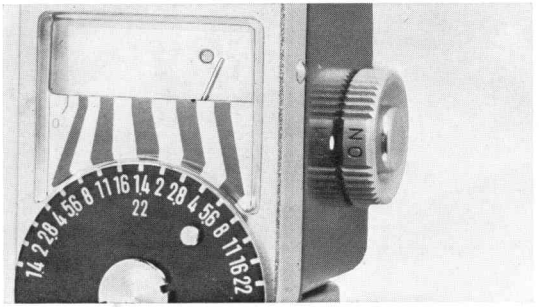


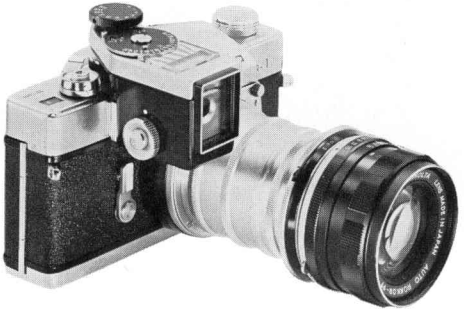
When the shutter speed (usually between 1/125 and 1/500 second) is set first, the needle moves. Read a red F figure along the guide line, and set the aperture opening for the lens according to the figure.
(The picture shows the case of F 11)

2. Measuring for a Dark Subject

Set the shutter speed (usually 1/30 or 1/60 second) when taking pictures in a dark area. The High-Low switch should be depressed. This will activate the needle. Read a white F figure along the guide line according to the vibrating needle, and set the aperture opening for the lens according to the figure. If, however, the figure pointed by the needle does not fit, make the shutter speed slow. (The picture at the following page shows the case of F 4.)

- If the lens opening is set first you would then turn the shutter speed dial until the pre-set aperture number is aligned with the needle. In this case, the camera can obtain the same results as one of the interlocked exposure meter type, because the meter is interlocked with the shutter speed dial.





Other Uses

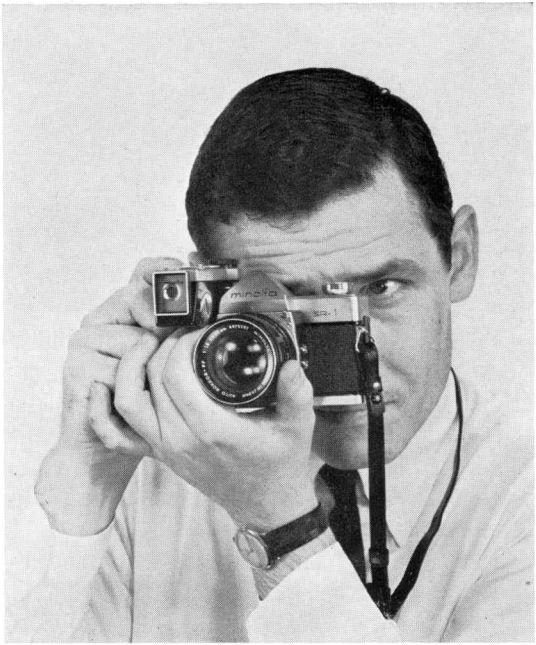
A. When making a close-up shot using an Extension-tube or Extension Bellows, obtain an exposure multiple from the manual for each on the basis of the measured exposure, and increase the exposure. When photographing light subjects such as literature and printed matter, exposure tends to become short. In such cases, the correct exposure can be obtained by using the standard reflection plate (grey). Separate the meter from the camera so that the reflection on the subject may fully strike the light receiving window of the meter.

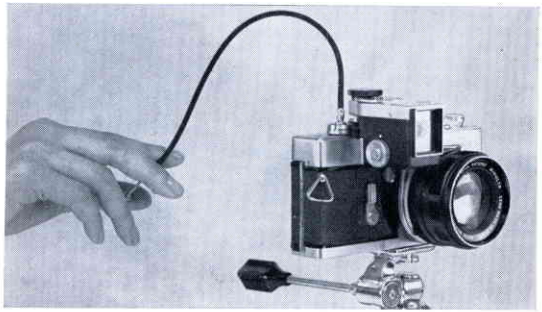
B. When an exposure multiple is required due to the use of a filter or else, it is convenient to set the quotient of the figure of the used film speed divided by the multiple to the film speed.

14. HOLDING THE CAMERA-TAKING A PICTURE

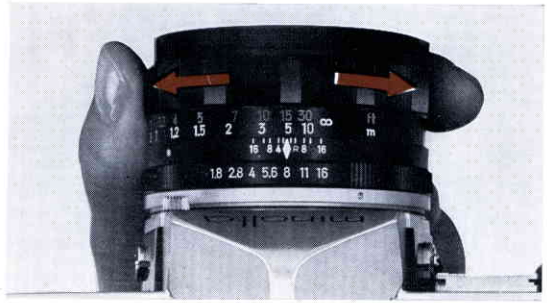
1. Holding the Camera

As mentioned before, there are many ways of holding the camera. The way as shown in the picture, however, is best suited for the SR-1 (model V), because it enables you to use the exposure meter and other features very conveniently. However, be sure to press the camera firmly against your face, tighten your elbows, and press the shutter release button gently. If you inadvertently jar the camera, your results will not be as good as they would be if the shutter had been properly released. It is advisable to look into the viewfinder with the right eye, because the film advance lever, even when turned, does not press your face. When taking a picture at a shutter speed slower than 1/30 second, use a tripod or some other stabilized mount, because the camera, if held with the hand, tends to be jarred. When using a tripod, it is also advisable to use a cable release.



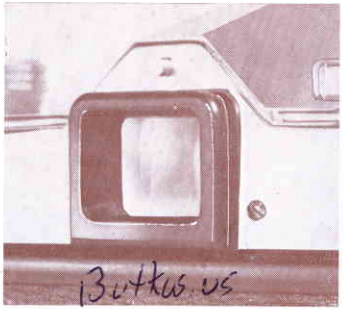


- The Minolta SR-1 (model V) has a built-in double exposure prevention so that you cannot accidentaly double expose the film. Once the picture is taken it is necessary to advance the film advance lever.
- The cable release is screwed into the shutter release button.
- When releasing the shutter at a slow speed of 1 or 1/2 second, be sure to turn the film advance lever only after the shutter is closed completely.



2. Focusing

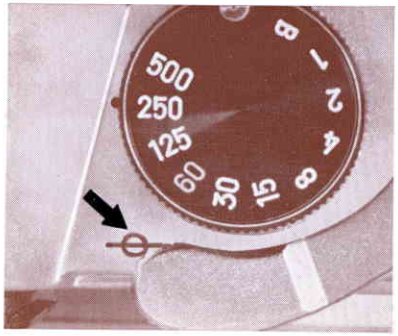
In order to focus, hold the camera firmly to your eye, turn the focus ring clockwise, or counter-clockwise. When the subject becomes sharp you will be in focus. The viewfinder consist of a group of slanted microprisms which are concentrated at the center of the viewing area. Therefore, the subject image is bright, and vignetting becomes stressed when the subject is out of focus. Proper focus is set when the image becomes sharpest. (See the right pictures.)



* The grooves on both the left and right sides of the eyepiece window are used when an Accessory Clip V, Angle Finder V or Magnifier V is inserted from above.

Focusing for Infrared Photography

When using infrared film, it is necessary to make a special adjustment with the focusing ring. First bring the subject in focus and note the distance indicated at the ◆ mark. Then shift the focus ring so the indicated distance is aligned with the red letter R. Use a red filter for infrared photography.

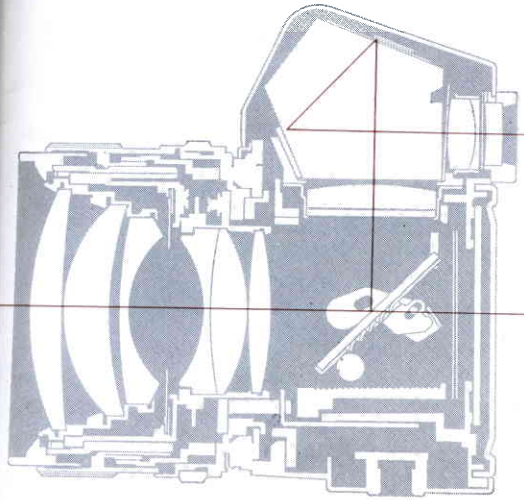


Position of the Film Surface

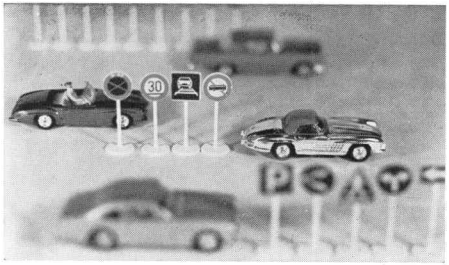
The red circle with a line through it, which is on the top of the camera, indicates the position of the film surface. To be precise, the distance from the camera to the subject is not the distance from the lens but that from the film surface. This is especially important in macro and close-up photography.

3. The Viewfinder and Composing

In the case of the SR's, the image on the taking lens is seen through the viewfinder. The perspective of the subject, the relations between the subject and the background, and the actual color effects, therefore, can be confirmed exactly as they appear on the negative. The SR-1 (model V), though small in size, has an oversize mirror and the field of view seen through the viewfinder reaches as much as 94%. The SR-1 (model V) causes no parallax and enables you to compose the subject all over the negative as you see through the viewfinder.

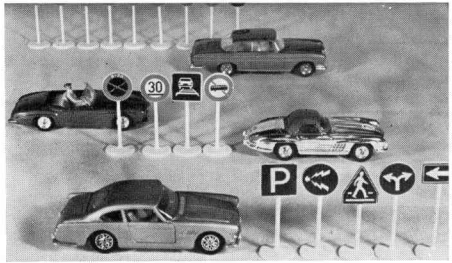


15. DEPTH OF FIELD



← When the lens aperture is wide open.

When the lens aperture opening is closed. →



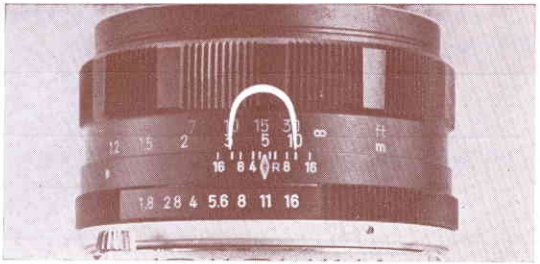
When a lens is focused at a certain distance, anything at that distance looks very sharp and there is a certain range in the foreground and background which also becomes comparatively sharp enough to take a picture. The range is what is called the depth of field. The above pictures are practical examples. The left picture was taken when the lens was wide open, while the right one was taken when the apeture opening was closed. The latter, as you can see, has a greater depth of field.

The Nature and Use of the Depth of Field

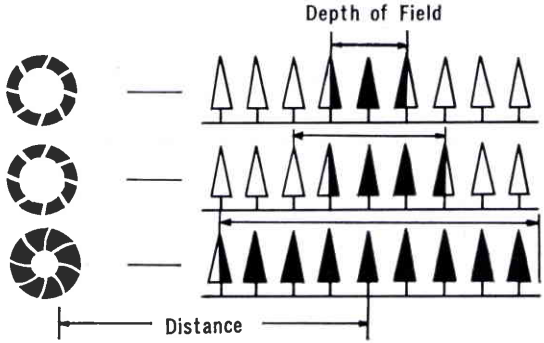
The depth of field varies with the aperture opening. The nature of the depth of field, therefore, can be used according to the photographic purposes and the composing plan. You can take a sharp picture of both a person at a short distance and the background at a long distance, or sharpen the image of the person while vignetting the background.

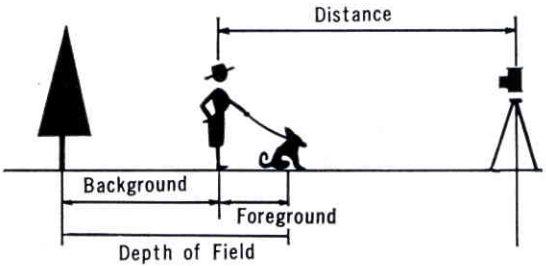
How to Read the Distance Scale and the Depth of Field Scale.

Look into the viewfinder, bring the subject



in focus, and read the depth of field scale marked on the lens barrel, then you can determine the depth of field that is in focus. The mark at the center of the depth of field scale indicates the distance from the camera to the subject in focus. The two same figures on both sides of the mark indicate the depth of field or the range of distance appearing sharply on the negative. For example, the indicated figure of 15 (5) means 15 feet (5 metres); and when a picture is taken at an aperture opening of F 11, the depth of field ranges from about 10 feet to 30 feet (3 m to 10 m) indicated by the two graduations of 11 on both sides of the ◆ mark.





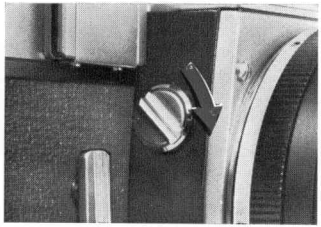
Depth of Field Table for F1.8/55mm and F2/55mm Lenses

Depth of Field Table — Auto Rokkor F/1.8-55mm

Dist. (ft) / F No.	∞	30	15	10	7	5	4	3.5 (3′6″)	3	2.75 (2′9″)	2.5 (2′6″)	2.25 (2′3″)	2	1.75 (1′9″)
1.8	91′ ∞	25′ 6″ 36′ 5″	13′10″ 16′ 5″	9′ 6″ 10′ 7″	6′9″ 7′3″	4′10″ 5′ 2″	3′11″ 4′11″	3′ 5¼″ 3′ 6¾″	2′11½″ 3′ ½″	2′ 8½″ 2′ 9½″	2′5¾″ 2′6¼″	2′2¾″ 2′3¼″	1′11¾″ 2′ ¼″	1′ 8¾″ 1′ 9¼″
2	86′ ∞	25′ 1″ 37′ 4″	13′ 8″ 16′ 7″	9′ 5″ 10′ 8″	6′9″ 7′4″	4′10″ 5′ 2″	3′11″ 4′ 1″	3′ 5¼″ 3′ 6¾″	2′11½″ 3′ ½″	2′ 8½″ 2′ 9½″	2′5½″ 2′6½″	2′2¾″ 2′3¼″	1′11¾″ 2′ ¼″	1′ 8¾″ 1′ 9¼″
2.8	70′ ∞	23′ 6″ 41′ 7″	13′ 2″ 17′ 5″	9′ 2″ 11′	6′7″ 7′5″	4′10″ 5′ 3″	3′10″ 4′ 2″	3′ 4¾″ 3′ 7¼″	2′11¼″ 3′ ¾″	2′ 8¼″ 2′ 9¾″	2′5½″ 2′6½″	2′2½″ 2′3½″	1′11¾″ 2′ ¼″	1′ 8¾″ 1′ 9¼″
4	55′ ∞	21′ 7″ 49′ 6″	12′ 7″ 18′ 7″	8′11″ 11′ 5″	6′5″ 7′8″	4′ 9″ 5′ 4″	3′10″ 4′ 2″	3′ 4½″ 3′ 7¾″	2′10¾″ 3′ 1¼″	2′ 8 ″ 2′10 ″	2′5½″ 2′6¾″	2′2½″ 2′3¾″	1′11½″ 2′ ½″	1′ 8¾″ 1′ 9¼″
5.6	42′ ∞	19′ 4″ 67′ 9″	11′ 9″ 20′ 8″	8′ 6″ 12′ 2″	6′3″ 8′	4′ 7″ 5′ 6″	3′ 9″ 4′ 3″	3′ 3¾″ 3′ 8½″	2′10½″ 3′ 1¾″	2′ 7¾″ 2′10½″	2′5 ″ 2′7¼″	2′2¼″ 2′4 ″	1′11¼″ 2′ ¾″	1′ 8½″ 1′ 9½″
8	32′ ∞	16′10″ ∞	10′10″ 24′ 6″	8′ 13′ 5″	6′ 8′6″	4′ 6″ 5′ 8″	3′ 8″ 4′ 5″	3′ 3 ″ 3′ 9¾″	2′ 9¾″ 3′ 2½″	2′ 7¼″ 2′11 ″	2′4½″ 2′7¾″	2′1¾″ 2′4½″	1′11 ″ 2′ 1 ″	1′ 8¼″ 1′ 9¾″
11	24′ ∞	14′ 3″ ∞	9′ 9″ 33′ 4″	7′ 4″ 15′ 8″	5′8″ 9′3″	4′ 3″ 6′	3′ 6″ 4′ 7″	3′ 1¾″ 3′11½″	2′ 9 ″ 3′ 3¾″	2′ 6½″ 3′	2′4 ″ 2′8½″	2′1¼″ 2′5 ″	1′10¾″ 2′ 1½″	1′ 8 ″ 1′10 ″
16	17′ ∞	11′ 9″ ∞	8′ 6″ 68′	6′ 8″ 20′ 5″	5′3″ 10′9″	4′ 6′ 7″	3′ 5″ 4′11″	3′ ¼″ 4′ 2 ″	2′ 7¾″ 3′ 5½″	2′ 5½″ 3′ 1½″	2′3¼″ 2′9½″	2′ ¾″ 2′5¾″	1′10¼″ 2′ 2 ″	1′ 7¾″ 1′10½″

- The smaller the aperture opening becomes (the greater the F figure becomes), the greater the depth of field will be.
- The depth of field becomes shorter for a longer focal distance and greater for a shorter focal distance lens.
- The depth of field extends greater into the background than into the foreground.
- The Rokkor lenses with the completely automatic diaphragms are always wide open before and after a picture is taken. The viewfinder, therefore, is bright and the depth of field can be checked only by pressing down the diaphragm lever after pre-selecting the desired aperture.

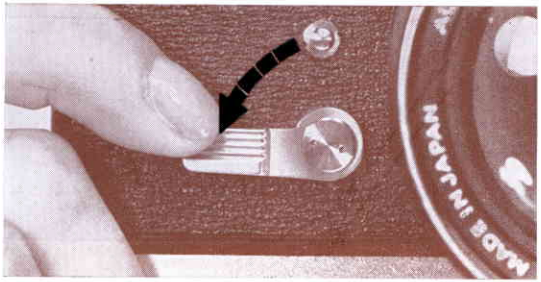
16. MIRROR LOCK BUTTON



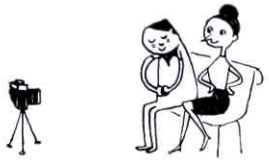
The mirror lock button is for use with the 21mm ultra-wide angle lens. Turn the button downwards until it stops. The mirror is then locked in a permanently suspended position. When the ultra-wide angle lens is attached to the camera, the shutter works alone with the mirror remaining in a suspended position. Therefore, viewing through the viewfinder cannot be acheived. Viewing is done through an accessory viewfinder which is attached to the eyepiece and focusing is done by the footage scale on the lens. When returning the button to its original position, turn the button upwards until it stops. The mirror is then unlocked and comes down to its original position. The mirror should not be released until the 21mm lens is removed.

- When attaching or detaching an ultra-wide angle lens, exercise caution so that the rear part of the lens may not hit the mirror or anything else.
- The accessory viewfinder is inserted into the grooves of the eyepiece window.
- The mirror locking feature of the SR-1 (model V) can be utilized when taking macro and micro photographs when the camera is mounted on a copy stand or tripod or when taking successive photographs of a subject that is not moving and does not require refocusing.

17. SELF-TIMER

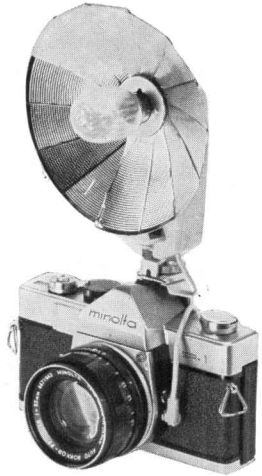


To set the self timer, push the lever down for about 90° in the direction as shown in the pictur e and press the start button. The timer then starts working and the shutter will be released about 10 seconds later. The shutter will not release unless the film has been advanced. You may set the timer either before or after advancing the film. If, however, you put the timer in motion without advancing the film beforehand, the lever stops halfways. In this case, advance the film first and then push down the lever. You can adjust its working time simply by setting the lever angle as you like. The timer, however, won't work unless the lever is pushed down for at least 45°.

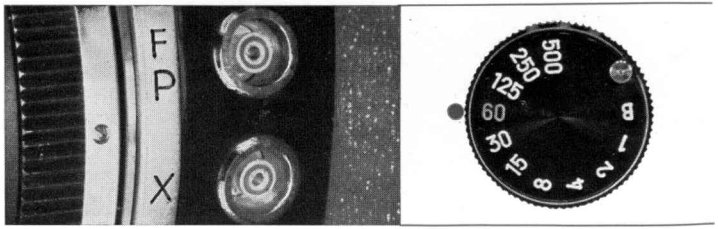


- The self-timer is utilized when taking a picture of yourself or a group of people together with you.
- The timer is also useful for study of your forms in playing sports such as golf, baseball, and tennis.
- When holding the camera to take a picture at a slow shutter speed, set the tmier for a short-time motion. Then you can release the shutter automatically without causing the danger of a camera jar.
- If you mistakenly press the shutter release button instead of the start button after setting will timer, the timer won't work but the shutter the be immediately released.

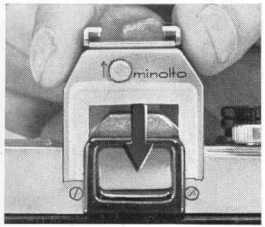
18. FLASH PHOTOGRAPHY

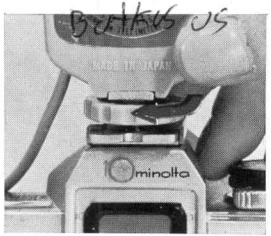


There are two terminals on the right side of the lens mount. The "FP" terminal is for a focal plane flash bulb, while the "X" terminal is for an electronic flash. Be sure to plug the flash cable into the correct terminal. When using the electronic flash, set the shutter speed at the red figure of 60 on the shutter speed dial and use the "X" terminal. When using FP class bulbs, you can use shutter speeds from 1 second to 1/500 second. The bulb flashes synchronize with the release of the shutter at any speed. It is advisable, however, to use a shutter speed faster than 1/60 second when photographing a moving subject at a comparatively bright place.



- Flash photography is recommended for snap shots at night, in a dark place, for indoor photography, or outside at sunup or sundown when deep shadows appear on the face and features of the subject.
- Flash photography is also effective in shaded areas when taking a picture of a person with a sky, sea, or window as the background or for backlighting photography.





Attaching Flash Equipment

Insert the Accessory Clip V into the grooves of the eyepiece window from above. The Accessory Clip V is properly mounted when it holds on the eyepiece.

Insert the base of your Minolta Deluxe Flash Gun or any standard flash equipment into the accessory clip from behind, and fasten the base with the screw of the flash equipment.

Shutter Speeds for Flash Photography
(The shaded area indicates adequate shutter speeds)

Terminal / Flash Bulb \ Shutter Speed		B	(Seconds) 1	1/2	1/4	1/8	1/15	1/30	1/60(X)	1/125	1/250	1/500
FP Terminal	FP Bulb											
X Terminal	F Bulb											
	M Bulb											
	Electronic Flash											

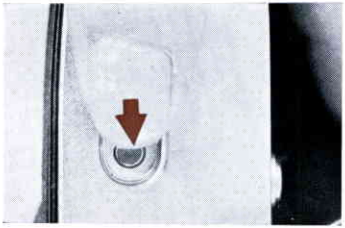
- Manuals of flash bulbs of various types show guide numbers commonsurate with a variety of film and shutter speeds. Correct exposure for flash photography can be determined according to the guide numbers.

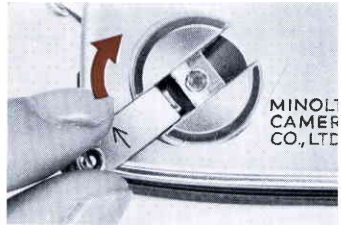
Distance to the Subject × Aperture Figure = Guide Number

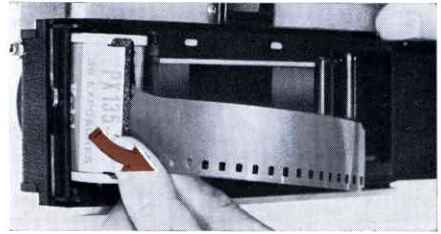
Therefore, the adequate aperture figure is: Guide Number ÷ Distance to the subject.

- Exposure shoud be measured against the main light when the flash light is used only as an auxiliary light at a bright place.
- In the case of a single lens reflex camera, the bulb flashes at the moment when the mirror springs up. You, therefore, may feel amidst the blind viewfield through the viewfinder as if the bulb had not flashed.

19. UNLOADING FILM





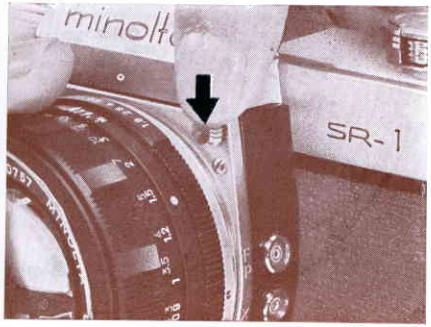


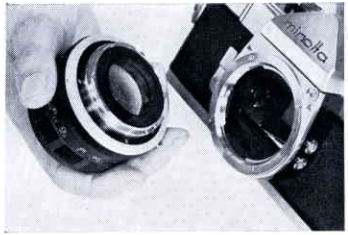
When you have reached the end of the roll of film the film advance lever will get stiff. If you force the film advance lever, the film tears out of the magazine and cannot be rewound, except in a dark room. Be careful in advancing the film when it comes close to its end. The finished film remains wound up in the chamber. Be sure not to open the back of the camera until the film is rewound into the film magazine, otherwise the film will be exposed.

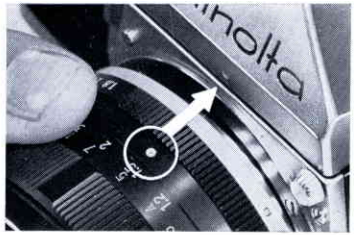
1. Push in the film rewind release button at the camera bottom, it will remain in and you do not have to continuously hold it in. If, however, the button pops out, rewinding the film slightly advance the film and then push the button. The button then remains pushed in and your hands are then free to rewind the film.
2. Raise up the crank and rewind the film in the direction of the arrow mark until you feel the slipping-out of the film from the clip of the take-up spool and a sudden release of tension.
3. Pull out the rewind knob and open the camera back. Separate the film magazine from the film axis of the camera and remove the magazine.

- Be sure not to rewind the film all the way into the magazine. (Some magazines permit the intrusion of light through their film exits.)

20. INTERCHANGING LENSES







Detaching the Lens

When detaching the lens, push down the lens lock button, turn the lens barrel counter-clockwise until it stops, and lift it out carefully.

Attaching the Lens

When attaching the lens, insert it into the bayonet mount by lining up the red dot on the lens barrel with the red dot on the camera body. Set the lens tight to the lens mount, and turn the lens clockwise until it stops. (When properly set you will hear a click.)

- The SR-1 is convenient for snapshots, teiephotography, wide-angle photography, and photography with an extension bellows, because it allows quick and accurate interchanging of lenses and accessories.
- You may interchange lenses either before or after advancing the film.
- A variety of adapters are available for lenses other than those exclusive with the SR-1 (Leica, Praktica and Exakta Adapters).

21. MAINTENANCE AND CARE OF THE CAMERA

When the camera is used at the beach or on a windy day, it may be stained with salt element or dust. If you leave it unclean, the lens on body may be corroded. It is essential, therefore, for you to take good care of your camera in order to prolong its service life. Please note the following so that your camera may serve you for many years:

Care after Use

Don't touch the lens with hand. If you inadvertently stain it, use a rubber ball blower to blow off dust from its surface, gently wipe its surface outwardly from the center with a clean cotton cloth dipped in a mixed liquid of alcohol and ether (at the ratio of 6 : 4). Be sure not to wipe strongly.

- Try to keep the lens clean. Brush it with a soft brush from time to time. Don't wipe it at quick frequently.
- Don't touch the mirror, but brush it with a soft brush
- When the aventurine chrome-plated surface is stained too much, wipe it with a cloth dipped in benzidine. In this case, exercise caution so that benzidine may not enter inside.

Caution in Maintenance

- When storing the camera, set the distance scale to ∞, release the shutter, and put the camera in the leather case.
- Do not drop or jar the camera.
- Do not store the camera at high temperature or humidity.
- When leaving the camera unused for a long time, remove the mercury battery from the camera.
- When storing the camera for a long period of time, put in original packaging with a small bag of Silca Gel. The Silca Gel is a drying agent.
- If you inadvertently drop the camera into sea water, wipe it with fresh water, dry with a clean cloth, and then bring it to a near-by service station for checkup. If it is left for a long time as it is, it may be corroded and become impossible to repair.

22. INTERCHANGEABLE LENSES FOR SR CAMERA

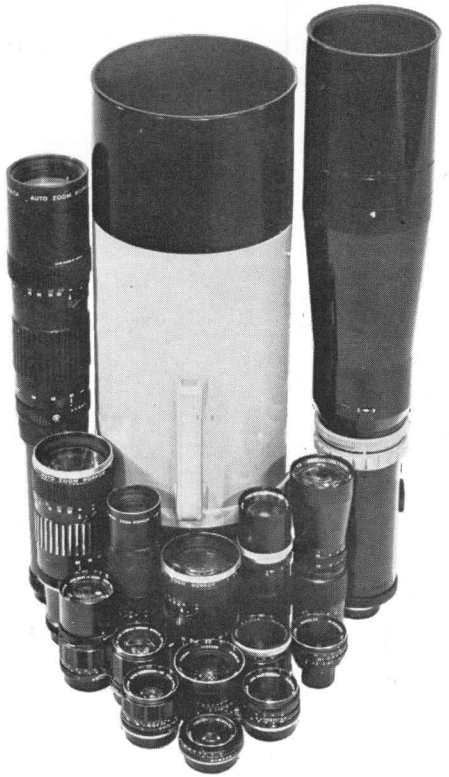
The SR camera with its excellent viewfinder system can capture the subject nearly in a 100% full size as you see through the vewfinder, no matter what interchangeable lens may be used, You, therefore, can quickly change the lens and the angle according to your photographic need. In order to achieve full enjoyment from your SR camera you should utilize some of the various accessory lenses.

Abundant Rokkor Lenses

Over 24 different types of intcrchangeable lenses from 21mm ultra-wide angle to 1000mm telephoto are available for the SR cameras. The interchangeable Rokkor lenses are high-performance products manufactured by a complete continuous processing system from the dissolution of optical glass to finished lenses coupled with an ultra modern optical theory.

Rokkor lenses are highly respected by all cameramen in the world for their superb efficiency resulting from excellent Achromatic Coating, sharp delineating power, beautiful vignetting, and excellent quality.

TABLE OF INTERCHANGEABLE ROKKOR LENSES

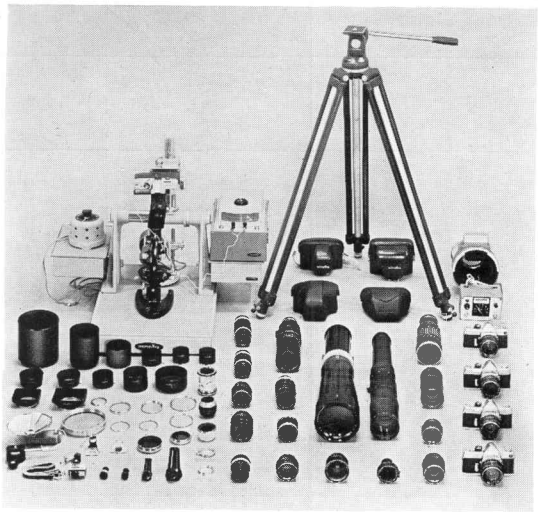


Types	Lens Opening-Focal Length	Lens Element (Group)	Angle of View
Ultra-wide	F/ 4–21mm	8(4)	92°
	F/3.5–28	7(7)	76°
Wide	F/ 4–35	5(4)	64°
	○F/ 4–35	5(4)	64°
	F/2.8–35	7(6)	64°
	○F/2.8–35	7(6)	64°
Semi-wide	F/2.8–45	4(3)	52°
Standard	F/ 2–55	6(5)	43°
	F/1.8–55	6(5)	43°
	○F/1.8–55	6(5)	43°
	F/1.4–58	6(5)	41°
	○F/1.4–58	6(5)	41°
Telephoto	F/ 4–100	3(3)	24°
	F/3.5–100	5(4)	24°
	○F/3.5–100	5(4)	24°
	F/ 2–100	6(5)	24°
	F/ 4–135	3(3)	18°
	F/2.8–135	6(5)	18°
	○F/2.8–135	6(5)	18°
	F/ 5–200	5(4)	12°
	F/3.5–200	6(4)	12°
	F/5.6–300	4(4)	8°
	F/4.5–300	4(4)	8°
	F/5.6–600	4(3)	4°
	F/6.3–1000		2°30′
Zoom	F/3.5– 50/100	15(9)	46°–24°
	F/3.5– 80/160	15(10)	36°–15°
	F/5.6–100/200	8(5)	24°–12°
	F/ 8–160/500	16(11)	15°– 5°
Macro	F/3.5–50	6(4)	45°
For Bellows	F/ 4–135	3(3)	18°

(○···Compact lens)

Filter Screw Diameter	Lens Shade Diameter	Lens Shade Type	Minimum Focus Dist.	Dimension Dia. × L.	Weight	Diaphragm
55mm			3 ft. (90cm)	60 × 20mm	5.8 oz. (166gr)	Manual
67	70mm	Slip-on	2 (60)	70 × 50	12.1 (345)	Automatic
55	57	〃	1.3 (40)	62 × 36	7.4 (210)	Pre-set
52	54	〃	1.3 (40)	60 × 34	6.4 (182)	〃
55	57	〃	1 (30)	63 × 48	10.5 (300)	Automatic
52	54	〃	1.3 (40)	60 × 45	7.2 (205)	〃
46	48	〃	3 (90)	64 × 17	4.6 (130)	〃
52	54	〃	1.75 (50)	60 × 35		〃
55	57	〃	1.75 (50)	66 × 39	9.9 (280)	〃
52	54	〃	1.75 (50)	60 × 35	7.4 (210)	〃
55	57	〃	2 (60)	66 × 42	11.3 (320)	〃
55	57	〃	2 (60)	62 × 40	9.3 (265)	〃
46	48	〃	4 (120)	56 × 80	8.5 (240)	Pre-set
55	57	〃	4 (120)	63 × 59	10.9 (310)	Automatic
52	54	〃	4 (120)	60 × 54	8.3 (235)	〃
62	62	Screw-in	4 (120)	66 × 63	15.0 (425)	〃
46	48	Slip-on	5 (150)	56 × 115	13.7 (375)	Pre-set
55	57	〃	5 (150)	63 × 95	18.6 (530)	Automatic
55	57	〃	5 (150)	56 × 115	14.7 (417)	〃
52	52	Screw-in	8 (250)	56 × 149	15.1 (430)	Pre-set
67	67	〃	8 (250)	70 × 138	27.1 (770)	Automatic
62	62	〃	15 (450)	65 × 197	19.2 (545)	Pre-set
77	77	〃	15 (450)	80 × 250	36.0 (1,020)	〃
126	126	〃	33 (1,000)	132 × 530	165 (4,700)	〃
49	200	〃	100 (3,000)	217 × 450	23.2 lb. (10.6kg)	ND Filters
77	77	〃	6.6 (200)	82 × 126	31 oz. (840gr)	Automatic
77	77	〃	8.3 (250)	84 × 206	47.8 (1,350)	〃
52	52	〃	7 (200)	58 × 175	19.5 (535)	Pre-set
77	77	〃	15 (450)	87 × 490	97.5 (2,770)	Automatic
55			0.9 (23)	63 × 54	9.1 (260)	Pre-set
46	48	Slip-on	1.8 (46)	56 × 55	7.1 (200)	〃

A wide variety of accessories are available for the SR cameras. When utilized, the SR cameras are virtually unlimited in superb efficiency over the entire spectrum of photography in the educational, medical, journalistic, sports and general photographic fields.

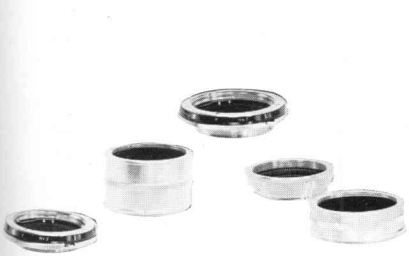


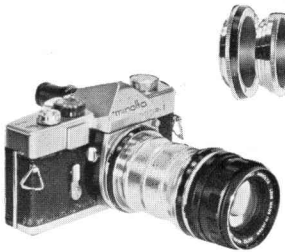
Close-Up Photography

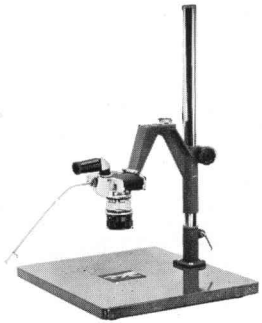
Nothing is more enjoyable than close-ups. A single lens reflex camera has no parallax, no matter how close it may be to the subject. Besides, it enables you to confirm the depth of field directly. It, therefore, is an ideal camera for close-ups, copying, and micro-photography.

A. Close-Up Lenses

The SR with the 55mm standard lens can take a close-up shot of a subject $7\frac{1}{4}'' \times 10''$. If, however, you want to move your camera closer to the subject, you require a close-up lens, intermediate ring, or a bellows. Since the close-up lens screws into the front of the standard lens you simply focus and shoot since the automatic diaphragm is operable at all times. You can enjoy close-up shots of insects fluttering over flowers, and many other subjects. The close-up lenses for exclusive use with the SR's are given a special design preventing a decrease in their close-up efficiency. Nos. 1 and 2 types of close-up lenses are available. In the case of 55mm standard lens, No. 1 is possible for 0.1–0.25 time close-up shots, while No. 2 for 0.2–0.3 time close-up shots.







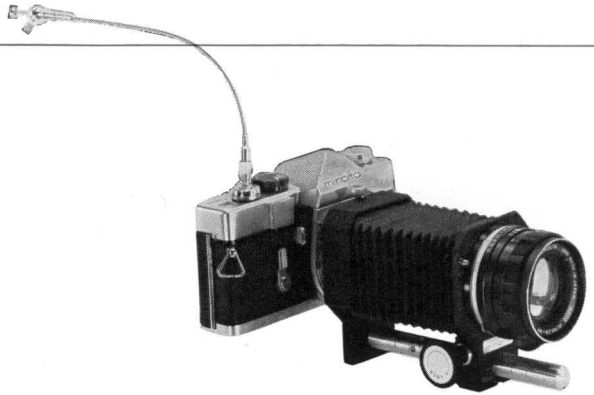
B. Extension Tube Set

When the subject requires an extreme close-up shot at greater magnification than the ordinary close-up shot, an intermediate ring becomes necessary. Nos. 1 – 5 types of intermediate rings are available. Any intermediate ring can be bayonet mounted between the camera body and the lens. It is quite convenient for copying pictures and insect specimens. In the case of the 55mm standard lens, the ring allows 0.14 – 1.4 time magnifications. The more rings added, the greater magnifications. The more rings are added, the greater magnifications will be obtained.

C. Copying Stand

The Minolta Copying stand is an important tool for taking copy photogaphs. It enables you to mount the camera, compose in the viewfinder and shoot, giving to bibrationless pictures. It also permits you to focus and then lock up the mirror before releasing the shutter. A cable release is recommended. The Minolta Copying Stand of the portable type can be easily assembled.

- When using the Copying Stand the Angle Finder V is an excellent aid in focusing.



D. Extension Bellows, Type 1

An Extension Bellows is useful for close-up shots and macrophotography of small subjects.

Type 1 is a folding portable type. When its bellows is extended, the 55mm lens can make continuous close-up shots at 0.8 – 2.4 magnifications.

Extention Bellows, Type 2

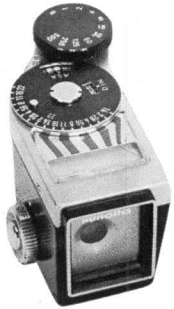
Type 2 is a deluxe Extension Bellows. The 55mm lens with the bellows can make continuous close-up shots at 1.0 – 3.2 time magnifications. The bellows is equipped with a slide copying attachment for recopying black-and-white and color slides.

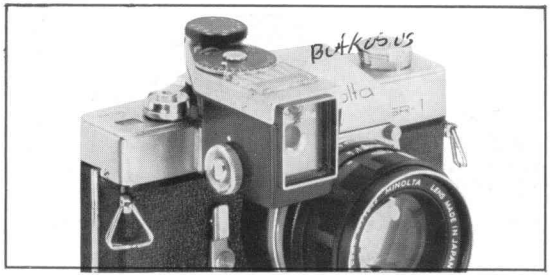
- Use a tripod and a cable shutter release for close-up shots in order to prevent a camera jar.
- It is convenient to use an Angle Finder V possible to view from above and a Magnifier V for precise focusing.
- Increase exposure for close-up shots with an intermediate ring or Extension Bellows.

- You are assured of sharp pictures if you use a macro-lens for copying literature or macrophotography as well as an Extension Bellows for close-up shots at animals and plants in the open air.

Table of Close-Up Accessories

Close-Up Accessories	Magnification with Standard Lens	Photographic Purpose
Close-up lens No. 1	0.11 – 0.25	Simple close-up shot at comparatively small magnification
Close-up lens No. 2	0.2 – 0.3	
Intermediate Ring	0.14 – 1.4	Ordinary close-up shot
Extension Bellows Type 1	0.8 – 2.4	Portable and extreme close-up shot
Extension Bellows Type 2	1.0 – 3.2	Extreme close-up shot and slide copying
Macro Rokkor F 3.5/50mm	∞ – 0.5	Literature copying, landscape photography, and close-up shot
Intermediate ring for macro lens	0.5 – 1.0	
Rokkor TC for Extension Bellows F 4/135mm	∞ – 1.1	From landscape photography to close-up shot with telephoto lens attached to Extension Bellows





SR Meter V Increasing Photographic Effi ciency

The meter is a high-efficiency CdS exposure meter for exclusive use with the SR-1 (m del V). When it is attached to the meter shoe of the camera, it becomes interlocked with the shutter speed dial. The camera then becomes one of the needle indication type interlocked with the exposure meter.

Features

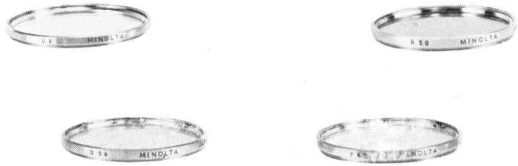
1. The meter of the highly sensitive CdS type can measure a broad range of EV2 through EV18 for an ASA 100 film due to its double-stage system. (EV2, 1 second.)
2. It has an accurate light receiving angle of about 30° which is equivalent to an 80mm focal length. It therefore, can measure exposure for the subject, effeciently and accurately.
3. The battery can be checked.
   As it is epuipped with a battery checker, the, voltage of the battery can be checked.
4. Easy to attach or detach.
   It can be accurately and quickly attached to or detached from the camera by using the meter shoe.
5. Wide ASA range from 6-6400.
   It is recommended to use the Minolta high-performance filters for the SR's.

24. OBTAINING SHARP PICTURES-ACCESSORIES

* **Lens Shades**

A lens shade recommended to prevent any stray light from entering the lens, thereby to obtain a sharp image of the subject. A variety of shades are available for use with all lenses from the standard size to the ultra-wide angle telephoto size.

A lens shades is especially essential for flash photography, and beach and snow photography. The lenses of 100mm or above are sold with lens hoods include in their respective price.



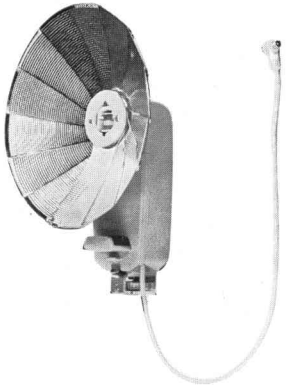
* **Filter**

A filter is used to obtain truer or more dramatic results from the subject or to secure specific color effects. It is essential for use with the lens throughout the four seasons.

* **Polarizing Filters**

A Polarizing Filter controls or eliminates reflections on the water surface, glass, and many other metallic surfaces as well as polarizing light emanating from the sky. It can clearly catch the subject through glass, water, etc. It can also be used to darken the sky without changing the color balance.

Two types of polarizing filters are available: One is for 55mm screw diameter lens, the other is for 52mm screw diameter lens.

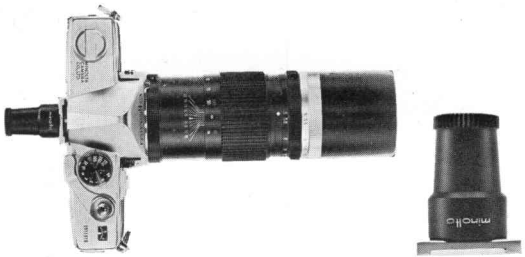


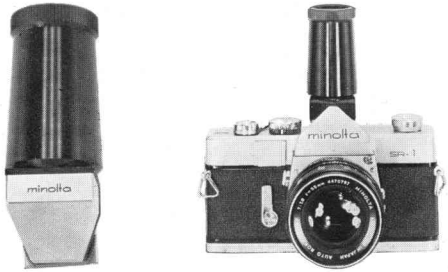
* **Accessory Clip V**

When using an accessory, insert this clip into the grooves of the eyepiece window of the camera.

* **Minolta DeLuxe Flash Gun**

A compact folding reflector flash unit that conveniently slips into camera's accessory shoe mount. A properly proportioned cord connects to the BC synchronization outlet. Comes with vinyl case. Uses bayonet and glass base bulbs and features a handy ejector.



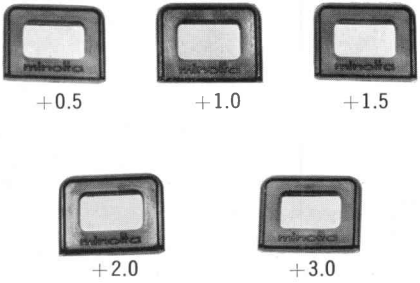


* **Magnifier V**

The Magnifier V is used for magnification of the image in the finder. When attached to the eyepiece window, it ensures more precise focusing. It is convenient for close-up shots and copying. The magnification of the image is 2.5 times.

* **Angle Finder V**

The Angle Finder V is used when holding the camera at chest level, as with a twin lens reflex. The Angle Finder V for the SR-1 (model V) has a pentagon prism, the first of its kind in the world, and is featured by forming an erect image. It affords easier viewing and framing, and can be used when taking pictures of people to your side. When using the copy stand for microphotography it is an excellent aid. The Angle Finder V revolves 360°.

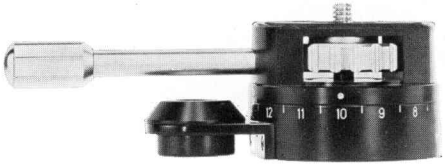


* **Eyepiece Correction Lens V**

The Eyepiece Correction Lens V enables even a far sighted SR user to focus very easily. It is attached to the eyepiece window.

(Five types of attachments from + 0.5 to + 3 diopters are available.)

Choose the best attachment suited for your visibility. (Check with your eye doctor for the proper number to suit you best.)

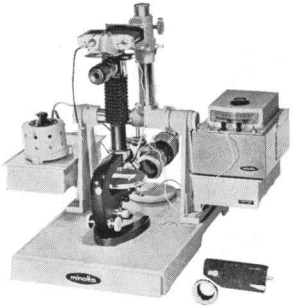


* **Panorama Head**

With the aid of the Panorama Head, an extensive range of the subject can be photographed in segments and printed as a single picture.

Panorama Head permits shifting the camera angle after each picture, shooting as much as 360° if you wish.

Each film can be subsequently printed in the dark room to make a panoramic view.

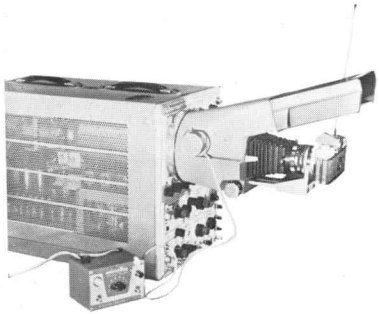


* **Microscope Adapter**

The adapter is used between the microscope and the camera body when taking microphotos. You can easily take microphotos of moving subjects while watching them through the lens. The Microscope Adapter can be adjusted from 24mm–27mm diameter.

* **Universal Microscope Photo System**

The systsem is for exclusive use with the SR's. It is featured by a vibration-proof device, free adjustment of photographic magnification, a precise viewfinder, a high-sensitivity exposure meter, etc., all of which are essential for microphotography. It is best suited for microphotography for academic and criminal investigation purposes.



* **Photo Oscilloscope Unit II**

Brauntube oscilloscopes have become much required for academic research and industrial production. The Oscilloscope Unit II for the SR guarantees accurate recording of electric waves, thereby to serve for more precise observation and measurememt.

It is highlighted by a big finder hood for easy observation and a special data recording device.

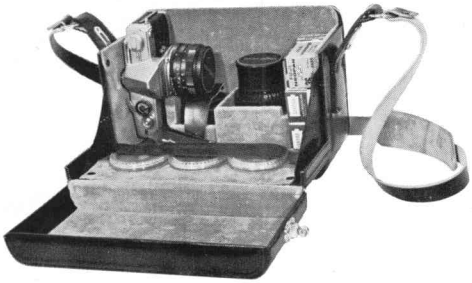
* **Leica Mount Type Adapter**

With the Leica mount type adapter, Leika mount type lenses are fitted to the SR. (These lenses, however, can be used only for close-up shots in view of the special construction of the single lens reflex camera.)

* **Exakta Mount Type Adapter**

With the adapter, any lens fitted with Exakta bayonet mount can be used with the SR from the nearest distance to infinity.

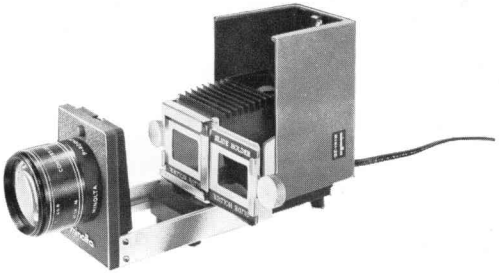
* **Praktica Mount Type Adapter**



* **Gadget Bag**

A SR camera, two interchangeable lenses (one wide angle and one telephoto lenses each), one body only, filters, and films can be put in the bag.

* **Cable Release**
* **Eveready Case**
* **Lens Cap**
* **Rear Cap**
* **Body Cap**
* **Neck Strap**



* **Minolta Mini 35 II Projector**

The projector is reco mmendednot only for families to enjoy color pictures but also for plants and schools to project pictures for training and educational purposes.

The projector is simple to useand easy to carry. The non-spherical condenser corrects the aberration of the condenser system and affords a bright picture with even illumination to its all corners.

Its wide angle conversion lens adjusts the picture size for a large or small room. It comes in an attractive carry case w/slide changer and lamp.