

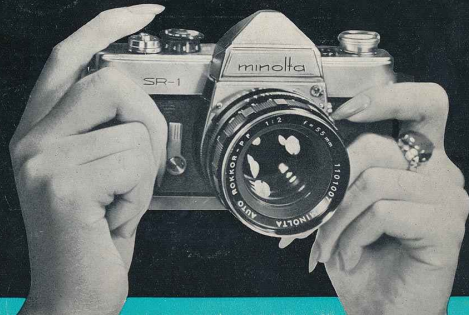


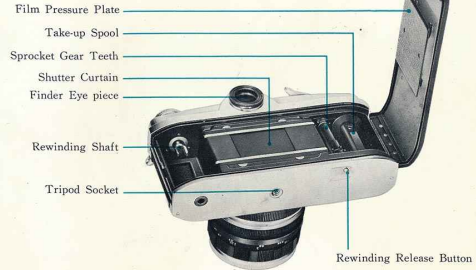
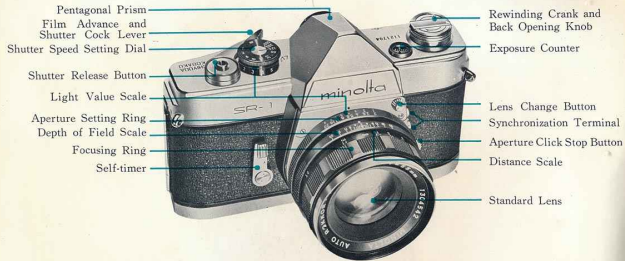
AUTO-TELE ROKKOR 200mm F3.5

CHIYODA KOGAKU SEIKO K. K.

Printed in Japan

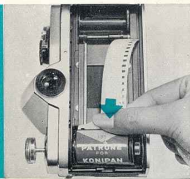
Minolta SR-1 Owner's Manual





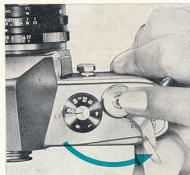
6 Steps before shooting

(Each step is explained in detail on the following pages)



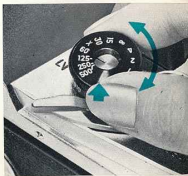
1

Load film.



2

Advance lever.



3

Set shutter speed.



4

Set F stop.



5

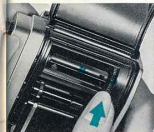
Frame subject and focus.



6

Click shutter.

20 or 36 exposures
35mm film can be
used.



1. To open the camera back, pull out the rewinding knob (1) until it stops, then with a slight extra pull, the back will open and the film counter (2) will return automatically to the starting position.

2. Insert film magazine (3) into the film chamber, so that the film axis knob of the magazine is placed on the bottom side of the chamber.

3. Push the rewinding knob (1) down to its original position. If you should have any difficulty then turn the knob around slightly and push down.

4. Using the knurled base of the film take-up spool (5) turn until the film catching clip (4) faces the upper side.

5. Insert the film leader into the take-up spool as per picture along the bottom side of the take-up spool. Make sure the film sprocket gear teeth are engaged with the film perforations.

6. Advance the film lever (6) by making several short strokes until both sides of the film perforations are engaged properly in the film sprocket gear teeth (7). When the film advance lever stops release the shutter (8) so that you can advance further.

Load and unload
the film in the
shadow and never
under direct
sunlight.



7. Please make sure that the film is placed parallel to the camera body before closing the camera back.



8. Again advance the lever (6) until it stops and then release the shutter (8). Repeat this action twice and advance the lever once more, then you are ready to shoot.



9. Notice the film counter window. A red arrow will indicate that the first film frame is in position to be exposed and you are ready for the first shot.

Film emulsion speed indicator :

For your reminder set the indicator to the emulsion speed number (ASA or DIN) of the film you have just loaded.

To set the indicator turn the dial knob (10). For instance, if your film, speed is ASA 200, set it as this picture indicates.

When color film is being used the indicator is set on the red figures.

Emulsion speed numbers (ASA) are listed right for your convenience.

They are also given on the instruction sheet which comes with each film.



Emulsion Speed Numbers

Films	A S A
ILFORD HPS	400
Anso Super Hypan	500
ADOX KB 14	(DIN) 14
ADOX KB 17	(DIN) 17
ADOX KB 21	(DIN) 21
Kodak Panatomic X	25
Kodak Plus X	80
Kodak Tri X	200
Kodacolor	32
Ektachrome (daylight type)	32
Kodachrome (daylight type)	10
Super Anscochrome (daylight type)	100
Anscochrome	32

Advancing the film

2

Do not advance the lever while the shutter is still in motion

Note: Unless the film advancing lever is completely wound, the shutter can not be released.



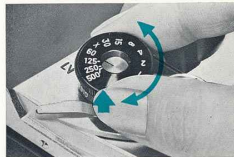
The film advancing lever performs the following five actions simultaneously

1. Advances the film one picture frame.
2. Advances the film counter to the next number.
3. Cocks the shutter mechanism.
4. Sets the quick-return mirror mechanism.
5. Opens the diaphragm fully.

You can turn the lever either by making several short strokes or by one 180 degree stroke until it stops as it is illustrated in the pictures.

3

The shutter speed setting



The shutter speed dial is marked with figures B to 500. The figures 1, 2, 4, 8, 15, 500 indicate respectively shutter speeds of 1 second, $\frac{1}{2}$ second, $\frac{1}{4}$ second, $\frac{1}{8}$ second, $\frac{1}{15}$ second $\frac{1}{500}$ second.

The B position or bulb enables you to keep the shutter opened as long as the shutter button is pressed down. This position is used when more than one second exposure is required.

The red letter-X corresponds to about $\frac{1}{50}$ of second speed. This position or speed is used with strobes or electronic flash equipment. (Please read page 25).

How to set shutter speed

Pull up the black knurled part of the speed dial and turn until the desired shutter speed figure is next to the center red line, then set down the speed dial. The shutter speed can be set either before or after advancing the lever.



The diaphragm is set to desired aperture figure by turning the diaphragm setting ring (11) while pressing the click stop button (12). When the white dot coincides with the figure you choose, release your finger from the button and it will be locked in the selected figure. Should the diaphragm ring left in any intermediate position between figures the ring will move to the next figure position when the shutter is released.

The diaphragm ring has aperture figures from 2 to 22. The more the figure increases the less light volume is permitted through the lens. The following illustration indicates the relationship between aperture and light volume.

Aperture	2	2.8	4	5.6	8	11	16	22
Light volume								
	1	1/2	1/4	1/8	1/16	1/32	1/64	1/128

What is a COMPLETE AUTO-PRE-SET DIAPHRAGM?

This is an advanced feature which Minolta is very much proud of. In general, with other single lens reflex cameras it is very difficult to focus when the aperture is small since the viewfinder will be very dark. For this reason it is necessary to open the lens to its maximum aperture when focusing and then to close the aperture down to the f stop desired after focusing.

The Minolta SR-1 completely eliminates this difficulty. When the lever is advanced, the lens will be opened to its maximum aperture and therefore it becomes very easy to focus and frame the subject through the extra-bright viewfinder. And when the shutter is released, immediately before the shutter mechanism starts to open, the aperture will automatically close down to the pre-set aperture stop.

This automatic pre-set mechanism is also contained in the Wide-angle F2.8-35mm lens, F3.5-100mm lens and F2.8-135mm lens as well as in the Standard F2-55mm lens.

The aperture stops are used for control of exposure on the film, and at same time to control the depth of field.

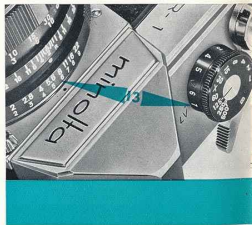
In order to check the depth of field in the foreground and back ground of the subject, adjust the diaphragm before cocking the lever.

(see page 16 for detailed information).

How to use "the light value scale"

The lower part of the shutter speed dial and the diaphragm setting ring are marked with small yellow figures (13) that are the divided light values—i.e. any combination of figures between the shutter dial and diaphragm ring would correspond to a light value.

If you have an exposure meter with Light Value Scale, you can get the proper exposure setting by using the yellow figures marked in the shutter dial and in the diaphragm ring.



First, read off the light value number indicated by your exposure meter and then divide this value between the shutter speed dial light value and the aperture ring light value.

For example, if the light value number of your exposure meter is 13, you may divide it into 7 on shutter side and 6 on aperture side as in the right illustrations or 9 on the shutter side and 4 on the aperture side.

You will get the proper exposure as long as the combinations add up to 13. In this case 7 and 6, 9 and 4, 5 and 8, 6 and 7.

Which side the priority in combination will be given to depends upon the subject you are about to shoot. For instance, if you are to shoot a fast moving subject, it is necessary to use a fast shutter speed. Assuming that a speed of $\frac{1}{250}$ of sec. is sufficient set the shutter speed light value index to 8-(1/250sec.) and then, using the example that the light value given by a exposure meter is 13, set the aperture light value index to 5-(f5.6) (13-8=5) If you wish to give priority to aperture setting rather than to shutter speed in order to achieve a greater depth of field, it is necessary to use a larger number on the aperture light value index.



It is recommended to focus after advancing the winding lever due to the greater brightness of the viewing field and shallower depth of field. However, if you wish to check the depth of field, you can do so before advancing the winding lever.

By looking through the viewfinder eyepiece and turning the lens barrel (15) either to the right or left your subject image will become sharper and clearer. At the sharpest point you are in focus and ready to shoot. The same image you see will appear on the film negative.



This is one of the biggest advantage of the Minolta SR-1 that there is no parallax correction problem, i.e., however close you may get to your subject you do not have to worry about parallax compensation. What you see through the view-finder is exactly what you will get on the film negative. Further advantages are followings:
you can see (1) The real relationship between subject, background and foreground. (2) The actual color condition when using filters. (3) Depth of field changes in accordance with the change of aperture settings.

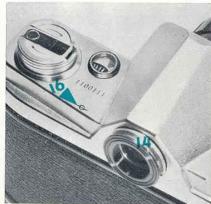
These results can be obtained before advancing the winding lever which will automatically open the diaphragm fully. Should you desire the above advantages ① adjust the aperture and the shutter speed, ② focus the lens approximately and view the subject, ③ advance the film and ④ focus the lens critically.



Infrared film indicator :

When using infrared film you must move back the focused distance indicated by ▲ mark to "R" position.

The black ring of finder eye-piece (14) can be screwed off by turning counter-clockwise in order to attach finder accessories such as the angle viewfinder and critical focusing (magnifier) viewfinder. The flash accessory shoe is attached by screwing in the eye piece.



Depth of field:

The depth of field of a lens is the range of distance within which all subjects are in relatively sharp focus when the lens is set for a given distance. This range varies with the lens aperture, being greatest when the lens is stopped down and least when it is open full.

The photographs on the next page illustrate the relationship. The same subject was taken at different aperture settings.



Taken at F2 ($\frac{1}{500}$ sec.)

At large aperture, only the subject (girl) is in sharp focus while the background (the castle) and the foreground (the boy) are fuzzy. This is an example of shallow depth of field.



Taken at F22 ($\frac{1}{4}$ sec.)

Overall picture is in comparatively sharp focus. This is an example of great depth of field.

The principles governing it are:

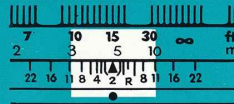
1. The depth of field is greater as the distance is increased or the aperture is stopped down.
2. The depth of field grows less as the distance is decreased or the aperture is enlarged.
3. The depth extends greater into the background than the foreground.
4. The depth of field is greater with a shorter focal length lens and shallower with a longer focal length lens.

Because the depth of field can be controlled by the aperture stops, you can either bring to sharpness both the background and foreground or emphasize the subject sharpness only by making the background fuzzy.

Foliage framing the distant view or deep shadows in the foreground will also set off the lighter distance landscape with strong effect.

You can check the effect of the depth of field by setting the aperture and focusing before advancing film.

However, should you advance the film first and then wish to check the depth of field, you must refer to the depth of field scale (17).



The arrow mark ▲ on the ring (17) indicates the distance between camera and focused subject. The two sets of figures on both sides of the arrow mark are aperture stops and the distance framed by the two same figures shows the depth of field. For instance, if you are focusing on a subject 15 feet away and if you are using a f 11 aperture, it will be possible to read off the distances opposite the figures 11 on both sides of the depth of field scale which will be approximately 10 feet to 37 feet. This will be the range of distance within which all subjects are in relatively sharp focus.

Depth of Field Table AUTO ROKKOR
55mm. F2

F. No.	2	2.8	4	5.6	8	11	16	22
Distance in ft.								
∞	135.48	96.81	67.80	48.50	34.00	24.76	17.07	12.45
60	107.19	75.52	506.40	∞	∞	∞	∞	∞
41.69	37.16	32.09	26.94	21.81	17.63	13.38	10.39	∞
30	38.38	43.28	53.36	77.40	242.40	∞	∞	∞
24.63	22.99	20.91	18.65	16.06	13.69	10.99	8.91	∞
20	23.37	26.07	28.12	33.60	47.50	68.96	∞	∞
17.48	16.64	15.53	14.26	12.79	11.19	9.34	7.79	∞
15	16.80	17.68	19.11	21.47	26.35	36.89	111.57	∞
13.56	13.05	12.36	11.54	10.51	9.46	8.11	6.90	∞
12	13.12	13.63	14.47	15.77	18.23	22.67	38.28	227.54
11.07	10.73	10.26	9.70	8.96	8.20	7.17	6.24	∞
10	10.76	11.10	11.64	12.45	13.93	16.37	23.10	46.00
9.35	9.11	8.77	8.26	7.81	7.23	6.42	5.67	∞
8	8.47	8.68	9.00	9.48	10.29	11.64	14.49	20.94
7.58	7.43	7.21	6.93	6.55	6.14	5.50	4.99	∞
7	7.36	7.50	7.74	8.09	8.68	9.54	11.44	15.08
6.68	6.56	6.38	6.18	5.88	5.54	5.07	4.60	∞
6	6.25	6.37	6.53	6.77	7.18	7.74	8.93	10.97
5.77	5.68	5.55	5.39	5.16	4.91	4.54	4.16	∞
5	5.17	5.24	5.35	5.51	5.77	6.13	6.84	7.94
4.84	4.78	4.69	4.58	4.41	4.23	3.95	3.68	∞
4.5	4.64	4.70	4.79	4.91	5.11	5.38	5.91	6.71
4.37	4.32	4.25	4.15	4.02	3.88	3.65	3.41	∞
4	4.10	4.15	4.22	4.31	4.46	4.67	5.06	5.62
3.89	3.81	3.81	3.73	3.63	3.51	3.32	3.12	∞
3.5	3.58	3.61	3.66	3.73	3.85	3.99	4.27	4.65
3.42	3.39	3.35	3.29	3.21	3.12	2.98	2.82	∞
3	3.06	3.07	3.11	3.17	3.25	3.34	3.52	3.78
2.95	2.93	2.90	2.86	2.80	2.73	2.62	2.50	∞
2.5	2.54	2.55	2.57	2.61	2.66	2.72	2.84	2.99
2.46	2.45	2.43	2.41	2.36	2.31	2.23	2.16	∞
2.25	2.28	2.30	2.31	2.34	2.38	2.43	2.51	2.64
2.22	2.21	2.20	2.17	2.14	2.10	2.04	1.97	∞
2	2.02	2.03	2.04	2.06	2.09	2.13	2.20	2.28
1.98	1.97	1.96	1.94	1.91	1.88	1.84	1.78	∞

When you release the shutter button :

- 1) The aperture will close automatically to the pre-set f stop.
- 2) The mirror will rise up to allow exposure to be made.
- 3) The shutter curtain will open to expose film at pre-set shutter speed.
- 4) The mirror will instantly return to its original position.



How to aim :

The camera may be held accordingly for either horizontal or vertical pictures. It is best to press the camera firmly against your face and to release the shutter with a slow pressure to avoid all movements and insure sharp negatives. Whichever eye is convenient for you to focus and view with may be used although for sequence shots it is advisable to use the right eye to permit free use of the rapid winding lever.

The lever contains a double exposure prevention mechanism and therefore the film can be advanced only after you release the shutter. Unless the lever is advanced completely, the shutter can not be released.

Attention :

When using shutter speeds of $\frac{1}{15}$ sec. and slower it is best to use a tripod to avoid camera movement. If a tripod is not available, set the camera on something or hold the camera against something steady.

A Cable release may be screwed into the shutter release button. It is best to use a cable release (19) when using a tripod.

When using slow shutter speeds such as $\frac{1}{2}$ of sec. or 1 second, please be careful not to advance film while the shutter mechanism is still in motion.



When you have finished taking all pictures (20 or 36 exposures), you will not be able to advance the lever any further. If you force it further, the film will tear or pulled out of the film magazine and it will be impossible to rewind film back into the magazine.



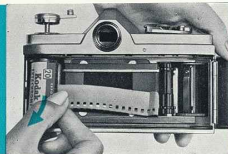
It is absolutely necessary to rewind the film back into the magazine in order to unload the film from camera.

1. When you have finished taking all pictures, push in the rewinding release button (20) and it will click into place, the button should remain in after releasing your finger, if the button pops up again then advance the lever very slightly while pushing the button down and it will click into place.



2. Raise up the crank (21) and rewind in a clockwise direction as the arrow on the knob indicate until you feel the film is slip out from the clip of the take up spool and a sudden release of tension.

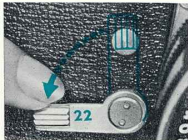
Attn: When operating the crank rewinding lever, please do not pull up the rewinding knob. If you do so, the camera back will open and the entire film will be exposed.



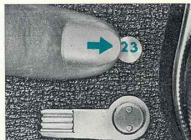
3. Open the camera back by pulling out the rewind knob as far as it goes (see page 4 step 1). Remove the film magazine.

The self-timer allows you to get yourself into the picture. Also the self-timer can be used to minimize camera movement. Even while you are holding the camera at slow shutter speeds with the self-timer working, you can minimize blurring better than by pressing on the shutter release.

Attn: If you press the shutter release button without pushing the self-timer button (23), the shutter will open without letting the self-timer work.



1. To charge or set the self-timer push down lever (22). When the lever is pushed down to the position this picture indicates, you will get a time lag of about 10 seconds.



2. To start the self-timer, push button (23) toward the lens barrel and the shutter will automatically release after the time lag of about 10 seconds. If you set the shutter dial on "B" and use the self-timer, you will get approximately a 2 second constant exposure automatically.

It is recommended using flash for night shots and for filling in dark shaded areas. You can use either regular flash or strobe light.

When you use a strobe light (Electronic flash) :

Please make sure the shutter speed dial is set on the red mark "X". Speeds slower than X (about 1/50 of sec.) may be used. With strobe light the camera is synchronized at speeds from 1 second to 1/50 of second.

When you use flash bulbs :

Please make sure you use FP. class bulbs. (Focal Plane bulbs) The camera is synchronized at all shutter speeds from 1 second to 1/500 of second when using FP. class bulbs.



Shutter Speeds (sec.)	Flash Bulbs												
		B	1/250	1/500	1/1000	1/2000	1/4000	1/8000	X	1/100	1/200	1/400	1/800
FP Contact	FP class bulbs (large size)												
	FP class bulbs (small size)												
X Contact	F class bulbs												
	M class bulbs												
	Speed light												

Shutter speed to be used for flash photography
(The speeds showed by oblique lines are the speeds you can use)

The important factor in flash photography is the aperture setting. The aperture setting is determined by the brightness of flash and the distance from the light to subject. As these factors vary greatly, precise information on instructions is attached with flash bulbs and strobe light units.

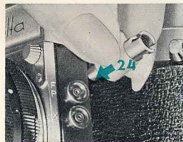


Minolta B.C. Flash

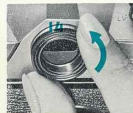


How to connect flash gun

If you wish to attach a flash gun on the camera, you can do so by using the SR-1 accessory clip (which is available separately) →



How to attach the SR-1 accessory clip



A) Unscrew the black eye piece ring (14) by turning it counter-clockwise.



B) Attach the accessory clip (25) over the penta-prism cover and screw in black ring which will hold it in place.



C) Slide flash gun shoe into the accessory clip.

← Insert the flash connection plug into synchronization terminal (24). Please make sure the plug is inserted into the proper terminal. When using a regular flash gun, insert plug into the terminal marked with blue FP and when using a strobe light unit insert plug into the terminal marked with red X.

Interchanging the lenses



Automatic pre-set lenses can be changed even after advancing the lever and still maintain the fullest aperture opening.



To remove lens

While pushing down the lens change-button (26) turn the lens barrel counter-clockwise until it stops (1/8 of a turn) and still holding unto the lens barrel lift up carefully.



To attach lens

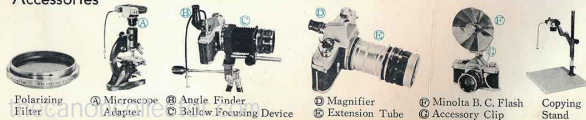
Insert the lens into the bayonet mount by lining up the red dot on the lens barrel with the red dot on the camera body and turn the lens clockwise until it stops (1/8 of a turn)

"ROKKOR" Interchangeable Lenses for Minolta SR-1

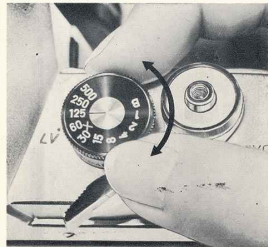
Accessories



Accessories



Your camera has the improvement as follows: —



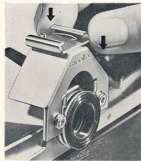
How to set shutter speed

Turn the shutter speed dial until the desired shutter speed figure is next to the center red line.

The shutter speed can be set either before or after advancing the lever.

Your camera has the improvement as follows: —

How to attach the SR-1 accessory clip.



A) Push the accessory clip onto the eyepiece as picture. The spring on the accessory clip will fix the clip on the penta-prism cover.



B) Slide flash gun shoe into the accessory clip.



C) For detaching the accessory clip, push up the two buttons of clip, it will come off easily.