CHIYODA KOGAKU SEIKO K. K. OSAKA, JAPAN

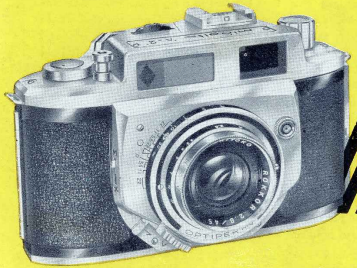
5702 - 5000

Printed in Japan

Minolta A-2

WITH ROKKOR F 2.8

35mm CAMERA



INSTRUCTIONS
FOR USING

The MINOLTA "A-2"

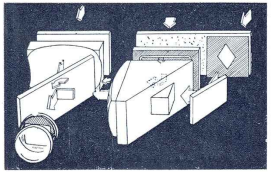
A precision, professional quality 35 mm camera in every respect, ruggedly built to withstand years of hard usage. It is housed in a lightweight, precision-diecast, aluminum alloy body. Designed for fast sequence shooting, the single thumb-stroke film advance lever cocks the shutter in the same operation and prevents double exposures. A knurled, index-finger-actuated cam and helical focusing threads provide smooth, fast-action focusing.

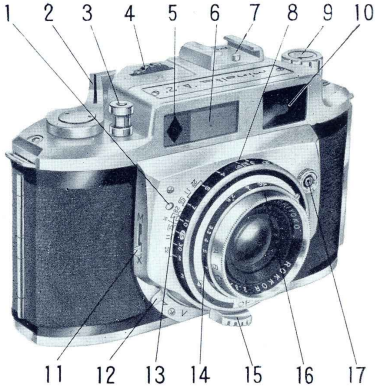
The fast, Rokkor f 2.8-45mm five-element lens has glass-air surfaces hard-coated and is equipped with a click-stop diaphragm. Diaphragm-stop numbers are equally spaced on the dial making proportional stops easy to select.

The smooth acting Optiper MXV shutter provides fast acting vibrationless operation at speeds from 1 to 1/400 second and bulb. It is synchronized for both flash bulbs and strobe-light and has a standard type connection so that any flash gun may be used. An accessory shoe on top of the camera takes all slide-in types of accessories.

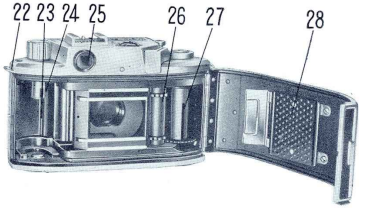
It makes 36 standard size pictures from the standard 35mm film cartridge. The hinged back provides easy loading and an automatic film counter shows the number of frames exposed.

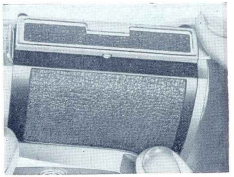
Your Minolta A-2 boasts a bright-frame built-in rangefinder-viewfinder which is the ultimate in composing ease and speed. Your subject is seen framed in a luminous rectangle which remains clearly visible even under dark conditions. The permanent position of the luminous frame, even though you may move your eyes, will greatly diminish the possibility of your chopping off heads or other subject matter composed on the extreme edges of your finder. This finder enables quick composing and anticipation of your next shot in the same manner as a sports finder, in as much as the area directly outside of the frame is clearly visible.

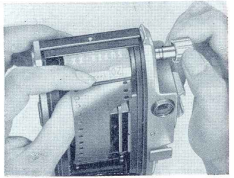




1. Signal Window for Self-timer Lever.
2. Film Advance and Shutter-cock Lever.
3. Shutter Release Button.
4. Shutter Speed Dial.
5. Rangefinder Window.
6. Illuminating Window for Bright Frame.
7. Accessory Shoe.
8. Distance Scale.
9. Rewind Knob.
10. Viewfinder Window.
11. Synchro Selector.
12. Self-timer Lever.
13. Depth-of-Field Scale.
14. Flash Guide Scale.
15. Focusing Lever.
16. Click-stop Diaphragm Setting Ring. (Diaphragm Stop Scale on top of lens barrel).
17. Flash Synchronizer Connection.
18. Film Counter Dial and Knurled Setting Screw.
19. Rewind (Sprocket) Release Button.
20. Tripod Mount.
21. Back Locking Tab.
22. Neck Strap Attachment.
23. Film Cartridge Chamber.
24. Rewind Shaft.
25. Rangefinder - Viewfinder Window.
26. Film Winding Sprocket.
27. Film Winding Spool.
28. Pressure Plate.







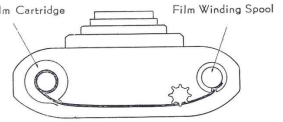
HOW TO USE

To Load Film

1. Pull out the Back Locking Tab (21), open the camera back.

2. Pull the Rewind Knob (9) out as far as it will go and place a film cartridge in the Chamber (23). Note that the spool on one end of the cartridge protrudes much further than on the other end. This protruding end must be pointing towards the bottom plate of the camera.

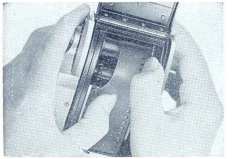
3. Insert the end of the film into the groove of the Film Winding Spool (27). It is necessary to insure that the film is caught

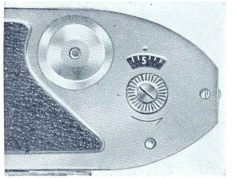


between the inner and outer flanges of the Film Winding Spool, as illustrated.

4. Turn the Winding Spool by means of the knurled edge to take up the slack on the film. Move the Film Advance Lever (2) a few short strokes to be sure that the perforations in the film mesh with the teeth of the Film Winding Sprocket (26). If they do, close the back cover, then it will be automatically locked.

5. Turn the film advance lever as far as it will go and release the shutter. Repeat this three times. Then set the Film Counter Dial (18) to zero by turning the knurled screw with your finger. The counter will then automatically indicate the number of exposures made.





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To Take Pictures

1. Set the Diaphragm Scale (16) to the proper number as indicated by your exposure meter or exposure guide. This is done by turning the diaphragm ring until the red dot clicks into position opposite the proper f stop.

2. Set the Shutter Speed Dial (4) to the proper shutter speed, again in accordance with your exposure meter reading.

3. Move the film advance lever to your right until it stops. This can be done in one long stroke or several short ones. This moves the film to the next exposure and also cocks the shutter.

4. While sighting through the Viewfinder (25) turn the lens barrel by means of the Focusing Lever (15) until the pink image in the center diamond of the viewfinder is exactly superimposed over the full image (Illustration 3). The arrow △ on the Depth of Field Scale (13) will then point to the number of feet on the Distance Scale (8) indicating the subject-to-camera distance.

Note: To use infrared film move the dial so that the number of feet indicated by the mark △ is advanced to the letter "R" on the Depth of Field Scale.

5. Keeping the camera as steady as you can, press the Shutter Release (3) firmly but smoothly to trip the shutter.

CAUTION: Do not wind the film advance lever until the shutter has finished its operation. This is particularly important at slow shutter speeds.

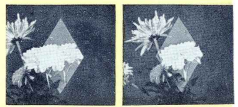
6. To set the camera at a fixed focus position set the red dot on the diaphragm ring to number "11" on the Diaphragm Scale. Then set the camera so that the number "15" on the Distance Scale is opposite the arrow on the Depth of Field Scale. Now everything from 8 ft. to infinity will be in focus.

7. The Optiper Self-timer (12) delays the actual working of the shutter for about 8 seconds.

Set the self-timer lever to the mark "V" (which means self-timer), then press the shutter release.

When the lever is set to the mark "V" the signal window shows a red warning signal.

The setting lever moves back to its original position after setting. It is not supposed to stay in the down position.



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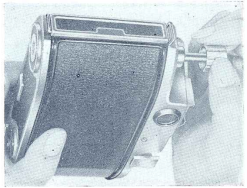


To Remove the Film

After all the film has been exposed it is necessary to rewind the film into its cartridge for removal from the camera. This is quickly and easily accomplished.

1. Push in the Rewind Release Button (19) located on the bottom plate of the camera. You will note that the button remains in the "pushed in" position.

2. Pull the Rewind Knob (9) out as far as it can go and wind it in the direction indicated by the arrow. Continue to wind until you feel the film leave the film winding spool. You will recognize this by the sudden release of tension in the rewinding. Then wind two or three more turns in order to get all the film completely into the cartridge.

NOTE: Should the Rewind Release Button inadvertently pop out while rewinding, move the film winding lever a little, then push the button in again and continue as before.

3. It is now possible to open the back and remove the film cartridge for processing.

For Flash Operation

Your Minolta A-2 is internally synchronized for use with electronic flash or with flash bulbs at all shutter speeds. However, the proper setting must first be made.

1. For electronic flash use, set the lever (11) at "X".
   NOTE: On this setting, class F (gas filled) flash bulbs can also be used at the shutter speed of 1/50 sec. or slower.
2. For class M (foil filled) flash bulbs, set the lever (11) at "M".

Flash Guide Scale

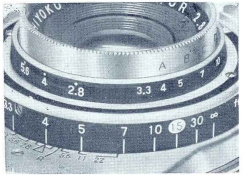
The correct lens opening for use with any flash bulb or electronic flash at any distance is automatically computed on your Minolta A-2. You will notice the marks A, B, C and D engraved on the Diaphragm Setting Ring. These correspond with the guide numbers of flash bulbs or electronic flash in accordance with the scale below. By setting proper letter opposite the number representing the distance in feet between the flash bulb and the subject, you will automatically arrive at the correct lens setting.

MARK	Feet Guide No.
A	40 — 60
B	61 — 90
C	91 —120
D	121 —180

For Example:

Assume you are using a flash bulb with a guide number of 50 and that your subject is 4 ft. away from the bulb. The chart indicates that you should use the letter "A". You would then turn the diaphragm ring until the "A" appeared opposite the number "4", as in Illustration 1. That is all you need to do.

In order to find the proper guide number to use with various flash bulbs or electronic flash units refer to the instructions of the bulb manufacturer.



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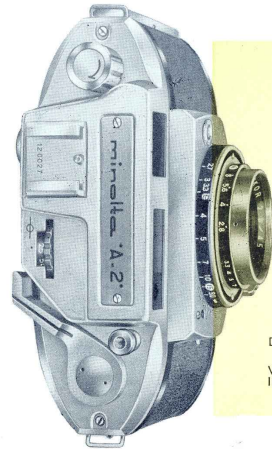


Relative Diaphragm Openings to Shutter Speeds

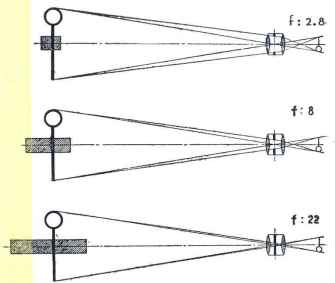
The Diaphragm Opening of a Lens controls the volume of Light that reaches the film in a given period of exposure. The Dial Markings indicate this volume of Light (see the diagram). Each Stop opening indicated on the dial by the numbers 2.8 to 22 reduces the amount of light passing through the lens by 1/2, or conversely, opening the lens from one mark to the next from the number 22 to 2 8 doubles the amount of light. The shutter controls the amount of light by the length of time it remains open i. e. 1 second, 1/2 second, 1/5 sec etc. Now, suppose you have determined by an exposure meter reading or other means that the correct exposure for your film under certain light conditions is 1/50 second at F 8, and you want to use a faster shutter speed because your subject is in motion. A shutter speed of 1/100 second cuts the exposure in half, so you must open the lens one stop to F 5 6 which will allow twice as much light to pass through and the amount of exposure will be the same as before.

Conversely, if you need to stop down the lens for greater depth-of-field (see explanation of Depth-of-Field next) and you select 16 as the correct stop opening you have reduced the amount of light to 1/4. Then you must give the film an exposure 4 times as long or 1/2 second, in this case you select the nearest shutter speed which is 1/10 second.

Diaphragm	2.8	4	5.6	8	11	16	22
Volume of light	1	1/2	1/4	1/8	1/16	1/32	1/64

Depth-of-Field

The depth-of-field of a lens is the range of distance within which all objects are in relatively sharp focus when the lens is set for a given distance. This range varies with the diaphragm opening, being greatest when the lens is stopped down and least when it is open full (see diagram). The range also varies with the distance for which the lens is set being least at close distances and greatest at farther distances up to a point where it takes in everything beyond an intermediate distance to infinity, which is indicated by ∞ on the distance scale, i. e. when the camera is set at ∞ and the lens is opened to F 5.6 the depth-of-field is from 36 ft. to infinity.



ACCESSORIES FOR THE MINOLTA ·A-2·

The following exclusive accessories are available for the Minolta A-2 and are recommended in order to obtain the very best results with it.

Minolta Filters

Filters will enable you to take better and more elaborate pictures than is possible without them.

List of Filters and Their Uses

Minolta Filter		Use
UV	Ultra Violet	To cut through haze and correct color film.
Y 44	Very light yellow	For outdoor subjects and distant views generally.
Y 45 Y 46	Light yellow	To darken light skies so that clouds are accentuated. Also for seascapes, snowscapes and other bright subjects.
Y 47 Y 48	Medium yellow	
Y 49 Y 50	Dark yellow	Deepens contrast between sky and clouds more than smaller numbered filters.
O 53	Light yellowish red	For special effects. Red and yellow appear abnormally bright while water looks dull. Called contrast filter.
O 54	Medium yellowish red	
O 55	Dark yellowish red	

R 59	Red	Intensify blue so that distant mountains appear clear. Used for infrared photographs in combination with infrared film. Turns sun into moonlight effect.
R 60	Dark red	
G 0	Yellowish green	Color corrects panchromatic film so that green becomes lighter and brighter. For foliage, grass etc.

Minolta ·A-2· Lens Shade - Round Shaped.

A lens shade should be used to prevent unnecessary and stray light from entering the lens, which will cause glare spots on the picture, and is especially essential in synchroflash work.

Minolta Junior B. C. Flash

A small pocket-sized unit which operates on the B. C. principle. A 22.5 V dry battery and a condenser (capacitor) can discharge more than 300 flashbulbs without changing the battery. The folding shade consists of 13 fan-shaped blades. The body of the flash gun is plastic and the folded reflector in its vinyl case fits any pocket or purse.