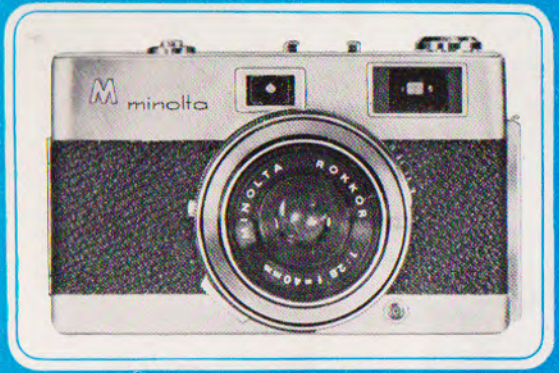
Minolta A5



Owner's Manual

E



All about the Minolta A5

We thank you for your purchasing Minolta A5 camera. The Minolta A5 is the most compact precision 35 mm camera.

It has the following features :

It is a completely manual operation camera with SEIKO-SLV shutter, rangefinder and cordless and cord flash contact.

Its Rokkor F/2.8 40 mm 4 elements coated taking lens is well recognized for its critical sharpness and high resolving power.

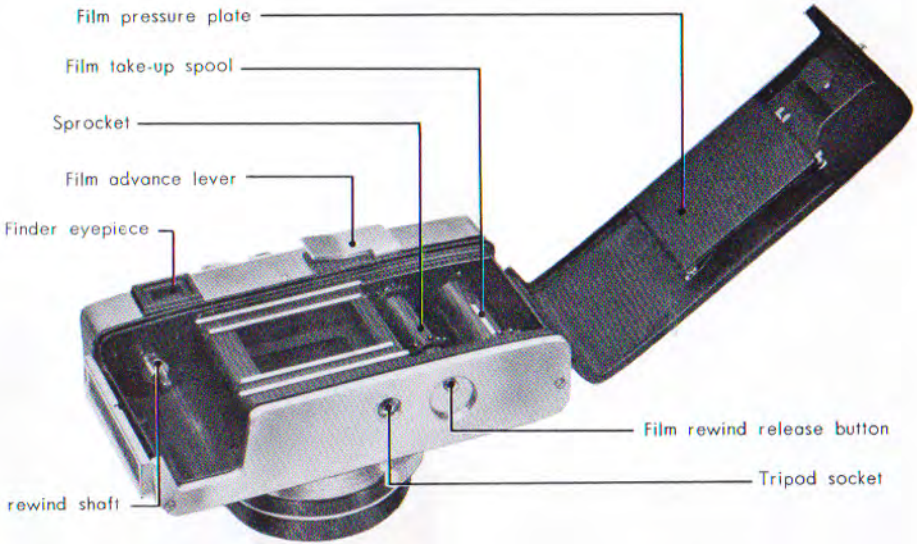
It is easy to use, compact and light and takes full-frame 35 mm pictures.

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PARTS NAME


Film rewind knob
Accessory shoe (Cordless flash contact)
Shutter release button
Film counter window
Rangefinder
Focusing ring
Diaphragm ring
MXV changing lever
Shutter speed ring
Viewfinder
Depth of-field scale
Rokkor 40 mm F/2.8 lens
minolta
ROKKOR


Film pressure plate
Film take-up spool
Sprocket
Film advance lever
Finder eyepiece
Film rewind release button
Tripod socket
Film rewind shaft

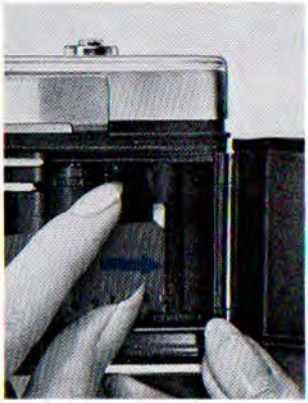
SPECIFICATIONS

● Lens :	
Rokkor TD 40 mm F/2.8	
Construction :	4 elements in 3 groups
Angle of view :	56.44°
Diaphragm :	Click stops of each engraved aperture scale f/2.8, f/4, f/5.6, f/8, f/11, f/16
Filter mount :	40.5 mm, screw-in
Lens shade mount :	42 mm, slip-on
● Shutter :	
SEIKO-SLV shutter	
Speed :	B, 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/125, 1/250, 1/500
Synchro contact :	M contact (M class bulb synchronizes at all speed)
	X contact (electronic flash synchronizes at all speed)
Self-timer :	About 10 seconds built-in self-timer
● Film winding	Lever type, quick advance winding with shutter cocking and double exposure prevention
Winding method :	Single full stroke
Winding angle :	140°
Film counter :	Automatic resetting counter shows number of frames exposed
Film rewinding :	Rapid rewind crank
Frame size :	36 × 24 mm
Film	Standard 35 mm film, 20 or 36 exposures
● Finder :	Tinted bright frame viewfinder with coupled to rangefinder and parallax correction mark
● Focusing :	Direct helicoid focusing coupled to superimposed rangefinder
Minimum focusing distance :	2.6 ft. 0.8 m
Distance scale :	2.6, 3, 4, 5, 7, 10, 20, ∞ ft.
	0.8, 1, 1.2, 1.5, 2, 3, 5, ∞ m
● Other features :	Cordless and cord flash contact
● Size :	(W) 128 mm × (H) 74 mm × (D) 60 mm
	5″ × 2-7/8″ × 2-3/8″
● Weight :	480 g 16.8 oz.

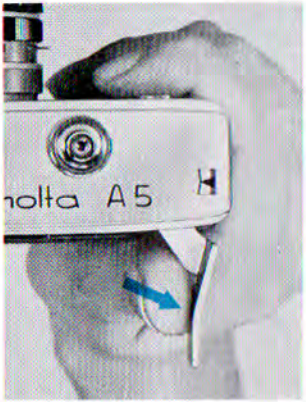


QUICK GUIDE TO USING YOUR MINOLTA A5

1 Open the camera back
Load the film



2 Close the camera back and work the film advance lever until the number "1" appears in the counter window.



3 Set the shutter speed



4 Set the lens opening



5 Focus on your subject



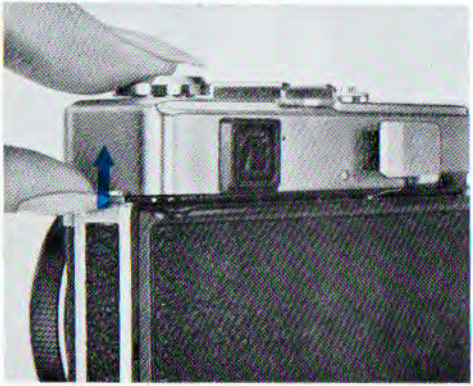
6 Release the shutter

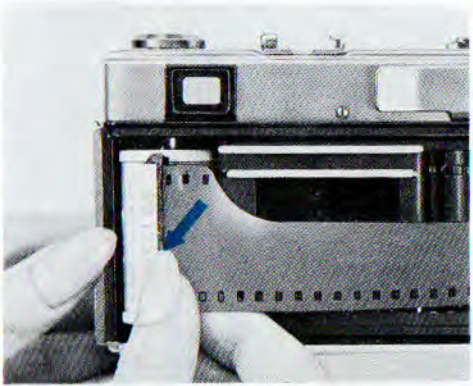


FILM LOADING

1 Pull the back cover lock up and the cover will automatically "pop" open.

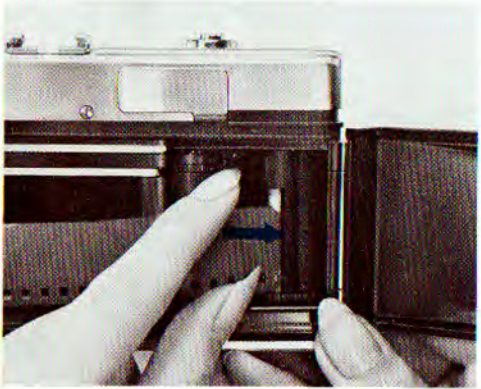
2 Place the film magazine into the film chamber. If the magazine axis does not set properly on the rewind shaft, turn the film rewind crank clockwise or counter-clockwise, until the magazine falls into the proper position.

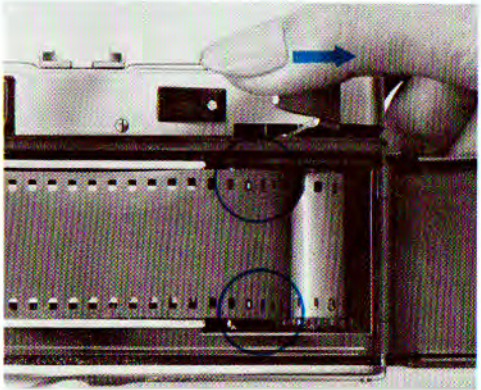




3 Insert the film leader into the take-up spool in the direction of the arrow as shown in the picture.

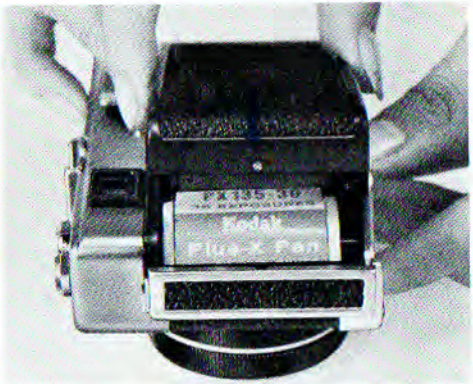
4 Turn the film advance lever little by little until both sides of the film perforations are securely engaged with the sprocket gear. If, however, the lever stops halfway, press the shutter release button. The film then can be advanced again.





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

6 Advance 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 you are ready to take a picture.







SHUTTER SPEED AND DIAPHRAGM

SHUTTER

The shutter speed determines the amount of light that will strike to the film.

When the shutter speed is raised one step at the same diaphragm, light volume is halved.

The shutter of this camera ranges from 1 second to 1/500 seconds. Use B (bulb) for giving exposures more than 1 second.

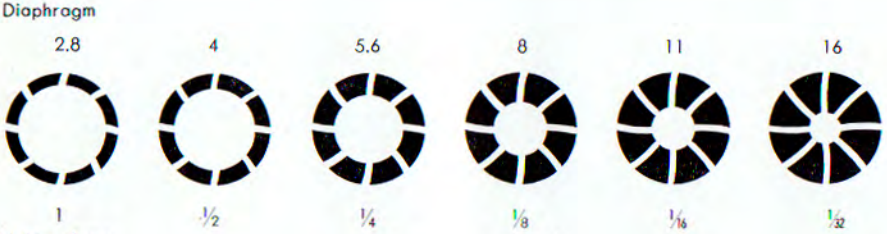
The B position, or bulb, enables you to keep the shutter open as long as the shutter release button is pressed down.

At speeds slower than 1/30 seconds or B position it is advisable to use a tripod and cable release.

Fast-moving object requires fast shutter speed so there will be no blur 1/125 seconds is recommended for general photography.

DIAPHRAGM

The diaphragm ring is used to adjust the light volume and the depth of field (see P. 15).
The larger aperture figure becomes, the less light volume is permitted through the lens.
The relation between the aperture and the light volume are shown at the below.
The light volume decrease by 1/2 for every one decrease in the F figure. Exposure can be set through the combination between the aperture opening and the shutter speed.



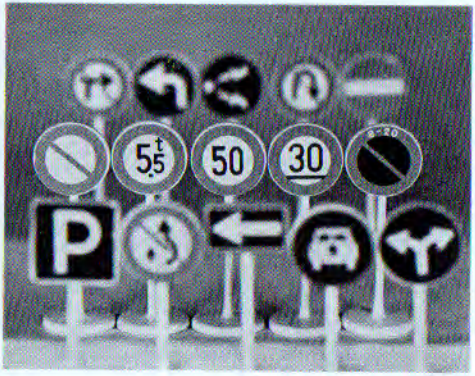
When taking pictures outdoors, the aperture opening should be small (large in F value), while on cloudy day or in a dark place it should be large (small in F value).

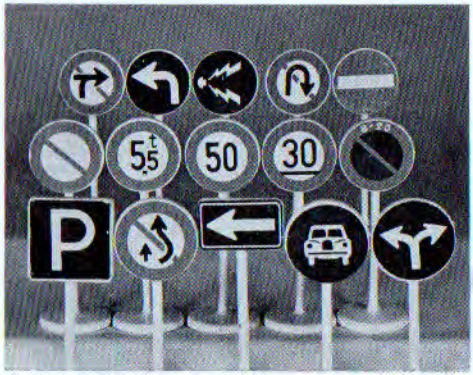




DEPTH-OF FIELD

When the lens is accurately focused, there is a certain depth considered to be in focus both in the foreground and the background. This is called "depth-of-field".
Depth of field becomes deeper as the aperture opening is made smaller (closing the diaphragm) and shallower as the aperture opening is made larger (opening the diaphragm).
Consequently, it sometimes necessary to select a proper aperture opening depening on your subject.





As shown in the picture, this camera has a scale of depth of field and when camera is focussed on an object it indicates the depth of the photograph that will be in focus.
The picture gives an example of depth of field.



When focussed at 2 m (6.6 ft.) distance with F8 approximately 1.5 — 3 m (5 — 10 ft.) will be in focus and with F 16 approximately 1.2 — 5 m (4 — 17 ft.) will be in focus.
See details in table of depth of field on next page.

TABLE OF DEPTH OF FIELD

F No. / D m	2.8	4	5.6	8	11	16
∞	∞	∞	∞	∞	∞	∞
	17.18	12.16	8.61	6.10	4.33	3.07
5	7.00	8.39	11.68	26.39	∞	∞
	3.89	3.57	3.19	2.78	2.35	1.93
3	3.61	3.94	4.53	5.75	9.32	80.95
	2.57	2.43	2.25	2.04	1.80	1.55
2	2.25	2.37	2.57	2.91	3.59	5.38
	1.80	1.73	1.64	1.53	1.39	1.24
1.5	1.63	1.69	1.79	1.95	2.22	2.78
	1.39	1.35	1.29	1.22	1.14	1.03
1.2	1.28	1.31	1.37	1.46	1.61	1.88
	1.13	1.10	1.07	1.02	0.96	0.89
1.0	1.05	1.07	1.11	1.17	1.26	1.42
	0.95	0.93	0.91	0.87	0.83	0.78
0.8	0.83	0.85	0.87	0.90	0.95	1.04
	0.77	0.76	0.74	0.72	0.69	0.65

F No. / D ft	2.8	4	5.6	8	11	16
∞	∞	∞	∞	∞	∞	∞
	56′ 4 9/16″	39′ 10 13/16″	28′ 3″	20′ 3 1/16″	14′ 2 3/8″	10′ 7/8″
20	30′ 8 7/8″	39′ 6 15/16″	66′ 9 5/16″	2680′ 6 7/16″	∞	∞
	14′ 10 1/16″	13′ 4 15/16″	11′ 9 11/16″	10′ 1 1/4″	8′ 4 13/16″	6′ 9 7/16″
10	12′ 13/16″	13′ 2 3/8″	15′ 2 11/16″	19′ 5 9/16″	32′ 2 5/16″	475′ 9″
	8′ 6 1/2″	8′ 11/16″	7′ 5 9/16″	6′ 9 1/16″	5′ 11 9/16″	5′ 1 7/16″
7	7′ 11 3/16″	8′ 4 13/16″	9′ 11 5/16″	10′ 6 3/16″	13′ 3 11/16″	21′ 5 1/16″
	6′ 3 3/16″	6′ 1/16″	5′ 8 1/16″	5′ 3 1/4″	4′ 9 5/16″	4′ 2 3/4″
5	5′ 7 7/8″	5′ 7 7/8″	5′ 11 13/16″	6′ 6 1/4″	7′ 5 5/8″	9′ 5 1/16″
	4′ 7 7/16″	4′ 5 13/16″	4′ 3 9/16″	4′ 3/4″	3′ 9 5/16″	3′ 5 3/16″
4	4′ 3 5/16″	4′ 4 13/16″	4′ 7 1/4″	4′ 10 11/16″	5′ 4 3/4″	6′ 3 7/8″
	3′ 9 1/4″	3′ 8″	3′ 6 9/16″	3′ 4 11/16″	3′ 2 1/4″	2′ 11 5/16″
3	3′ 1 3/4″	3′ 2 9/16″	3′ 3 11/16″	3′ 5 1/2″	3′ 8 1/4″	4′ 1″
	2′ 10 7/16″	2′ 9 3/16″	2′ 8 15/16″	2′ 7 7/8″	2′ 6 7/16″	2′ 4 5/8″
2.6	2′ 8 1/2″	2′ 9 1/16″	2′ 9 7/8″	2′ 11 1/4″	3′ 1 1/16″	3′ 4 1/4″
	3′ 6″	2′ 5 9/16″	2′ 4 15/16″	2′ 4 1/4″	2′ 3″	2′ 1 9/16″

SET THE SHUTTER SPEED AND DIAPHRAGM

Turn the shutter speed ring, and set the desired speed to the black mark.
When setting the shutter, turn the ring until it stops with a click.

Turn the lens aperture ring, and set the desired aperture at the black mark.
You may use intermediate aperture opening between any two F/stops.

NOTE : The index for the shutter speed and the aperture setting is the (▮) mark on the lens barrel.





SIMPLIFIED EXPOSURE TABLE

In the above time column, on next page, the figures on the left are for the morning and those on the right for the afternoon.
The exposure time is shown in terms of second.
Set exposure about twice the speed of the above figures in winter and half in summer.

SIMPLIFIED EXPOSURE TABLE

(Fine weather in spring or fall, F/8 on ASA 100 film)

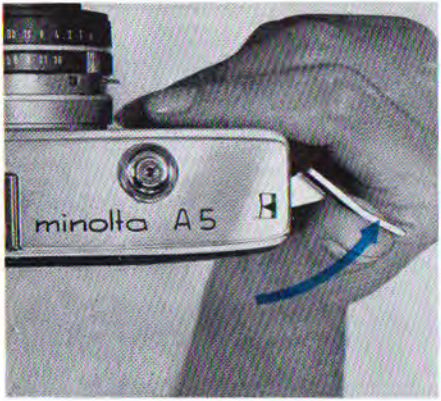
When taking pictures at other F numbers, adjust exposure according to the following comparative table :

Diaphragm F. No.	2.8	4	5.6	8	11	16	22
Ratio	1/8	1/4	1/2	1	2	4	8

Subject \ Time	6.6	7.5	8.4	9.3	10.2	11 12–1
Extended Mountain and Sea	1/60	1/125	1/250	1/500		
Extended Landscape	1/60	1/125	1/250	1/500		
Ordinary Landscape	1/8	1/30	1/60	1/125	1/250	1/250
Bright Street	1/8	1/30	1/60	1/125	1/250	1/250
Landscape at a Short Distance	1/4	1/8	1/30	1/60	1/125	1/125
Figure Exposed Direct to the Sun	1/4	1/8	1/30	1/60	1/125	1/125
Dim Landscape, Figure under the Eaves	1	1/2	1/4	1/8	1/30	1/30
Bright Room, Figure beside the Window	2	1	1/2	1/4	1/8	1/15

FILM WINDING

Single full stroke film winding automatically advances the film, cocks the shutter and advances one figure in the film counter window. This automatically prevents double exposure.



Be sure to turn the film advance lever until it stops completely.

When the film is advanced properly, the film rewind knob turns counter-clockwise. This acts as a double check on correct loading.

Turn the film advance lever until it stops completely. Otherwise, the shutter button won't work.

NOTE: If the number 36 or 20 appears in the film counter window and the film winding lever feels stiff, it means you have come to the end of the film. Forcible winding may cut the film or cause it to be pulled off the magazine, making rewinding impossible.




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HOW TO HOLD THE CAMERA

A good picture depends on many factors ..... one of which is the proper holding of the camera. If your grip is unsteady or if you press the shutter release button too quickly, the movement of the camera can ruin your photograph.

There are two basic way to hold your camera while taking picture ; vertical and horizontal. Press the shutter release button gently, supporting the camera rigidly against your face so it does not move.

HOW TO FOCUS

Look through the viewfinder at the center of the eyepiece. Then, turn the focusing lever until double image seen in the "diamond" at center of the viewfinder overlaps one sharp image.





Out of focus

When the subject is seen as double image in the "diamond", the camera is not properly focused.



Proper focus

If your subject dissolves into a single image in the "diamond" as shown in the photo, the subject is in sharp focus. The distance from the camera to the subject is indicated on the distance scale of the focusing ring.

VIEWFINDER

As you look through the viewfinder you will notice a yellow bright frame near the outer edge. The actual picture you take will be inside this frame. Make sure your picture is composed inside the bright frame.

When taking a close-up picture, because of parallax (the difference between what the viewfinder "sees" and what the lens "sees") you have to compose your picture inside of the lumi-mark, using as the edges the hook mark seen on the upper left, the short line on the upper right and the vertical line on the lower left.





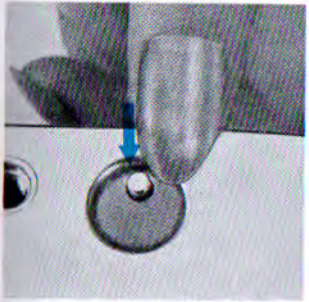
UNLOADING FILM

Before removing the magazine the exposed film must be rewound into the magazine.

1 To rewind the film depress the rewinding button on the bottom of the camera.
The button will remain depressed when you remove your finger.

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

3 Now, open the camera back and remove the film magazine.







HOW TO USE SELF-TIMER

At certain times you may wish be included in the photograph you are taking.
The self-timer will allow you about 10 seconds to get into the picture yourself.



1 To operate advance the film winding lever.

2 Move the MXV changing lever to the "V" mark.

3 Press the shutter release button. The self-timer operates for about 10 seconds, at this time the shutter will automatically be released.



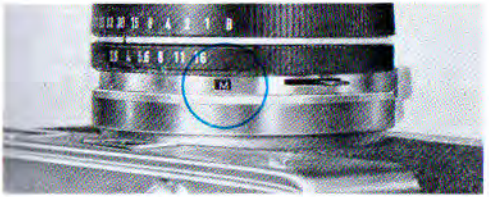


TAKING FLASH PICTURE

When taking pictures at night, indoor or for shooting shaded areas where light is insufficient for proper exposure, flash bulbs or electronic flash units are recommended.









X contact :

When the MXV changing lever is set to the mark X, it becomes X contact point. It will synchronize with all shutter speeds when electronic flash unit is used.

M contact :

When the MXV changing lever is set to the mark M, it becomes M contact point. It will synchronize with all shutter speeds when M class bulb is used.

The Minolta A5 is equipped with a cordless (and cord) flash contact. If you use a flash unit which has a cord contact, be sure to attach the terminal of the cord to the synchro terminal.

1 Attach the flash unit

Attach the flash unit into the accessory shoe. If you use a cord contact flash unit, be sure to attach the terminal of the cord to the synchro terminal.

2 Determine the exposure

To determine the correct exposure for flash photography, refer to the guide number of the flash unit you are using, and see the next page.





3 Now you are ready to shoot your picture.



HOW TO DETERMINE THE CORRECT EXPOSURE

With the guide number known, the correct aperture can be determined by using the following formula :

$$\text{Aperture (F stop)} = \frac{\text{Guide number}}{\text{Distance to subject}}$$

Caution :

1 When using the Minolta Duo-Fit flashgun or Minolta flashgun select a guide number from the table shown on its back.

2 When using other flashgun, check their guide number table or instructions.

3 Use "Blue" flash bulbs for color photography.

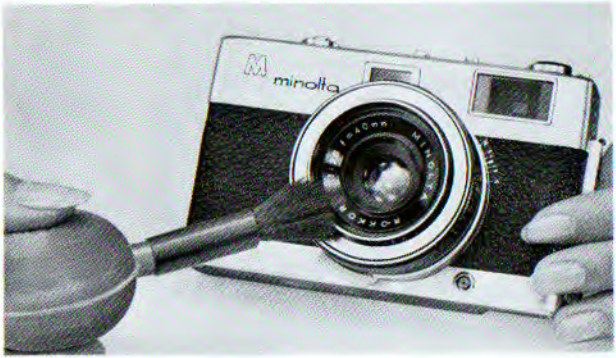
MAINTENANCE AND CARE OF CAMERA

Be sure not to touch the camera lens. If this is accidentally done, wipe it gently with a clean soft cloth.

If the chrome parts of the camera are stained, use a soft cloth and benzine to clean them.

When storing the camera, keep it where temperature and humidity are relatively low. Also, do not store the camera near chemicals which contain salt.

It is advisable to keep the camera in an air-tight container together with silica-gel (drying agent).





ACCESSORIES

Filters



UV :

This filter absorbs excessive ultraviolet light when shooting mountain, snow, sea and other distant scenes.

Y 48 (Yellow) :

For black and white photography this filter renders red and yellow objects lighter than the eye sees them it can also be used to darken skies, emphasize clouds.

Lens Shade :



The lens shade prevents extraneous harmful light from entering the lens, and is recommended for all outdoor photography.

Minolta De Luxe Flash Gun



The powerfull Minolta de luxe ‖ gun enables you to take photographs at any time and in any place.

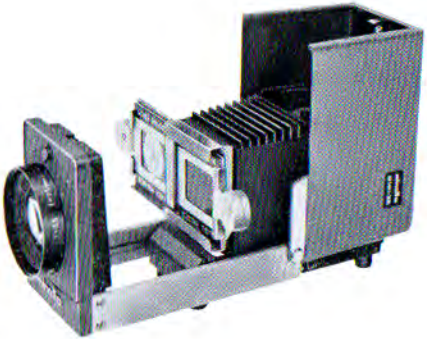
Minolta Duo-Fit Flashgun



This compact flashgun has a unique design for extremely efficient operation. When used with the Minolta A5, it operates without cord. It is also equipped with a self-stored cord for use with cord terminal cameras.



For enjoying color pictures, we recommend the Minolta Mini 35 ‖ slide projector.
It projects slides on a large screen even in a small room and will give you many hours of enjoyment.





MINOLTA MEANS BETTER PICTURES

Minolta

MINOLTA CAMERA CO., LTD.

MA5-612 IE

Printed in Japan.