



This manual is for reference and historical purposes, all rights reserved.

This page is copyright© by M. Butkus, NJ.

This page may not be sold or distributed without the expressed permission of the producer

I have no connection with any camera company

On-line camera manual library

This is the full text and images from the manual. This may take 3 full minutes for the PDF file to download.

If you find this manual useful, how about a donation of \$3 to: M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your e-mail address so I can thank you. Most other places would charge you \$7.50 for a electronic copy or \$18.00 for a hard to read Xerox copy.

This will allow me to continue to buy new manuals and pay their shipping costs.

It'll make you feel better, won't it?

**If you use Pay Pal or wish to use your credit card,
click on the secure site on my main page.**



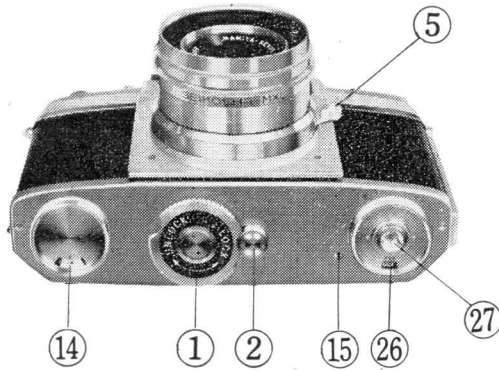
MAMIYA
Magazine-35



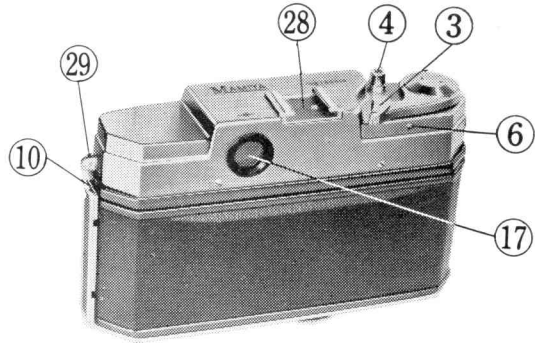
U S E R ' S

M A N U A L

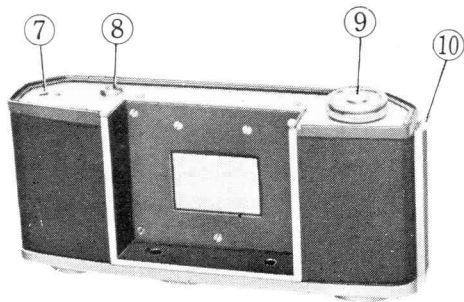
NOMENCLATURE



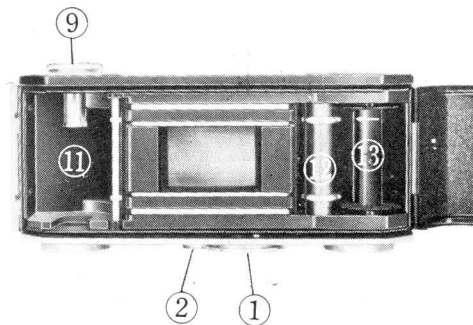
1. Body change dial
2. Body change dial button
3. Film advance lever
4. Shutter button
5. Focusing lever



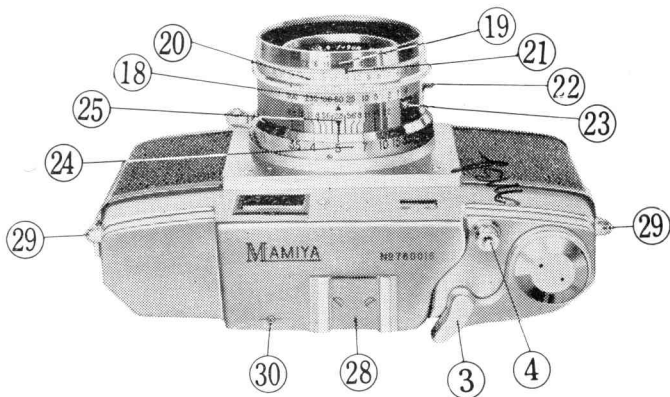
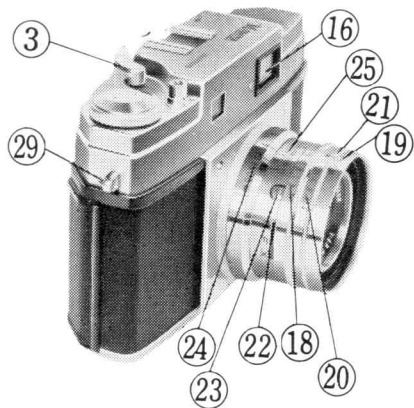
6. Film-advance indicator
(Shutter cock indicator)
7. Film-advance indicator
8. Film-advance coupling
9. Film rewind knob



- 10. Backlid catch
- 11. Cartridge chamber
- 12. Sprocket
- 13. Take-up spool
- 14. Exposure counter
- 15. Film movement indicator



- 16. Viewfinder window
- 17. Eyepiece
- 18. Shutter speed scale
- 19. Aperture scale
- 20. Light value scale



- 21. Light value and aperture dial
- 22. Synchroflash adjustment
- 23. Synchroflash tip
- 24. Distance scale
- 25. Depth of field scale

- 26. Film rating indicator
- 27. Tripod socket
- 28. Accessory clip
- 29. Strap eyelets
- 30. Focal plane mark

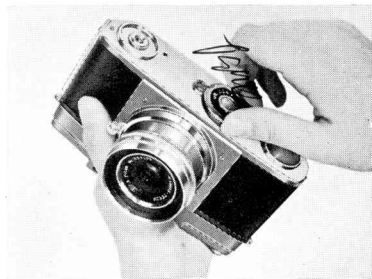
GENERAL DESCRIPTION

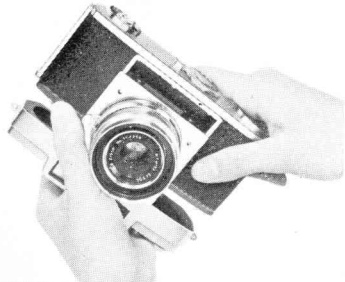
Before trying out the body-change feature or the single-action film advance and shutter cocking mechanism, familiarize yourself with the workings of this unique camera.

To Change Body

Depress body change dial button (2) and turn body change dial (1) from "LOCK" to "UNLOCK" so that the button springs up to lock the dial. Camera will come apart, with the body unit disengaged from the shutter-optics unit. When removing the body unit, always hold the shutter-optics unit securely (see cut).

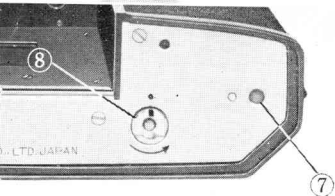
For combining the two units, reverse the procedure; bring to a snug fit, then turn body change dial (1) to "LOCK". When the body unit contains film, the following points should be checked :-





1. The red mark on the film-advance coupling (8) must be in alignment with the small red dot. Turn coupling with finger tip in direction of arrow to correct position.

2. If snug fit with shutter-optics unit cannot be obtained, check film advance lever (3) to see that it has been swung fully out to cock position.



3. When fitting film-loaded body unit to shutter-optics unit, see that the color of the shutter cock indicator (6) and the film-advance indicator (7) is identical. If there is a mismatch, correct the shutter-optics unit indication by operating film advance lever (3) or by pressing shutter button (4) (see middle and lower cut).



Automatic film advance and shutter cocking

Engaging the tip of the film advance lever (3) with the thumb, and swinging it through an arc of about 180 degrees counterclockwise until it comes to a stop advances the film one frame and simultaneously cocks the shutter. The shutter cock indicator (6) changes color to show that unexposed frame of film is in position and shutter is ready to be tripped. The film advance lever will spring back automatically when released, and is locked until the frame has been exposed.

Loading and removing film

All loading and unloading is done with the body unit disengaged from the shutter-optics unit. Do not move body change dial of film-loaded, disengaged body unit; safety cover will open and the film will become fogged. Before loading, see that body change dial is securely locked at "UNLOCK" position.

Coupled rangefinder

Operating the focusing lever (5) causes the lens-shutter barrel to move in and out, and this motion is accurately transmitted to the rangefinder mecha-

nism. When the subject is sighted through the eyepiece, a double image is seen in the center of the viewfinder field. When by manipulating the focusing lever this image becomes single, the subject is in correct focus for sharp register on the film.

Automatic shutter speed and aperture regulation

The SEIKOSHA-MXL shutter incorporated in this camera gives, in addition to full synchronization of flashbulbs at all shutter speeds, automatic regulation of shutter speeds and aperture by means of a light value scale and dial. Once the light value is determined and the aperture dial (21) is set at this number, the correct aperture for any shutter speed within the permissible range is automatically obtained. This reduces to a minimum the possibility of mistakes in exposure.

LOADING WITH FILM

This camera uses 35 millimeter, perforated cine film obtainable in safety cartridges in twenty and thirty-six exposure lengths. The negative picture

size is 24×36 mm. When loading or unloading, always avoid direct sunlight.

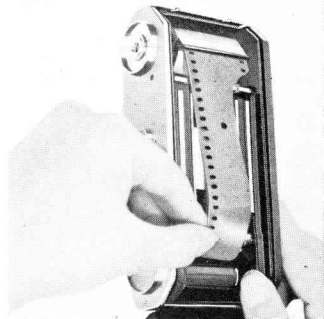
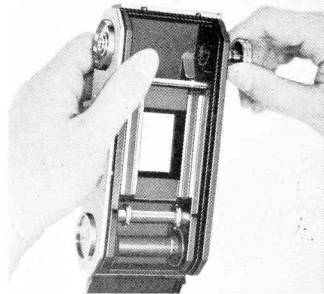
1. Disengage body unit from the shutter-optics unit.

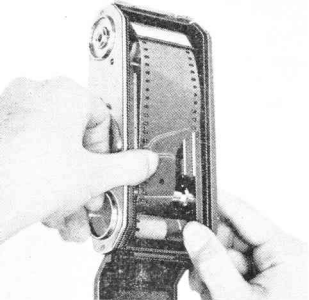
2. Pull out backlid catch (10). Backlid will be released and will spring up a little. Swing it fully open on hinge.

3. Pull out film rewind knob (9) as far as it will go (see upper cut).

4. Place cartridge in cartridge chamber (11), seeing to it that it faces the right way. Secure in position by pushing down film rewind knob (9) fully so that it catches on cartridge spool. Pull out film about two and a half inches across over the film gate and sprocket (12) (lower cut).

5. Secure end of film to take-up spool (13) by



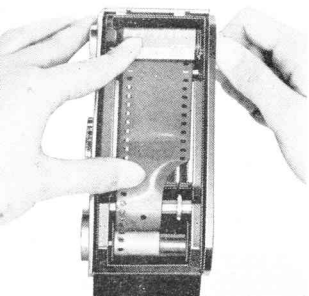


turning spool in direction of arrow to bring slit into position for inserting film end. Engage one of the perforations on protruberance in slit. Wind film on to take-up spool, seeing to it that the sprocket teeth engage the perforations (upper cut).

6. Hold cartridge and turn film rewind knob (9) clockwise to take up slack (lower cut).

7. Now continue winding film on to take-up spool by pushing the rim of the spool with the thumb until the red mark on the film-advance coupling is in alignment with the small red dot (see right cut).

8. Close backlid and snap shut. Fit body unit and shutter-optics unit together, and lock by turning body change dial (1) to "LOCK" position. If

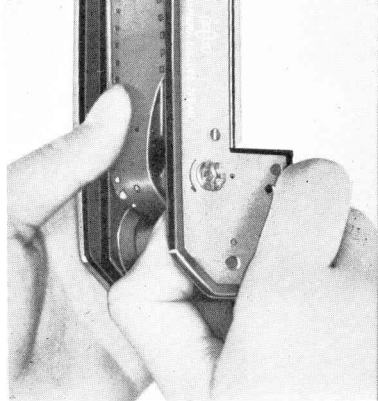


snug fit cannot be obtained, despite matching of the shutter cock indicator (6) and film-advance indicator (7), operate film advance lever (3) fully and release.

9. After the camera is assembled, leave lens cap on and press shutter button then operate film advance lever. Repeat until exposure counter (14) shows numeral 1. When advancing film, watch film movement indicator (15). If there is no motion, film is not being taken up properly. Disengage body unit, open backlid, and check.

10. With film-advance functioning properly, and with the exposure counter (14) indicating number 1, the shutter is cocked, and the first frame is in position for exposure.

11. When loading spare body units with film, go through the above steps



to bring first frame in position, then disengage from shutter-optics unit. After loading spare body unit, always set film rating indicator (26) to match the rating of the loaded film. When film has been removed, set rating indicator at "E" for empty. To set rating indicator, depress knurled ring concentric with tripod socket (27) and turn to obtain desired indication.

BODY UNIT CHANGES

When changing body units while part way through the film contained, it is necessary to see that the shutter cock indicator on the shutter-optics unit and the film-advance indicator on the body unit are of identical color. This is necessary because :-

1. When there is a mismatch, with shutter cocked, a double exposure will result. When intentional multiple exposures are desired, this feature is utilized.
2. Conversely, with the shutter uncocked, and with the film advanced one frame (indicated by the film-advance indicator) one good frame of film will

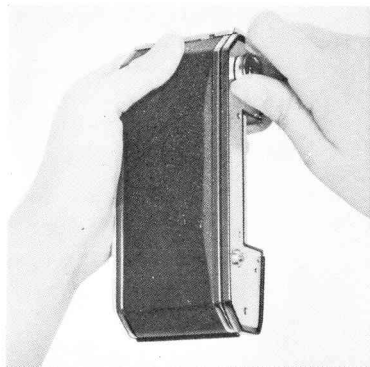
be wasted upon operation of the film advance lever.

What to do when a snug fit between the two units cannot be obtained has already been explained.

REMOVING EXPOSED LENGTH OF FILM

Do not attempt to take more than the specified number of pictures20 or 36 exposures, depending on the type of film in use. Forcing the film free from its anchorage on the cartridge spool will prevent rewinding into the safety cartridge, and the camera will have to be opened in a dark-room if the film is to be saved.

1. Disengage body unit.
2. Turn film rewind knob (9) clockwise, continuing until the film-advance coupling (8) ceases to turn. Open backlid and pull



out film rewind knob (9) to release rewound cartridge.

CAUTION: If, after going beyond the specified number of frames the film advance lever sticks halfway through its arc, do not force. Disengage body unit, and wind film back into cartridge. Operate film advance lever, and cock shutter.

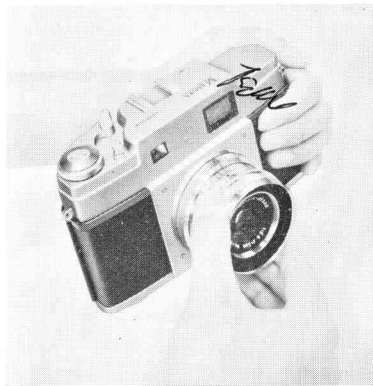
SHUTTER AND APERTURE ADJUSTMENTS

1. When using the "light value" method, first determine the light value of the subject, then bring the light value-aperture dial (21) to the correct numeral on the light value scale (20), seeing to it that the range of the aperture scale (19) is not exceeded. When the light value is extremely high, say 17 or 18, calling for the maximum shutter speed of 1/500 Sec., it is easier to make this shutter setting before film-advance and shutter cocking. Once the light value-aperture dial (21) is set at the correct light value reading, adjustments of the shutter speed scale will automatically give the correct aperture settings. When depth of field is required, use slow shutter speeds

for greater stopping down of the lens. When moving objects are to be photographed, use high shutter speeds. The lens will be opened up with loss of depth of field. When moving the shutter speed scale, it is advisable to have the fingertips grip light value-aperture dial also. By so doing, it is possible to tell when range of automatic coupling is being exceeded (see cut).

When, with the shutter cocked, the speed setting is shifted from $1/250$ to $1/500$ considerable resistance is encountered because extra tension is brought into play. Although it is better to make this adjustment with the shutter uncocked, no serious mechanical trouble will be caused by failing to observe this precaution.

Automatic co-ordination of shutter speed and aperture does not apply at the $1/500$ Sec. setting, and in this case it is necessary to



stop down the lens one step (up the light value setting one step).

The same can be said for the other end of the speed scale. When the shutter speed is reduced from 1 second to B, the shutter must be kept open for 2 seconds. If it is possible to stop down the lens further, the exposure time must be doubled for each step on the aperture scale.

2. The SEIKOSHA-MXL shutter is so constructed that the setting of the light value-aperture dial at midway between scale graduations will not result in an intermediate shutter speed. So it is necessary first to set the shutter speed at some definite click stop position. Later adjustment of shutter speeds may result in the positioning of the light value-aperture dial at some intermediate scale position. This is the correct position to the light value and shutter speed selected.

3. The screw socket in the center of the shutter button (4) is for a cable release or a self-timer.

4. Leaving the shutter cocked and under tension for periods running into months should be avoided. When putting the camera away for any length

of time, remove the body unit and trip the shutter.

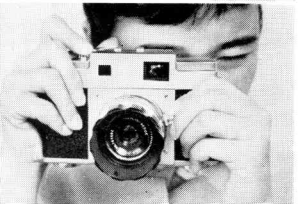
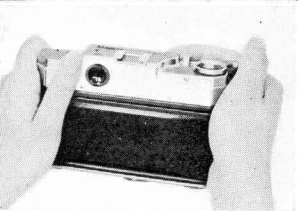
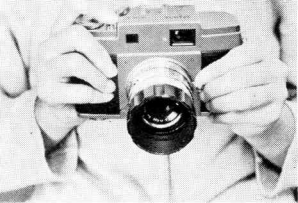
5. The SEIKOSHA-MXL shutter provides adjustments for obtaining full flash synchronization at all shutter speeds. By moving the synchroflash adjustment (22) to the correct setting for the type of flashbulb used, the proper time lag correction is made to permit the shutter to be fully open at the instant of peak intensity. When not using flash, position the synchroflash adjustment at "X" to disengage the extra train of gears and springs.

6. When releasing shutter for purposes other than picture-taking, always do so at speeds not slower than 1/25 second.

CAMERA GRIP AND STANCE

There is no hard and fast rule about holding the camera. Any comfortable steady position will do, but care should be taken to see that fingertips do not touch the aperture and shutter dials.

1. Hold camera steady with both hands, using the middle finger of the left hand to manipulate the focusing lever (5) and the right forefinger to



operate the shutter button (4). The right thumb should be hooked lightly on the film advance lever (3) (upper and middle cut).

2. When taking horizontal pictures, raise camera as held to eye-level, and sight with right eye through eyepiece (17). Hold camera steady by bringing elbows in contact with body. Hold breath briefly when gently pressing shutter button.

3. When taking vertical pictures, there are two basic ways of holding the camera. One of them is to hold the camera with its top facing left, with the shutter finger curled over the side of the camera, now at the top. Hold camera firmly against right cheek, using the thumb and forefinger of the left hand for focusing adjustments.

The other method is to hold the camera in the

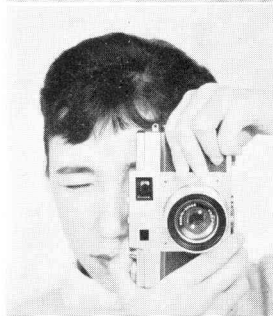
same way as for horizontal picture-taking, then to twist it over to the right, using the left eye, and bringing the right hand around to grip the camera between the fingers and the base of thumb. Use thumb to press shutter button (right lower).

FOCUSING

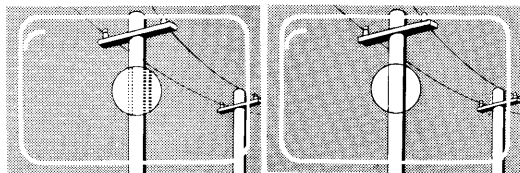
Sighting through the eyepiece and viewfinder, bring the principal subject into the center of the field, then by adjusting the focusing lever (5) cause the double images to merge into one. The closer the object, the more accurate will have to be the focusing.

For focusing, select some object with clearcut vertical lines, such as telegraph poles, window frames.

When focusing on human subjects, use the nose and cheek lines, or eyeglass frames.



When the subject is sighted through the viewfinder, it is enclosed by a bright, translucent, optical frame, which indicates the limits of the picture field. This frame is correctly positioned for viewing objects at some distance away from the camera, but because of parallax (the optical axes of the viewfinder and the camera lens are not identical) the true picture field shifts toward the camera lens axis in proportion to the proximity of the subject. Consequently, a reference mark is provided at the upper left corner of the bright frame to indicate the upper left extremity of the true picture field when the camera is trained on a subject approximately 3.5 feet from the focal plane mark (30). Particular attention should be paid



to this adjustment for parallax when working at ranges closer than 3.5 feet with the AUTO-UP attachments.

When taking vertical

DEPTH OF FIELD TABLE, MAGAZINE-35 MAMIYA-SEKOR LENS

(f/2.8, 50mm: Circle of Confusion 1.7/1,000 inch)

Aperture	Distances Focused on (in feet)							
	∞	30	15	10	7	5	4	3.5
2.8	62' 6 1/2" ∞	20' 4 1/2" 57' 1"	12' 2" 19' 6 3/4"	8' 8 1/4" 11' 9 3/4"	6' 4" 7' 9 3/4"	4' 8" 5' 4 3/4"	3' 9 1/2" 4' 3"	3' 4" 3' 8 1/4"
4	43' 10" ∞	17' 11" 93' 3 3/4"	11' 3 1/4" 22' 6 1/4"	8' 2 1/2" 12' 9 3/4"	6' 1" 8' 2 3/4"	4' 6 1/2" 5' 7"	3' 8 1/2" 4' 4 1/4"	3' 3 1/4" 3' 9 1/4"
5.6	31' 4 1/4" ∞	15' 5 1/2" 615' 7 1/2"	10' 3" 28' 2 1/4"	7' 8" 14' 5 1/4"	5' 9 1/2" 8' 10 1/4"	4' 4 1/2" 5' 10 1/4"	3' 7 1/4" 4' 6 1/4"	3' 2 1/4" 3' 10 1/2"
8	22' ∞	12' 9 1/2" ∞	9' 1 1/2" 45' 5 1/2"	6' 11 3/4" 17' 10"	5' 4 3/4" 10' 1 1/4"	4' 1 3/4" 6' 3 3/4"	3' 5 1/4" 4' 9 1/4"	3' 1" 4' 3/4"
11	16' 1 1/2" ∞	10' 6 3/4" ∞	7' 10 1/2" 196' 9 1/2"	6' 3 1/4" 25' 4 1/2"	4' 11 3/4" 11' 11 1/2"	3' 10 3/4" 7' 1 1/4"	3' 3 1/4" 5' 1 3/4"	2' 11 1/4" 4' 4"
16	11' 1" ∞	8' 2 1/4" ∞	6' 5 3/4" ∞	5' 4 1/2" 87' 3/4"	4' 4 3/4" 17' 9 1/2"	3' 6 1/2" 8' 7 1/2"	3' 1 1/2" 5' 11 1/2"	2' 9" 4' 10 1/2"
22	9' 5" ∞	6' 5 1/2" ∞	5' 4 1/2" ∞	4' 7 1/4" ∞	3' 10 1/2" 43' 3 1/4"	3' 2 1/2" 11' 11 1/4"	2' 9 1/2" 7' 3 3/4"	2' 6 1/2" 5' 8 3/4"

pictures, focus first in the horizontal position then compose picture in the vertical frame for greater accuracy.

On examining a finished photograph, it will be noted that not only the subject sighted and focused, but other objects within a certain range are in sharp register. This range of sharp register, depending on the aperture adjustment of the lens, is known as the depth of field. This range varies also with the distance between the camera and the subject brought into sharp focus, and the depth of field for any given lens is indicated by a table or on the depth of field scale (25) on the camera.

DETERMINING CORRECT LIGHT VALUE

With film of a given speed rating, and with the subject illuminated by a constant light, a number of different combinations of shutter speed and lens aperture can be used to obtain the same exposure. For instance, if, when taking a certain subject, the correct exposure is obtained with the shutter speed at $1/50$ second, and aperture setting at $f/8$, then any of the following

combinations would be equally correct: $1/25$ second, at $f/11$; $1/100$ second, at $f/5.6$; $1/250$ second, at $f/3.5$. Consequently, if the light values given out by subjects are given definite grades, it is possible to assign to each grade various combinations of shutter speed and aperture for correct exposure. The light value scale is so devised that the value 0 is given to the amount of light passing through a lens rated at $f/1$ during a period of 1 second duration, the next higher step, 1, is twice the intensity, or one-half the duration or aperture rating, and so on up to 20.

The shutter speed scale (18).....B, 1, 2, 5, 10, 25, 50, 100, 250, 500.....gives the inverse values of the actual shutter opening duration time, and does not comprise a regular series, but apart from B and 500, correct matching of shutter speed and aperture can be automatically obtained for any given light value.

When using an exposure meter

When using an electric exposure meter equipped with a light value scale, read off the light value of the subject, then set the light value-aperture dial

to the correct number on the light value scale (20) of the camera. When no light value scale is available on the exposure meter, adjust shutter speed and aperture settings as obtained from the meter separately.

Subjects	Weather Conditions											
	Bright			Hazy			Thin Clouds			Cloudy/rain		
FILM RATING (ASA)	200	100	50	200	100	50	200	100	50	200	100	50
Bright Subjects	16	15	14	15	14	13	14	13	12	13	12	11
Ordinary Subjects	15	14	13	14	13	12	13	12	11	12	11	10
Dark Subjects	14	13	12	13	12	11	12	11	10	11	10	9

Note, – this table is applicable from two hours after sunrise to two hours before sunset. Add 0.5 to light values in summer, and subtract 0.5 in winter.

When working without an exposure meter

Use experience and judgment to set the light value-aperture dial to the correct numeral on the light value scale, or set aperture and shutter speed separately. The foregoing table will serve as a rough guide for judging light values.

When using filters

Since filters normally cut down the amount of light reaching the emulsion surface, it is necessary to correct for this loss by whatever factor the filter rates. For example, the Y-2 filter has a factor of 2 in daylight. This means it cuts down the amount of light reaching the film by one-half. Consequently, the light value-aperture dial will have to be moved one step down the light value scale (20).

SYNCHROFLASH PHOTOGRAPHY

As explained elsewhere, the SEIKOSHA-MXL shutter is so designed as to give perfect flash synchronization at all shutter speeds. The synchroflash

adjustment (22) is used as follows:-

Position "M" This position is used when employing class M flashbulbs (with a time lag of about 20 milliseconds). Perfect synchronization of the shutter opening with peak flash intensity is possible at all speeds including 1/500 second.

Position "F" This setting is for flashbulbs of class F (with a time lag of about 10 milliseconds). Perfect synchronization is possible with shutter speeds up to and including 1/100 second.

Position "X" At this position, there is no delayed action of the shutter. It is therefore used in conjunction with strobolights (gas discharge flashtubes) and when shutter speeds are below 1/25 second. This position is also normal when not using flash.

It is possible to use position "F" with flashbulbs of class M; but in this case synchronization will be good only up to 1/50 second.

Use of the correct adjustment position for each type of flashbulb is therefore recommended as is the use of the MAMIYA B-C Flashgun, which fits

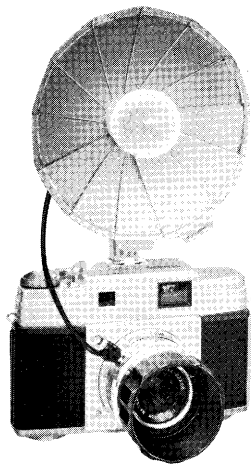
handily on the accessory clip (28). Secure to accessory clip then plug connector socket on synchroflash tip (23). Set synchroflash adjustment (22) at correct position for the type of flashbulb used, then set shutter speed. Select appropriate aperture setting for correct exposure.

ACCESSORIES

Spare Body Units (with leather carrying case) These interchangeable units are indispensable when working with more than two kinds of film (black-and-white, and color, or films of different speed ratings) and when the shooting sequence cannot be interrupted for film loading.

Lens Hood One of the first accessories needed for good camera work is a lens shade to protect the lens and to prevent glare and other injurious light from impinging on the objective.

Filters For special effects and color correction, filters are essential. Landscape photography with blue sky and cloud effects, seaside shots, and pictures of plant life, all call for filters. Low factor filters are also useful



for safeguarding the exposed surface of the lens. Available in three shades of yellow, in green, in red, and in other hues, including "sky light" for color photography.

MAMIYA B-C FLASH ATTACHMENT

This compact, collapsible flashgun is a completely self-contained unit, which mounts on the accessory clip. It can be used either as a battery-capacitor arrangement or as a straight battery operated (3 penlight cells) flashgun. When used as a B-C unit (miniature 22.5 V battery in conjunction with a capacitor), this unit is capable of pre-testing flashbulbs and the synchroflash circuit, thus eliminating misfires. Extension flashbulbs can also be hooked up to the unit. In short,

this miniature flash unit is capable of performance equal to that of units many times larger and heavier. It will also operate as an independent flashgun, and will fit almost any type of camera.

AUTO-UP Portrait Attachment This unique supplementary lens permits close-up photography for copying, plant life studies, insect and animal studies, etc. with the coupled rangefinder functioning in the normal way. Two types are available, one for close range and the other for super close range work.

The optical system employed in the AUTO-UP attachments is the result of the tireless work undertaken by Dr. J. Koana, a leading authority in the field of optics. The single anastigmat system used is comparable in performance to the Zeiss-produced Proxar. The lens material is of the finest, with high light transmitting characteristics; so the AUTO-UP is superior to any portrait attachment heretofore available.

FILM MAGAZINE Normally, the film cartridges supplied by the film manufacturers are used only once. However, for users of film in bulk, the

special magazine made by MAMIYA for use in the MAGAZINE-35 and other cameras is as simple to handle as the disposable type. This special film magazine can be used over and over indefinitely.

CARE AND MAINTENANCE

The camera is a precision instrument so it must be handled with care. Nevertheless, its life will be shortened if it is not taken out and used on all possible occasions. It will withstand bad weather conditions and rough handling if proper after care is provided.

Care after Normal Use

Using a clean soft camel-hair or other artists' brush, remove all dust, grit, and other matter from the body and working parts. Then carefully wipe and polish clean with a soft dry piece of lint-free cotton cloth. Special attention should be paid to the electroplated portions to prevent tarnish and discoloration.

Care after Exposure to Rain, Salt Air

Special pains should be taken to remove all traces of moisture and salt. Gently wipe the lens and finder windows with a soft dry piece of cloth. In some cases, the use of a filter gives protection to the lens surface in addition to enhancement of pictorial effect.

Storage

Before putting away the MAGAZINE-35 for any length of time, clean both interior and exterior, with particular attention to removal of dust and particles from the lens tube, film chamber, and other parts.

Remove from leather carrying case, wrap in cellophane or polyethylene, and place in a dry container which can be sealed tight. Store in cool place. Enclosure of silica gel or some other dessicant with camera is good practice. Inspect from time to time, and if possible air in the sun.

Do not attempt to oil working parts or make adjustments that call for professional skill. Send camera to dealer or manufacturer at least once a year for checking and servicing.



MAMIYA CAMERA CO., LTD.

No. 7, 1-chome, Hongo, Bunkyo-ku, Tokyo

www.orphancameras.com