

MAMIYA C3

professional



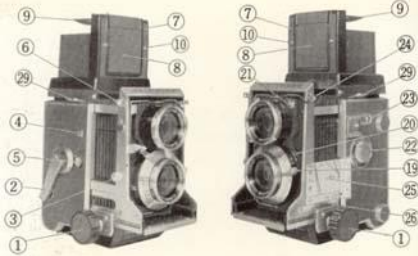
MAMIYA CAMERA CO., LTD.
No. 7, 1-CHOME, HONGO, BUNKYO-KU, TOKYO, JAPAN

Printed in Japan



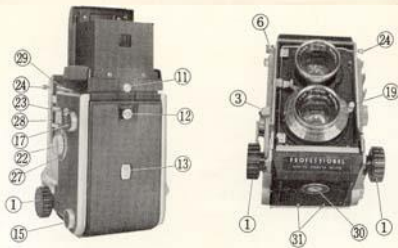
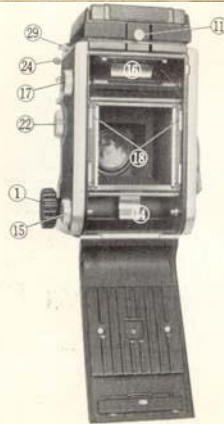
USER'S MANUAL

NOMENCLATURE



- | | |
|------------------------------------|---|
| 1. Focusing Knobs (right and left) | 5. Multiple Exposure /Filmstop Selector |
| 2. Filmwind Crank | 6. Cable Release Socket |
| 3. Shutter Button | 7. Focusing Hood Front |
| 4. Film Counter Window | 8. Frame Viewfinder Lid |

- | |
|---|
| 9. Magnifying Glass |
| 10. Frame Viewfinder Mask Studs (right and left) |
| 11. Focusing Hood Lock Screw |
| 12. Backlid Catch Button |
| 13. Red Window Cover |
| 14. Film Chamber |
| 15. Film Spool Catch Stud |
| 16. Take-Up Spool Chamber |
| 17. Take-Up Spool Catch Stud |
| 18. Start Marks (right and left) |
| 19. Shutter Cocking Lever (lens-shutter assembly) |
| 20. Synchroflash M-X Selector (lens-shutter assembly) |
| 21. Synchroflash Tip (lens-shutter assembly) |



- | | |
|---------------------------------------|------------------------------------|
| 22. Lens-Shutter Assembly Change Knob | 27. Filmspeed (ASA) Dial |
| 23. Lens-Shutter Catch Lock Button | 28. Accessory Clip |
| 24. Lens-Shutter Assembly Catch | 29. Strap Eyelets (right and left) |
| 25. Distance Scale | 30. Tripod Socket |
| 26. Exposure Correction | 31. Backlid Hinge Release |

FOCUSING HOOD OPERATION

1. The focusing hood will snap erect when the focusing hood front (7) is lifted up from the rear.
2. Slight pressure on the frame viewfinder lid (8) will release the magnifying glass (9) which will spring into proper position over the ground glass viewing and focusing screen.
3. When the frame viewfinder lid (8) is pushed down fully it will catch and stay down over the ground glass. Eye level viewfinding can then be performed through the peephole of the focusing hood back plate.
4. To release the frame viewfinder lid (8) for returning to original position push in the focusing hood side plate on the filmwind crank (2) side (see Fig. 1).
5. To collapse and fold the focusing hood, first see that the frame viewfinder lid (8) is closed, then fold down the magnifying glass (9). Fold down the side plates and the back; hold momen-



tarily while folding back the focusing hood front (7).

FOCUSING

1. The method of focusing is the same as for any twin-lens reflex camera. Turn either of the focusing knobs (1) while keeping the image of your subject centered on the ground glass screen.

2. When using the eye-level frame viewfinder in conjunction with the 80-millimeter (short focal length) lens, no masking of the opening of the focusing hood front (7) is necessary.

3. When using 65-, 105-, 135- and 180-millimeter lenses, use the appropriate mask hooked on the mask studs (10).

LENS CHANGING

1. Before removing or fitting a lens-shutter assembly turn focusing knob (1) to **make certain that the lens mount is fully retracted into the camera body.**

2. Turn lens-shutter assembly change knob (22) to "UNLOCK".

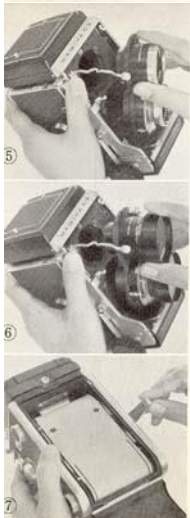
3. Push lens-shutter catch lock button (23) toward front of camera (Fig. 2).

4. Press down knurled head of the lens-shutter assembly

catch (24), and allow it to swing out forward. The lens-shutter assembly can then be lifted out (Figs. 3, 4 and 5).

5. To attach a lens-shutter assembly, lower carefully into position on the lens mount, then secure in place by replacing the lens-shutter assembly catch (24), then turn the lens-shutter assembly change knob (22) to "LOCK". The catch lock button (23) will return automatically to lock position.

6. A red warning signal visible under the ground glass screen indicates that the lens-shutter assembly change knob (22) is at "UNLOCK" position, with light barred from entering the camera through the lens. Always make sure that your camera is readied for picture-taking.



FILM LOADING

1. To open backlid, first turn backlid catch button (12) so that the red dot is aligned vertically, then push to the right, in the direction indicated by the arrow mark. The backlid will be released, and the film counter (4) will be re-set at "O".

2. Loading and unloading film is done in the same way as with other twin-lens reflex cameras. However, before loading **always make certain that the multiple exposure/filmstop selector (5) is turned to "ROLL FILM"**. In this position, you are assured that the shutter button (3) cannot be operated for release of shutter unless the film has been wound and advanced one frame.

3. After the film has been positioned over the film gate, and the end has been secured to the take-up spool, turn the filmwind crank (2), winding until the start mark (double-headed arrow) printed on the paper backing of the film comes into alignment with the start marks (18) near the upper side of the film gate (Fig. 7). Close backlid, and lock by turning the backlid catch button down toward the left.

4. Turn filmwind crank (2) in clockwise direction until it stops. The first frame of film will be correct position for exposure, while the film counter (4) will indicate numeral 1. Turn crank counterclockwise until it stops, then fold out of the way.

5. Repeat the above step after each operation of the shutter.

6. Red window cover (13) can be slid down to ascertain whether or not the camera contains film.

CAUTIONS

1. When the multiple exposure/filmstop selector (5) is set at "ROLL FILM", the shutter button (3) is operable once only for each numeral, from 1 to 12, appearing in the film counter window (4). This automatic locking of the shutter button for prevention of multiple exposure does



not occur when no film is loaded.

2. Never forget to operate the shutter cocking lever (19) before each shot. Failure to do so results in the shutter button (3) being locked without any action of the shutter. If you should inadvertently forget to cock the shutter

before pressing the shutter button, you can still save the unexposed frame of film by operating the shutter, after cocking, by means of the shutter trip lever on the shutter itself, or by shifting the multiple exposure/filmstop selector (5) to "SHEET or Multi-exp" to release the shutter button. In the latter case, do not forget to re-set the selector (5) at "ROLL FILM" after making good the missed shot (Fig. 8).

PICTURE-TAKING

CLOSE-RANGE PHOTOGRAPHY CAUTIONS

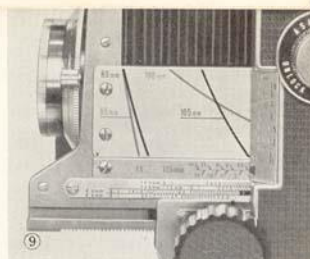
1. As the distance between the lens and the film increases, the effective brightness decreases, and compensation must be made to obtain correct exposure of the film. **When undertaking close-range photography, note the ex-**

posure correction scale (26), and adjust shutter speed or aperture accordingly (Fig. 9).

2. If, for example, you are using the 80-millimeter lens, and when the subject is in sharp focus the exposure correction scale (26) indication is as shown in the cut, exposure must be doubled, much in the same way as when a filter of $\times 2$ rating is in use. If the brightness of your subject, as measured by an exposure meter, calls for $1/60$ second at $f/8$, then you must either adjust your settings to $1/30$ second at $f/8$ or $1/60$ second at $f/5.6$.

3. In addition, **compensation must be made for parallax**, particularly with such short focal length lenses as the 65- and 80-millimeter assemblies.

With the 80-millimeter lens in use, when the distance to

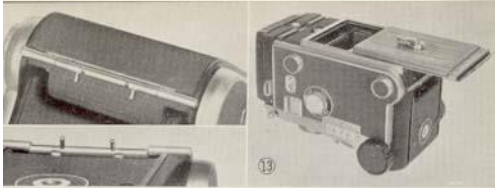


the subject is down to the range calling for $\times 1.5$ exposure, the parallax can be corrected by using the upper correction line across the ground glass. Compose your picture so that all essentials come below this line. When the subject is even closer, and $\times 2$ exposure is needed, use the lower correction line as guide. When $\times 3$ exposure is needed, an imaginary line across the middle of the ground glass screen should be used as the upper limit. This principle applies to lenses of other focal lengths, but with the 105-millimeter and longer focal length lenses, the cut-off line will be at about the second correction line when the bellows is fully extended.

When a tripod or stand is used, the interpositioning of the parallax compensation mount (PARAMENDER) will permit you to sight and focus without any parallax whatsoever.

DEPTH OF FIELD PROBLEMS

1. The curves and scale above the exposure correction scale (26) constitute the distance scale (25). The point at which the curve meets the edge of the scale indicates the distance for the lens in use. A separate scale (blue) is provided, however, for the 135-millimeter lens.
2. When it is necessary to check the available depth of



(31), lock pivots by turning up into the slots, and finally unlock and release backlid catch. The backlid will come off completely (Figs. 11 and 12).

3. Remove the spool from inside the camera, then attach the special single-exposure back, reversing the removal procedure. Slide plate or cut film holder, loaded, into the grooves of the single-exposure back, and secure by means of the catch. You are now ready for single picture photography (Fig. 13).

SYNCHROFLASH PHOTOGRAPHY

1. By attaching a flashgun or electronic flash unit to the accessory clip and connecting up with the synchroflash tip (21), you have a handy set-up for synchroflash photography. position "X".

SPECIAL ACCESSORIES

INTERCHANGEABLE LENS-SHUTTER ASSEMBLIES (MAMIYA-SEKOR lens with SEIKOSHA-S shutter)

Wide-Angle (F 3.5, $f=65$ mm, 63-degree picture angle). A 6-element, 5-group, fully corrected anastigmat with retro-focus arrangement, this lens is unsurpassed for brilliance, sharpness and color fidelity. Wide-angle in conjunction with large negative size gives extreme versatility in press and candid photography. Outstandingly suitable for close-range work such as copying because lens-to-subject distance can be as close as 4 inches.

Short Focal Length (F 2.8, $f=80$ mm, $50^\circ 40'$ picture angle). A general purpose anastigmat of 5 elements in 3 groups, this lens permits close-range photography down to approximately 7 inches between lens and subject. It is therefore convenient for document copying and high magnification work.

Long Focal Length (F 4.5, $f=135$ mm, 33-degree picture angle). Ingeniously designed 4-element, 3-group, fully corrected anastigmat, this lens gives reproductions of extreme naturalness and depth, which cannot be obtained with conventional twin-lens reflex cameras using lenses of 75-mm focal length or thereabouts. This fully corrected anastigmat is eminently suitable for portraiture, commercial and art photography, and scientific and industrial documentation.

Telephoto (F 4.5, $f=180$ mm, $24^\circ 30'$ picture angle). A 4-element, 3-group, fully corrected, this unique lens, because of its telephoto design and construction, does not differ much in physical length from the 135-millimeter assembly, and is particularly suitable for stage action photography, portraiture, and candid shots in situations where the subject cannot be easily approached.

LENS HOODS

Four types are available: for wide-angle, for 80-mm and standard lenses, for 135-mm long focal length lens, and for the 180-mm telephoto.

Caution: When attaching the hoods for the 135-mm and 180-mm lenses, the securing screw side should be fitted to the picture-taking (not viewfinding) lens. Otherwise the dividing partition will obstruct picture-taking.

FILTERS (by TOSHIBA)

Filters of various types are available in three sizes: 40.5-mm diameter screw-in type for the 80-mm and 105-mm lenses; 46-mm diameter screw-in type for the 135-mm lens; and 49-mm diameter screw-in type for the wide-angle and 180-mm telephoto lenses.

Y2, YG, O2 color filters, UV ultraviolet filter, and SUNLITE filter for color film are available.

Note: When attaching filter to the 180-mm telephoto lens, the guard ring at front extremity of the barrel must first be removed by applying the palm and turning counterclockwise. Always replace guard ring when filter is removed. Be sure to specify filter for MAMIYA C.

field, obtain the distance to the subject either by referring to the distance scale (25) or by actual measurement, then make use of the depth of field table.

FOCUSING HOOD CHANGE

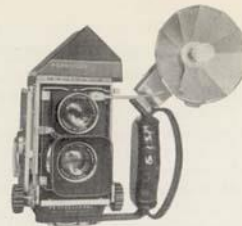
1. The focusing hood can be easily removed by loosening the lock screw (11) and lifting up the rear end of the assembly (Fig. 10).
2. To mount the mirror finder, slip on and secure, reversing the above procedure. The PORROFLEX correct-orientation mirror finder is mounted in the same way.

SINGLE EXPOSURE PHOTOGRAPHY

1. Turn multiple exposure/filmstop selector (5) to "SHEET or Multi-exp." At this position the shutter button can be operated at will, regardless of the film-wind crank and film counter.
2. Remove backlid by pushing inward the backlid hinge release



It is convenient to make use of eye-level sighting by means of the frame finder, mirror finder, or the PORROFLEX.



2. Set the synchroflash M-X selector (20) for the type of flash used. This adjustment may be done after the shutter has been cocked.
3. Position "M" gives the correct delayed shutter action for class M flashbulbs (about 20 milliseconds to peak), permitting accurate synchronization at all shutterspeeds including 1/500 second.
4. Position "X" gives no time lag, and is used in conjunction with electronic flash (xenon strobo) for all shutterspeeds, or with ordinary flashbulbs at shutterspeeds not exceeding 1/30 second.
5. When not using synchroflash, keep selector (20) at

CLOSE-RANGE PHOTOGRAPHY TABLE

| Type of Lens | Minimum Distance from Film to Subject | Subject Coverage at Minimum Distance |
|--------------|---------------------------------------|--------------------------------------|
| 65-mm | $10^{11}/16''$ | $2^{11}/8'' \times 2^{11}/8''$ |
| 80-mm | 1' $1^{1}/2''$ | $3^{11}/8'' \times 3^{11}/8''$ |
| 105-mm | 1' $10^{13}/16''$ | $7^{11}/16'' \times 7^{11}/16''$ |
| 135-mm | 2' $8^{11}/16''$ | $9'' \times 9''$ |
| 180-mm | 3' $10^{13}/16''$ | $9^{11}/4'' \times 9^{11}/4''$ |

extreme naturalness and depth, which cannot be obtained with conventional twin-lens reflex cameras using lenses of 75-mm focal length or thereabouts. This fully corrected anastigmat is eminently suitable for portraiture, commercial and art photography, and scientific and industrial documentation.

Telephoto (F 4.5, $f=180$ mm, $24^\circ 30'$ picture angle). A 4-element, 3-group, fully corrected, this unique lens, because of its telephoto design and construction, does not differ much in physical length from the 135-millimeter assembly, and is particularly suitable for stage action photography, portraiture, and candid shots in situations where the subject cannot be easily approached.

GRIP HOLDER

Special grip-form handle is particularly handy for carrying steady camera grip during picture-taking. Will also and take flashgun.

PARAMENDER Parallax Correction Mount

Fitted between the camera and tripod or other mount, the PARAMENDER permits lowering of the viewfinder lens to picture-taking lens position for complete elimination of parallax while focusing and composing.

SINGLE-EXPOSURE ATTACHMENT

By using the single-exposure back in place of the standard backlid, the special plate and cut film holders permit the taking of single-frame negative pictures which are so useful in professional and advanced amateur work. Immediate checking of results is possible.

PORROFLEX

This reflex mirror attachment permits eye-level viewing and focusing by means of an image in correct orientation. Fitted in the same way as the standard mirror finder, this viewer is indispensable for candid and press photography.

SPECIAL LEATHER GADGET BAG

For carrying camera, interchangeable lenses, & c.