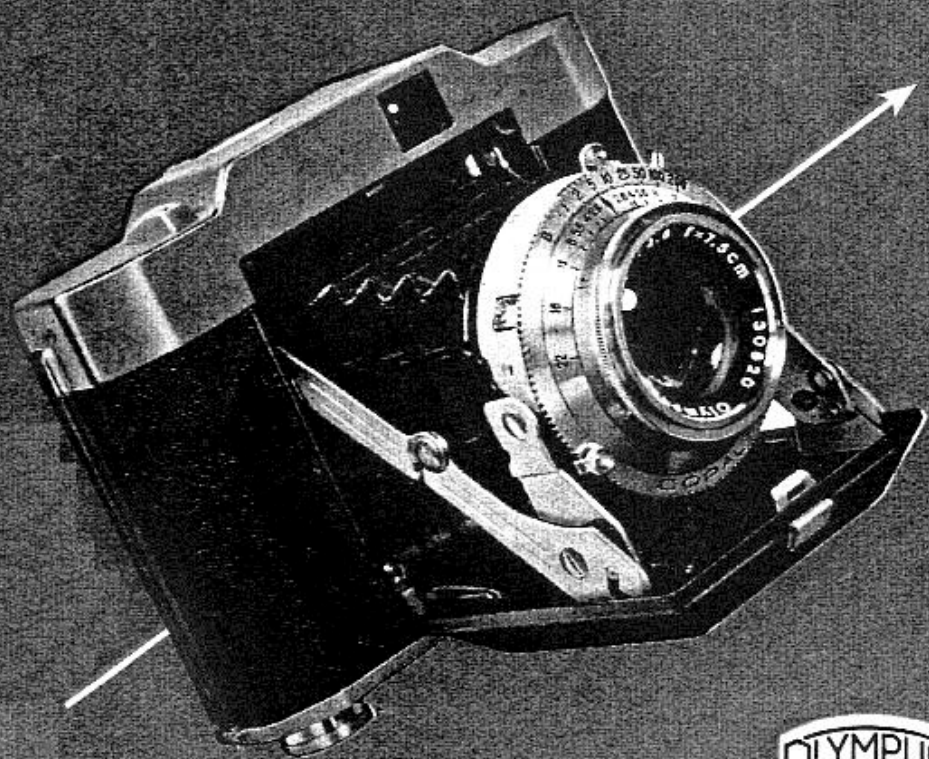


OLYMPUS

CHROME SIX

V



OLYMPUS
TOKYO

INSTRUCTIONS

OLYMPUS Chrome Six

Model V (S 5A, S 5B)

Va D. ZUIKO F 1: 3.5, f = 75mm Full Coated.

Vb ZUIKO F 1: 2.8, f = 75mm Full Coated.

Flash synchronized copal Shutter with 7 speeds from 1 sec. to 1/200 and Bulb, for Time exposure.

Uses standard 120 roll film, 12 exposures 6 × 6cm or 16 exposures 4.5 × 6cm.

Film plane corrector, Correcting scale for displacement of focus.

Excellent definition with full coated Zuiko.

Accurate and smooth operation of synchro-copal shutter.

Indestructible dye-cast body with elegant stain chrome finish.

Stream line appearance which beyond compare other makes.

The Olympus Chrome Six Model V is the World's Finest Camera which incorporates the standard excellent point of spring cameras.

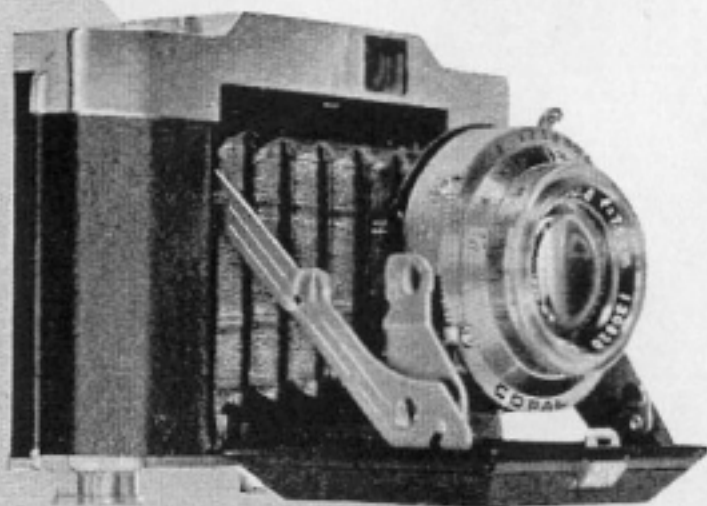
This is designed to give you the best possible negative under all lighting conditions. They well know that the "ZUIKO" lens stands for superior quality, excellent graduation, flatness of field, color correction, crisp definition and precision tolerances. Incorporates the exclusive patented automatic film plane corrector and no more out of focus photograph due to variation in film tention.

Get the full benefit of this camera by developing all its characteristics by reading this booklet.



OLYMPUS Chrome Six V A

OLYMPUS Chrome Six V B





Since roll film is flexible celluloid film wound on a spool with its back paper, it is very difficult to keep the sensitized film surface parallel to the flat focal plane of the camera. However, in order to take 100% advantage of the lens and get sharp and well defined pictures, the film surface should lie evenly with the focal plane.

For this reason we often experience in getting pictures which are inexplicable out of focus. Irrespective where it was manufactured, either here or abroad and whether it is very expensive or cheap, as long as it was a roll film camera it was impossible to get rid of this defect.

To get a perfect alignment between the sensitive surface of film to the focal plane is rather difficult, however there is a natural range of allowance. This range in photography is known as the depth of focus and for pictures in sizes 6×6 cm or 4.5×6 cm the depth of focus for $F 1: 2.8$ opening is plus or minus 0.1 mm. From the focal plane and for $F 1: 3.5$ it is plus or minus 0.13 mm. Therefore, even though some irregularities may exist on the film surface, as long as it is within the range above mentioned, it will not affect the practical sharpness of the picture. By enlarging the diameter of the circular aperture of the diaphragm, the depth of focus will decrease as shown on the following table.

DEPTH OF FOCUS

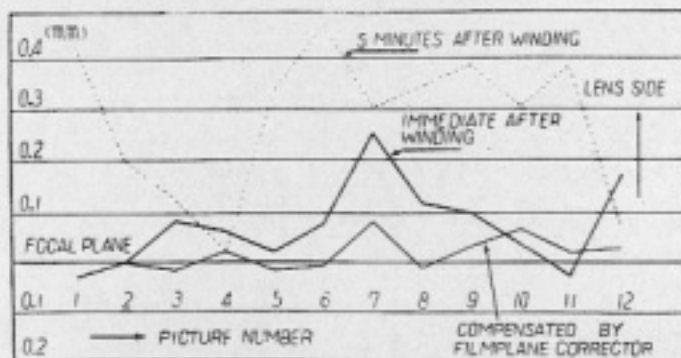
Iris	2.8	3.5	4	5.6	8	11
Depth (mm)	± 0.10	± 0.13	± 0.14	± 0.22	± 0.32	± 0.44

The figures under the horizontal axis show the exposure number. The upper figures indicates the projected parts towards the lens and the lower figures shows the depression away from the focal plane. The full line which shows the position of the film surface immediately after it was placed into position shows that No. 1 to No. 6 is properly set but No. 7, the film surface is projected over 0.2 mm towards the lenses and No. 12 to 0.15 mm. After a lapse of five minutes since the film have been wound up, only No. 4 is within the allowable range of the depth of focus, as it is shown by dotted line, and all the rest have projected itself towards the lens.

Contributing reasons for this irregularities are as follows :

1. Curling of film and its back paper, which changes in temperature and moisture,
2. Backlash of the film winder,
3. Loosening of film from its position due to vibration, knocks to the camera etc :

However, Based on the film plane corrector, the Olympus Chrome Six Model V firmly holds the film in relation with the focal plane without slackening and at the same time, the construction of the surface where the film travels, the flatness of the pressure plate and the pressure against the plate holding the film in place is properly adjusted allowing the film surface to maintain its proper relationship as shown on the illustration. With the addition of this new device the un-explainable distortions and improper focusing have been eliminated from this roll film camera.



1. The depth of field indicator (10) is a useful guide for regulating focus and lens aperture.
2. Your subject will be defined most sharply when it lies just at the distance on which the lens is focussed; its definition will gradually become less sharp when it is moved too near to or too far from the camera. Even when the subject does not lie exactly at the focussed distance, if the difference is within certain limited range, its definition will be practically satisfactory. This range... the distance between the nearest and furthest planes within which subjects are to be taken with satisfactory sharpness... is commonly known as "depth of field". It varies with focussed distances and lens apertures. The depth of field indicator (10) shows this relation on the focusing scale.
3. There are two same figures on both sides of the center mark on "the Depth of Field Indicator". (D.F.I.) The figures on the left side indicate the furthest planes of depth of field on the focusing scale when the lens is stopped down to any of the said figures, while the figures on the right side indicate the nearest planes.
4. For instance, put the 10 meters mark on focusing scale under the center mark (▼) on D. F. I. In this case, the subject comes out most sharply when it is at the distance of 10 meters no matter what lens aperture may be used. But if you fix lens aperture at $F 1 : 4$, the other subjects coming within distances of 7 to a little over 20 meters will practically be defined satisfactorily. This can be said :—

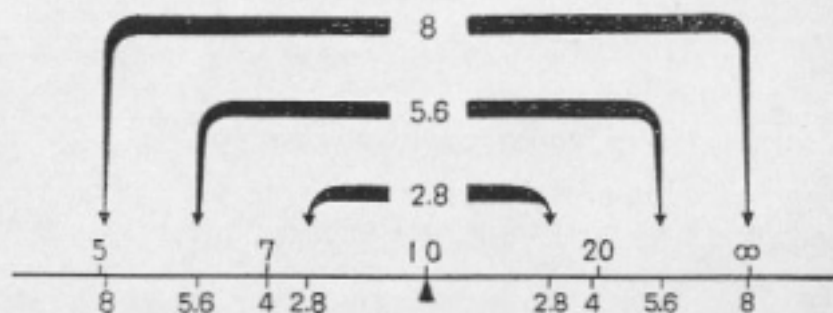
Read the figures on the focusing scale that come directly under Fig. 4 on D. F. I. As you can easily see, Fig. 4 on the right side indicates 10 meters and Fig. 4 on the left side a little over 20 meters. Thus, you can determine the depth of field under the lens aperture of $F 1 : 4$ as ranging from 10 to a little over 20 meters.

5. Likewise, when you stop down the lens to $F 1:8$, read the figures on the focusing scale which come under Fig. 8 on both sides of the center mark of D. F. I. In this case, you will find the depth of field is from about 5 meters to infinity.

Put other meter marks under the center mark on D. F. I. In the same manner, you can determine the depth of field under the lens aperture you have chosen.

On the other hand, when you like to produce a sharp picture of more than one subject happening to be at different distances, you can easily regulate the focusing ring and determine the lens aperture which may be used, by means of this D. F. I.

CORRECTING SCALE FOR DISPLACEMENT OF FOCUS is engraved on the distance ring of this camera to eliminate displacement of focus which results from the changes of lens aperture. This device and the film plane corrector will assure you sharp photos and give you negatives with a crispness heretofore unequalled with conventional cameras. The figures engraved on the distance ring indicate the exact distance focused upon at full lens aperture. Displacement of focus with the lens stopped down is corrected by setting the ring at the compensating mark under the range of lens apertures smaller than $F. 8$. Distance further than two meters is automatically compensated for by the depth of field inherent in this lens.





Because of their excellent definition, the Olympus Zuiko Lenses has been in high reputation among many photographers both at home and abroad. And it is the very D. Zuiko Lens that has given a great impetus to this increasing reputation of our Zuiko lens group.

After so many years research in our laboratory, a special design and utmost optical glass was incorporated into this D Zuiko lens... 4-element, F/3.5... which is now wellknown to all camera carriers as the most superior tessar-type optic in every respect of optical science.

Perfect elimination of all kinds of aberrations... curvature of field, astigmatism, coma, Spherical and chromatic aberration-would assure you with the best pictures of both black-and-white and color with always crisp definition. This is in short, only the Olympus D Zuiko will satisfy all your photographic demands.

Many photographers, amateur and professional, have been perplexed with the fault inherent in lens focusing cameras in relation to the distance focused upon and the actual distance of the subject. This is an inherent fault of lens construction especially when one or more of the lens elements are turned with the focusing scale ring. Beyond 2 meters ($6\frac{1}{2}$ feet) this shifting of focus becomes negligible to all intents and purposes.

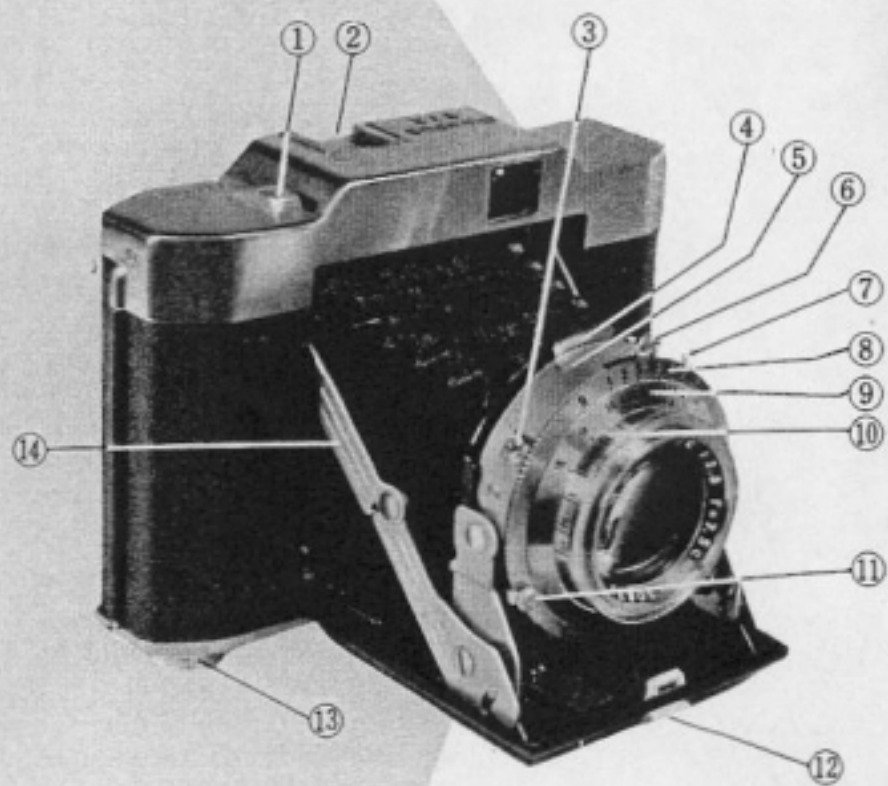
It is well known to photographers that when the lens aperture is stopped down the depth of field is increased and up to a certain limit there is an increase in resolving power. But as the photographer gains more skill and begins to research into inherent characteristics of the camera he learns that there is a difference in the focal point (especially in close distance work) when the aperture is used wide open and when stopped down. To illustrate this point you can notice the difference in sharpness when the photo is taken at six feet at F: 2.8 and another taken at F: 4.5 or F: 6.3. This is called focal point movement and will be noticed with all camera lenses.

The Olympus Six model V incorporates an adjusting graduator which eliminates out of focus pictures due to this basic optical law. The focusing ring has a short line by which compensations can be made for clearer, sharper photos.

For Use :

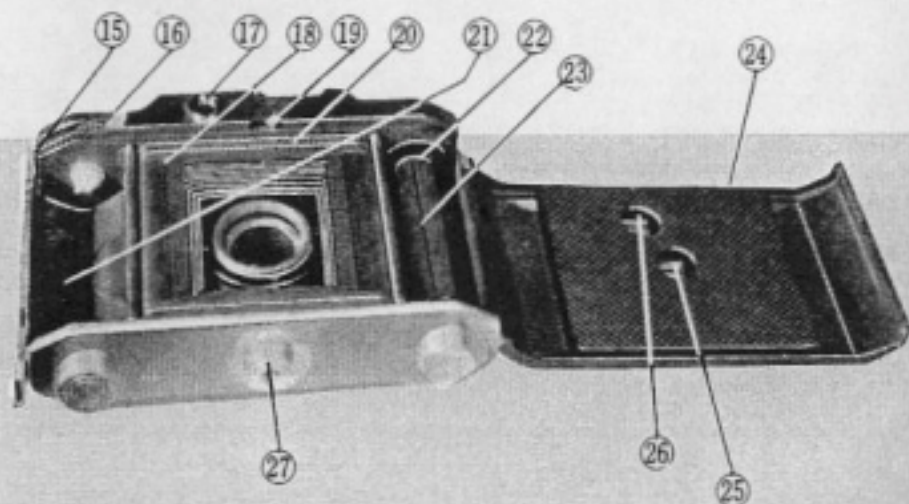
At the widest aperture use the line extending toward the front of the camera. When the lens is stopped down to F: 5.6 set the pointer at the half way mark. For other apertures set the pointer at a corresponding (proportional) distance on the graduator.

This is the first camera in Japan to incorporate this advancement for the convenience of camera users.



MAIN ELEMENT

- | | |
|--|---|
| ① Body shutter release | ⑩ Back cover lock |
| ② Accessory bracket
(Rangefinder, Flashgun, Etc.) | ⑪ Rapid film wind lever |
| ③ Cable release socket | ⑫ Viewfinder |
| ④ Diaphragm scale (Aperture) | ⑬ Removable mask
(for 4.5×6cm photos) |
| ⑤ Shutter cocking lever | ⑭ Viewfinder mask adjustment
lever |
| ⑥ Diaphragm indicator lever | ⑮ Focal plane |
| ⑦ Synchro-flash connection | ⑯ Takeup spool chamber |
| ⑧ Shutter speed scale | ⑰ Film stabilizer key |
| ⑨ Footage indicator mark
(meters) | ⑱ Spool |
| ⑩ Depth of field scale | ⑲ Back cover |
| ⑪ Selftimer cocking lever | ⑳ film indicator window
(16 exposures) |
| ⑫ Front cover release | ㉑ film indicator window
(12 exposures) |
| ⑬ Film loading knob | ㉒ Tripod socket |
| ⑭ Side struts | |



DIRECTIONS

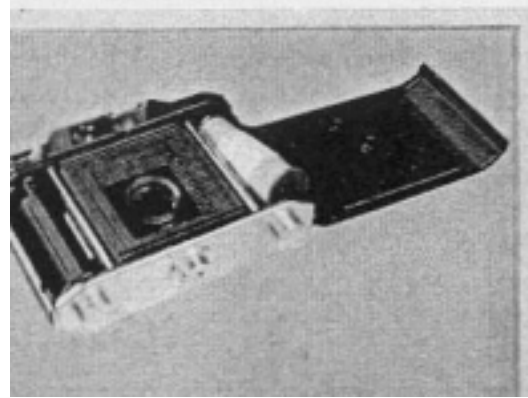
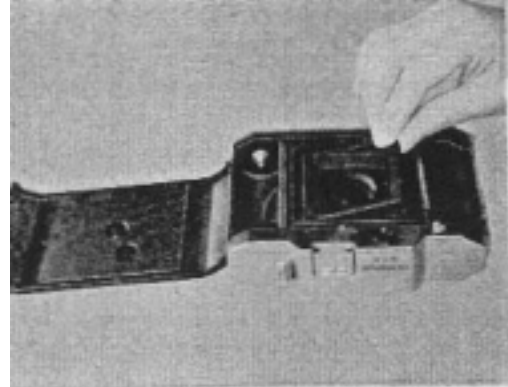
1. Pull out the back cover locking lever (15) and open the back of the camera.
2. A detachable mask (18) is attached to the base

frame of the focal plane and is easily removable.

3. If you prefer $2\frac{3}{4} \times 2\frac{3}{4}$ pictures remove the mask by pulling slightly to the side and lifting up. For $2\frac{3}{4} \times 1\frac{5}{8}$ pictures insert the mask by fitting one of its ends into the base frame and by slightly bending the mask insert the other end into opposite side. Make sure the mask is vertical, longer side parallel to the roller.
4. Set the finder mask lever to the corresponding position for the size of photo being taken. Set lever under the large square for $2\frac{3}{4} \times 2\frac{3}{4}$ photos and for $2\frac{3}{4} \times 1\frac{5}{8}$ move the lever to the small square position.

Lever can only be changed when the back cover is open.

5. Pull out the spool holder knob (13) and insert film. Release the knob and check for proper seating of the roll.

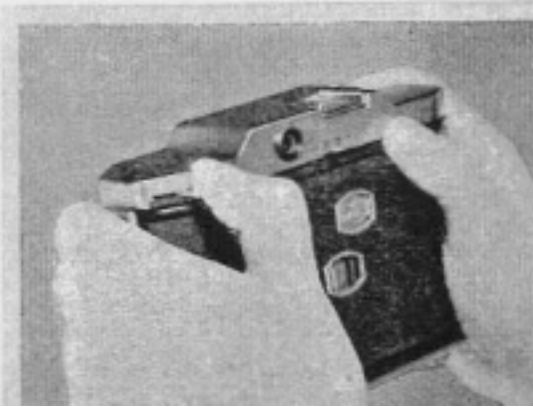
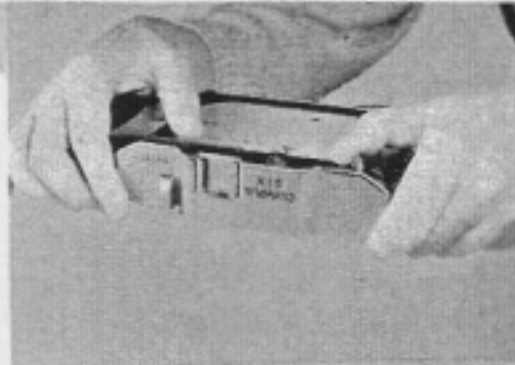


FOR LOADING

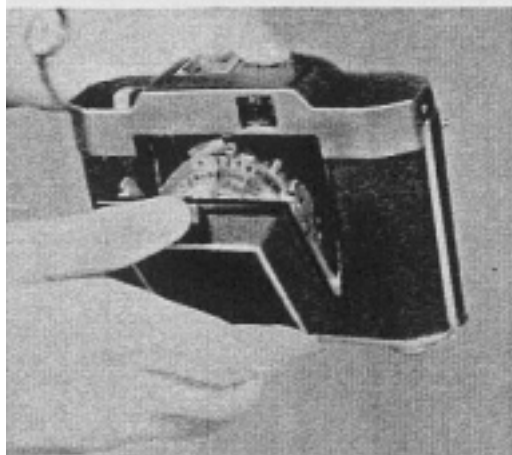
6. Take off the gummed strip of paper and pull out about four inches of leader paper. Insert this leader paper in the long slot of the takeup spool.

Use the quick wind lever to roll the spool and make sure the leader paper is securely fastened. Be certain the leader paper is flush with the film spool flanges. Check for proper alignment of the leader paper over the focal plane opening. Film should be centered between the two outer rails.

7. Check all of the above items before closing camera. Close back cover and lock by pushing the locking lever.
8. Open the back windows for the size you are using, upper window for $2\frac{3}{4} \times 1\frac{5}{8}$ (4.5 x 6) Lower window for $2\frac{3}{4} \times 2\frac{3}{4}$ (6 x 6).
9. Use the quick wind lever and watch movement of backing paper until you reach No. 1. Now you are ready to take your first picture.



FOR MAKING

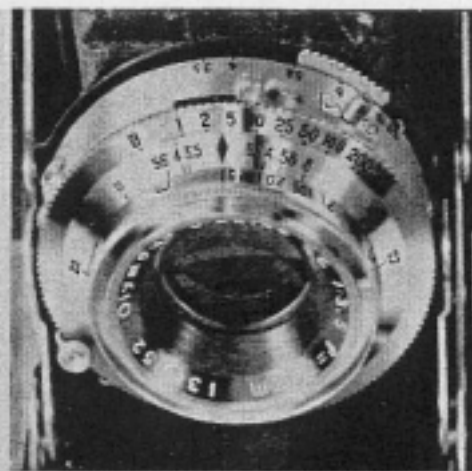


1. Push the button to open the camera front. It is advisable to open the camera front slowly holding it lightly so as not to disturb the surface of the film at the focal plane.
2. Before making an ex-

posure, you must determine three factors . . . focus, shutter speed and lens aperture.

3. Scales of distance indicated in feet are engraved on the side of the focusing ring. Measure the distance of your subject by the eye or by means of a distance meter and place the corresponding scale under the center mark (▼) on the depth of field scale by rotating the focusing ring.
4. Shutter speed and lens aperture must be determined according to the motion of the subject, light condition and the kind of

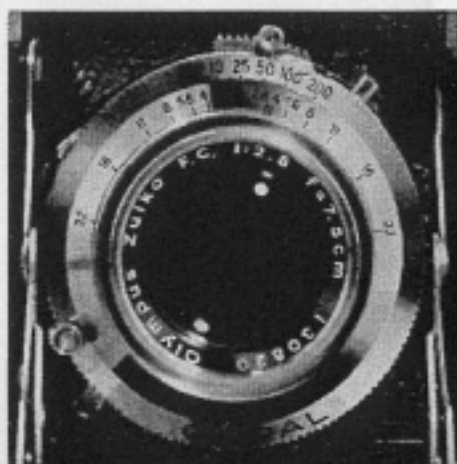
a film used. In ordinary cases, first determine shutter speed according to the moving speed of the subject and then regulate the lens aperture with adequate consideration given to the light condition and the speed of film.



5. Engraved figure B on the speed dial of the shutter indicates bulb exposure. Set figure B to the center mark (▼) on the shutter, lay down leftward the cocking lever and push the release button. Now, you will find the shutter opens; as long as the release button is pressed, the shutter remains open.
6. The other figures on the speed dial, being the denominators of fractions of a second they represent, indicate the time required for an instantaneous opening of the shutter. 1 indicates 1 second, 2 indicates $1/2$ of a second, and so on. In any case, set your desired figure to the center mark, cock the shutter and push the release button; then the shutter will make an instantaneous opening at an indicated speed.
7. Apertures of the lens are indicated by F numbers on the

F number	2.8	3.5	4	5.6	8	11	16	22
Proportion	2	1.3	1	$1/2$	$1/4$	$1/9$	$1/16$	$1/32$

aperture scale. The higher the number the aperture. The quantitative proportion of light passing through the lens are the above.



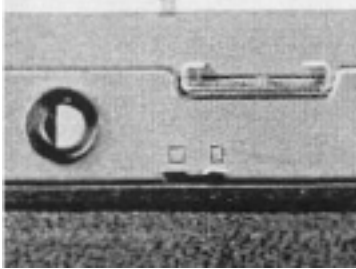


8. Set distance, set shutter speed, regulate the lens aperture by placing the iris-diaphragm regulator on your desired scale and cock the shutter. Now, all is ready for an exposure. You need only to press the release button slowly, looking at the subject through the viewfinder to take your first picture.

9. It is essential to press the release button slowly in order not to give any shock to the camera, since even the slightest shock will spoil the definition of your negative.

10. VIEW FINDER has a field mask. Turn the lever to left (marked with large ) and the view field will be for 6×6 cm pictures, switch to right (marked with smaller ) and then a black mask appears in the field to fill the view lens at both sides changing it for 4.5×6 cm pictures. However, these operations should be done before film loading.

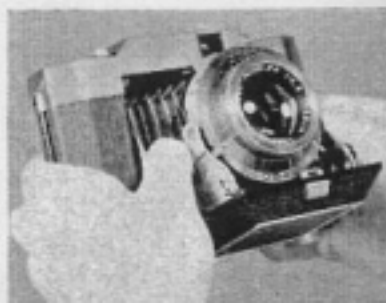
11. In both cases, when the subject is at an extremely near distance, the upper limit of the subject to be taken in the picture, due to the parallax of the viewfinder and lens, becomes lower than that which may be seen through the viewfinder.



The 3.5 feet mark on the viewfinder indicates this upper limit when the subject is 3.5 feet distant.



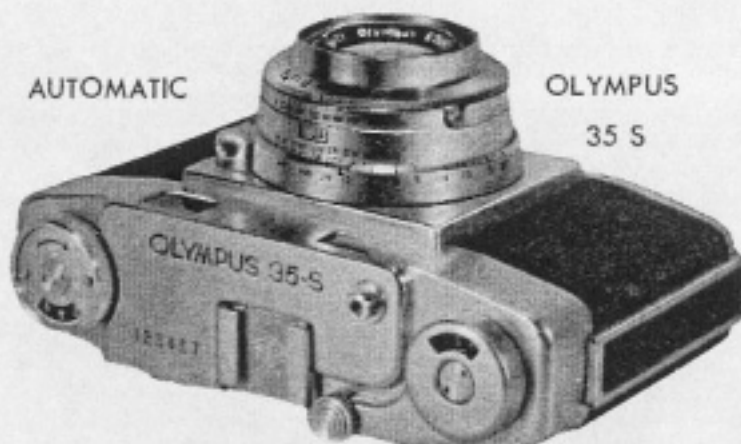
12. When you want to take your own portrait or to make an automatic exposure, set downward the self-timer lever after the shutter is cocked, and push the release button. Then, the shutter will make a delayed-action automatic release after about 8 seconds.
13. When you like to make a flash gun to the flash plug of the shutter and operate the shutter as usual. This makes possible a flash synchronized exposure. The limit of shutter speed is up to $1/50$ of a second for F-type bulbs and $1/25$ of a second for M-type bulbs.
14. When a filter or sunshade is to be used, fix it to the round groove on the front of the focusing ring. The diameter of filter or sunshade must be 37 mm.
15. In the case of a wire release, connect the same wire release as that used for Leica to the screw thread of release button.
16. To close the camera front after exposures, fold the side struts and then shut the front base board.



1. Don't forget to wind up the immediately after exposure in order to prevent double exposures.
2. Open one of the back windows chosen by you, wind up the lever until the next figure appears.
3. After the last exposure, open one of the back windows and wind the lever until the entire length of back paper is wound up. Open the camera back, pull out the spool holder, take out the exposed film and paste down the end of back paper.
4. Film loading and unloading should not be done under direct sunlight.

NOTE :

1. Protect your camera from dust and moisture.
2. Keep your lens clean. When the lens gathers dust wipe it carefully with soft, clean cotton cloth. Never leave it dusty.



For ordinary purpose, medium speed film with a rating of about 30 to 50 ASA is suitable. Under a poor light condition, high speed film may be used, but it has rather coarse grain. Low speed film possesses fine grain high contrast. ASA number is proportional to the speed of film.

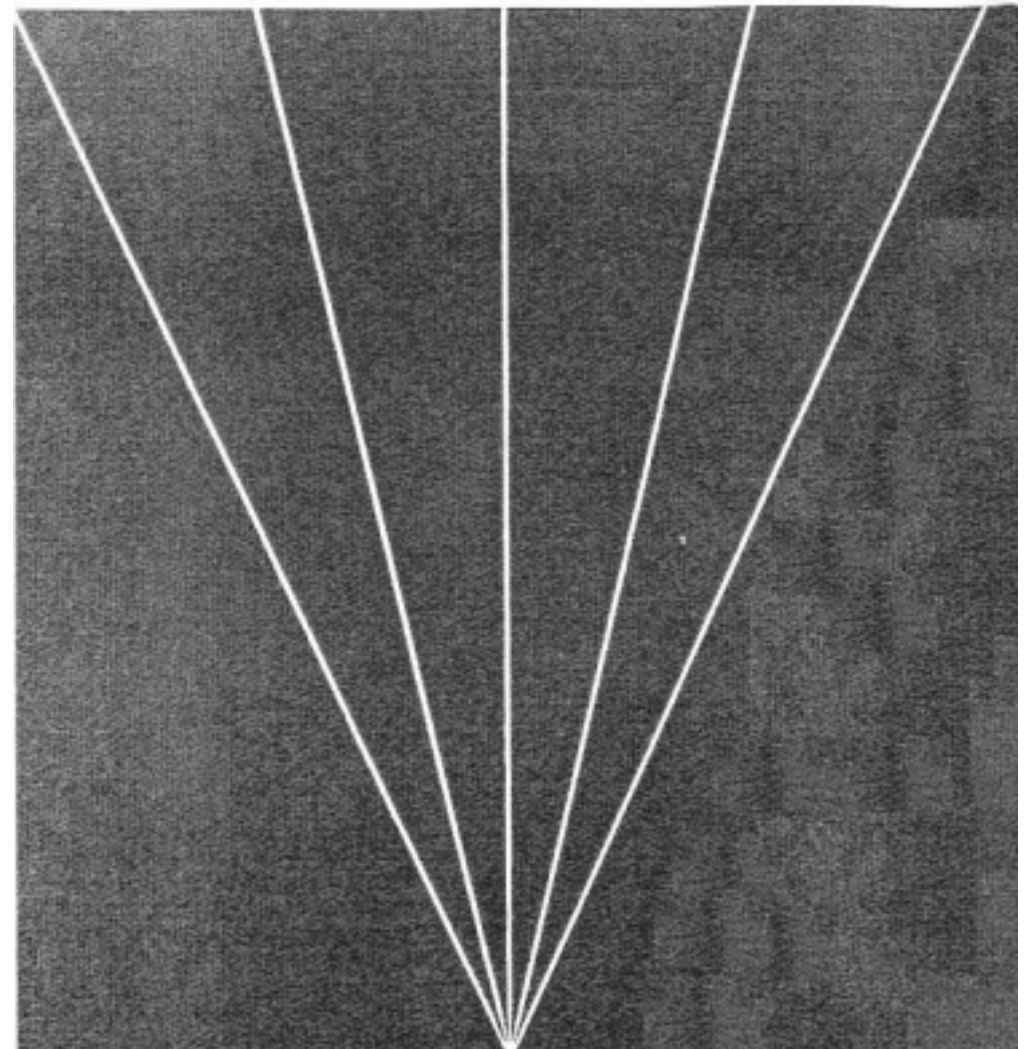
TABLE I

ASA	DIN	GE	WESTON
8	10/10	10	6
10	11/10	12	8
12	12/10	16	10
16	13/10	20	12
20	14/10	24	16
24	15/10	32	20
32	16/10	40	24
40	17/10	48	32
48	18/10	64	40
64	19/10	80	50
80	20/10	100	64
100	21/10	125	80
125	22/10	160	100
160	23/10	200	125
200	24/10	250	160
250	25/10	300	200

This exposure guide table is for medium speed film and a clear sky during the summer months between 10 A.M. and 4 P.M. During spring and autumn, double these exposures and winter multiply them by four. In the case of color photography, the use of a photo-electric exposure meter is recommendable.

TABLE II

Subject	Lens Opening	Shutter Speed
Street scene, Building:	5.6— 8	1/100
Landscape with dark foreground:	8—11	1/100
Open landscape:	11—16	1/100
Open set Snow scene:	11—16	1/200
Portrait in shadow:	3.5— 4	1/50
Indoor portrait near window:	3.5	1/10—1/25



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