6×6(2-1/4-square) single-lens reflex camera

66

KOWA SIX MM

Welcome to the exciting and rewarding world of KOWA-SIX 2-1/4-square single-lens reflex photography.

Although you are probably anxious to start shooting with your new KOWA-SIX, we suggest that you take the time to carefully study this instruction manual. As you go through the pages, try to understand—not just memorize—the operations of the camera. In this way, you will quickly realize the full potential of this superb instrument and its accompanying lens and accessory system. If you have any questions, your Kowa dealer will be glad to answer them.

Note:

These instructions apply to the two models, KOWA-SIX MM(version II) and KOWA-SIX(version II), but the instructions printed in this color are applicable only to the MM model.

CONTENT

① Viewing magnifier, interchangeable

② Strap stud, front

③ Multi-exposure index

④ Multi-exposure knob

⑤ Strap stud, rear

⑥ Film & shutter knob/flip-out crank

⑦ 12/24 frame counter selection knob

⑧ Automatic zero-reset 12/24 frame counter

⑨ Depth-of-field preview lever

⑩ Mirror locking knob

⑪ Mirror-up signal window

⑫ Removable finder hood

⑬ Distance scale

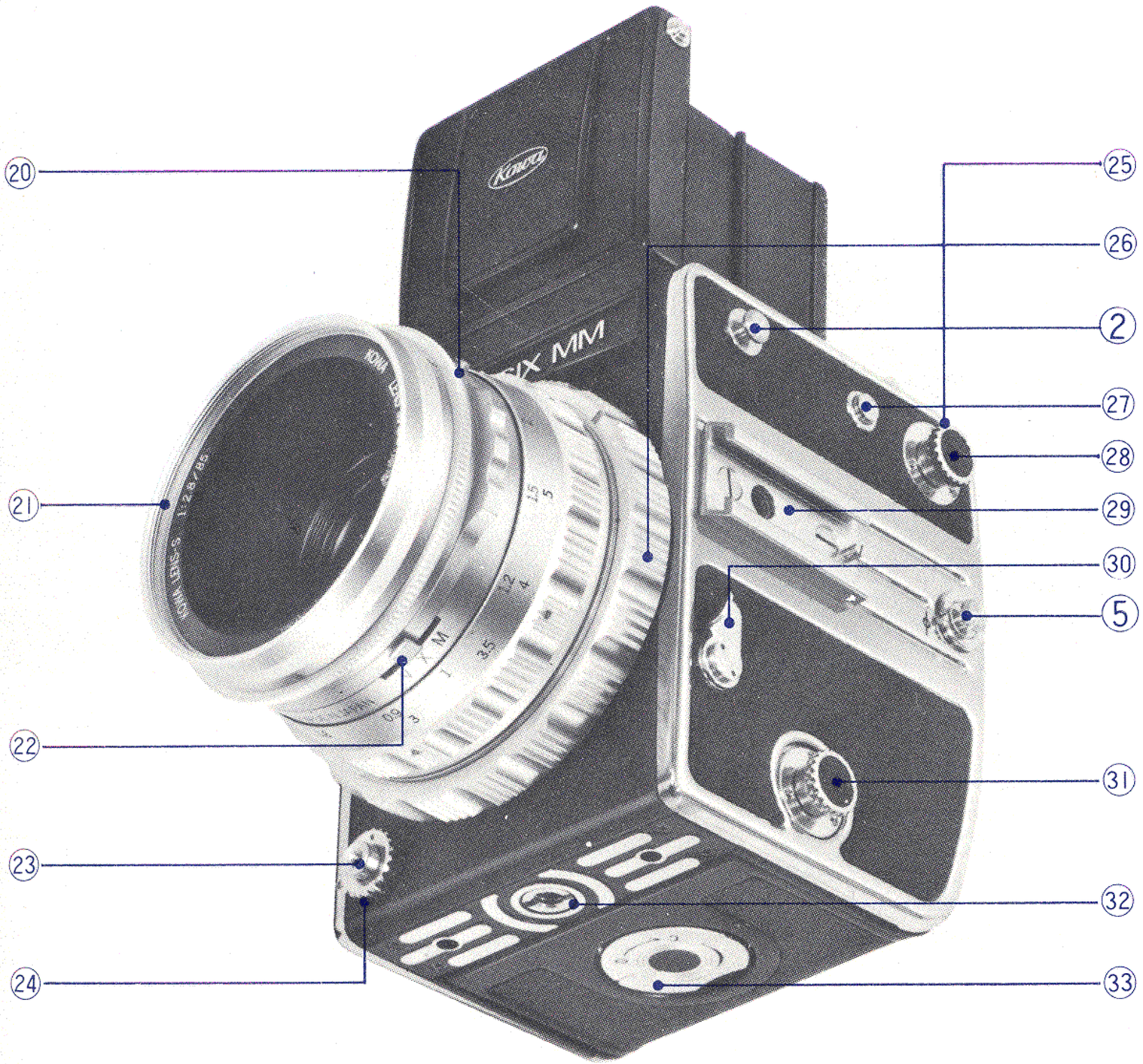
⑭ Depth-of-field scale

⑮ Aperture scale

⑯ Shutter speed scale

⑰ Aperture selection ring

Parts Description



18 Shutter speed selection ring

19 Focusing ring

20 Flash synchro terminal

21 Filter mount threads

22 M/X flash synchronization and self-timer

23 Shutter release button

24 Shutter release button lock ring

25 Camera back locking lever

26 Lens locking collar

27 Interchangeable finder hood release button

28 Take-up spool knob

29 Accessory shoe

30 Lens locking lever

31 Feed spool knob

32 Tripod mount

33 Camera back locking knob

*) Items printed in different color are not provided on standard model

FILM LOADING

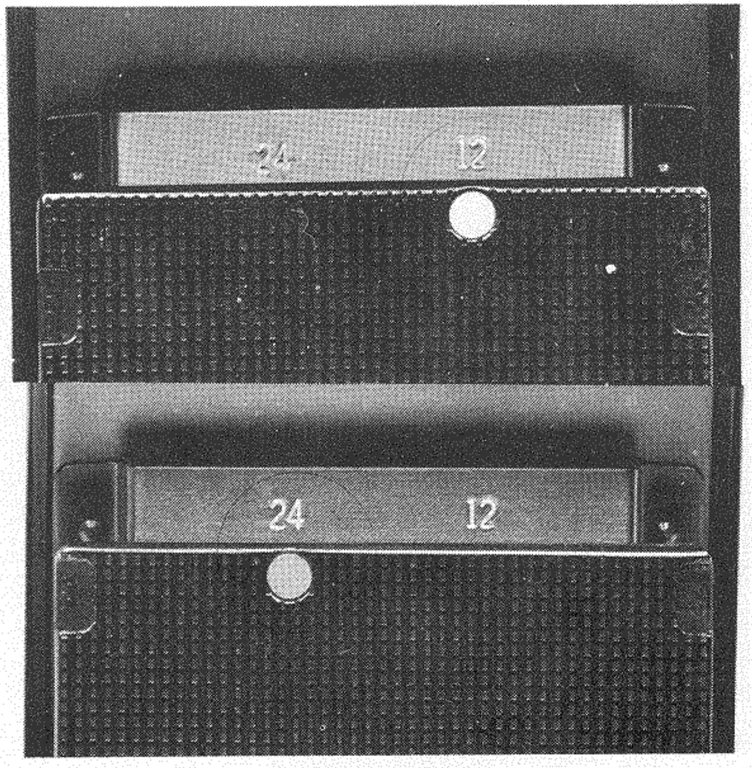
※ Avoid direct sunlight when loading or unloading film. A relatively dark place — especially with higher speed film — is best.

1

1. Open the camera back

Flip up the camera back-locking knob on the bottom of the camera. Turn the knob toward "0" until it comes to a stop. Pull it out gently. The camera back will now open.

2

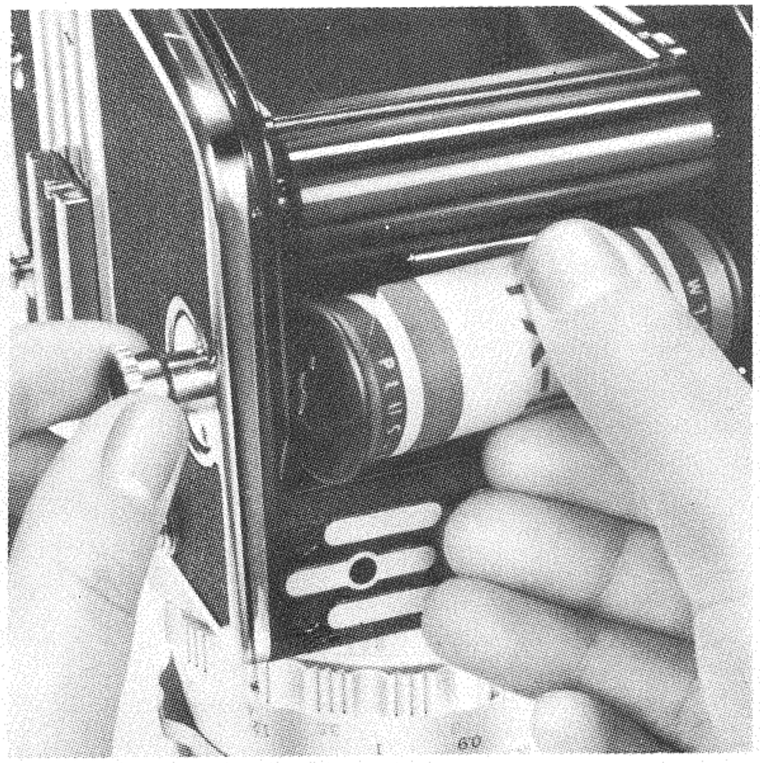


2. Set film pressure plate and frame counter, if necessary

The film pressure plate and frame counter must be set for the type of film you are using, 120 or 220. See the directions on Pages 8 and 9.

※ Make sure that they fit the type of film used.

3

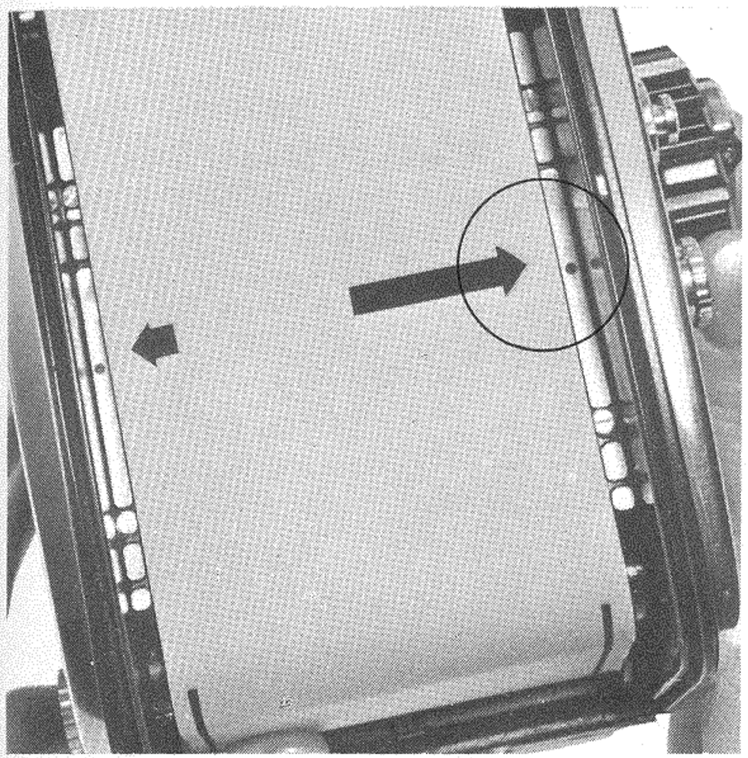


3. Load the film

Insert an empty spool into the top of the film chamber and a loaded film spool into the bottom of the chamber. To facilitate loading of the spools, first pull out and turn the take-up and feed spool knobs. Both will remain in the pulled-out position. When you have placed both spools into the camera, twist the knobs. A spring will return them to their normal positions. See that the take-up and feed spools are moving freely.

※The shutter button can be pressed only after winding is completed.

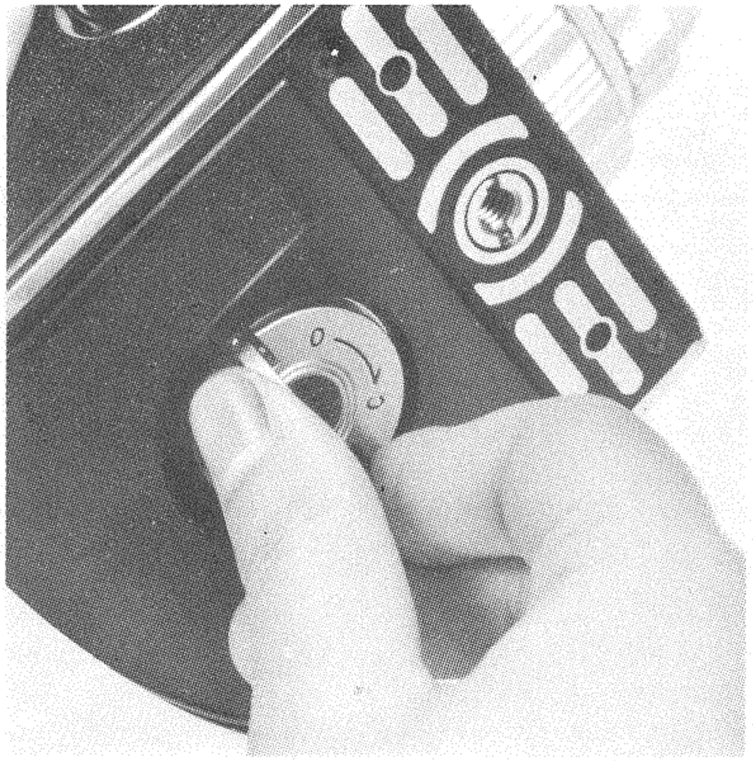
4



4. Advance the film to the "start" markings

Insert the film leader tip into the slit in the take-up spool. Slowly advance the film, making certain that take-up is smooth, taut, and straight. Continue to advance the film until the "start" markings on the film (usually arrows) line-up with the index points (red dots) on the camera's film guides.

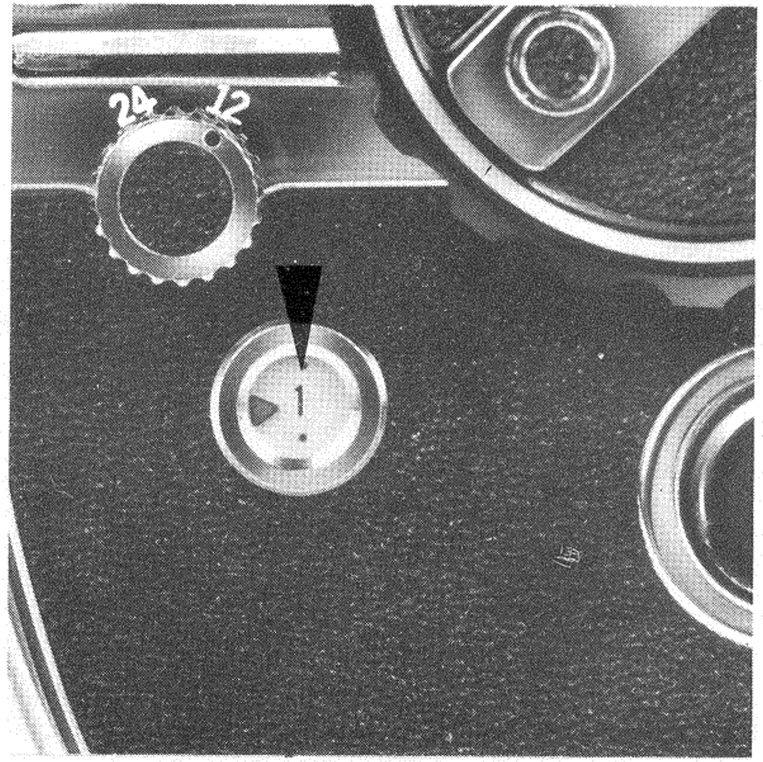
5



5. Close the camera back

Close the camera back and turn the camera back locking knob in the direction of the "C" until it comes to a stop. At the same time, press in on the camera back. Check to be certain that it is properly locked.

6

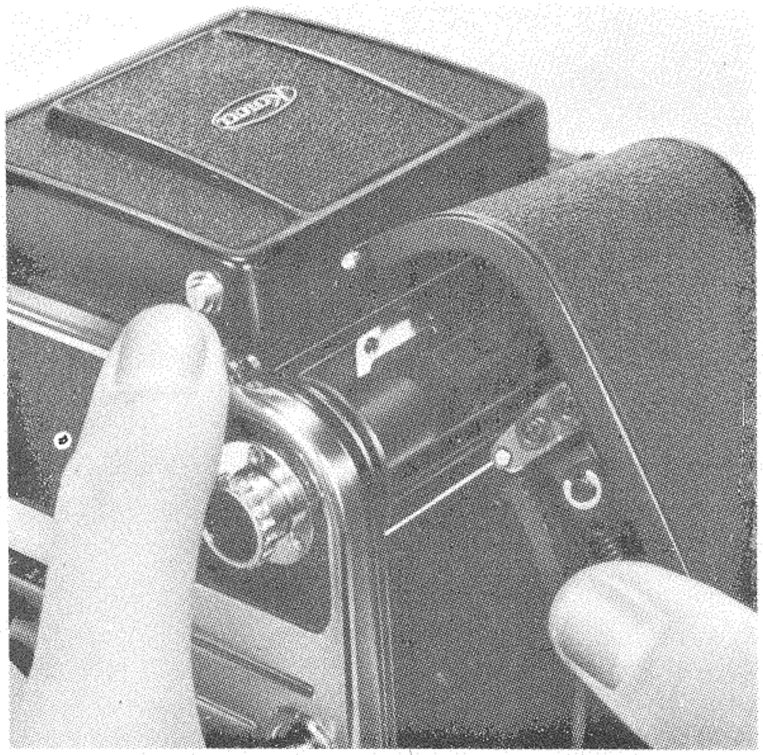


6. Advance the film to the first frame

Advance the film until the number "1" appears in the frame counter window (about six full turns). The automatic mechanism will stop the film from abvancing further when you reach the first frame. The shutter is now wound and you may take your picture.

SETTING FOR 120 OR 220 FILM

1



1. Remove the back cover

Open the back cover and move the camera back locking lever (located at the hinged top of the camera back) toward the back of camera. Detach the camera back. Reverse the order to replace the camera back.

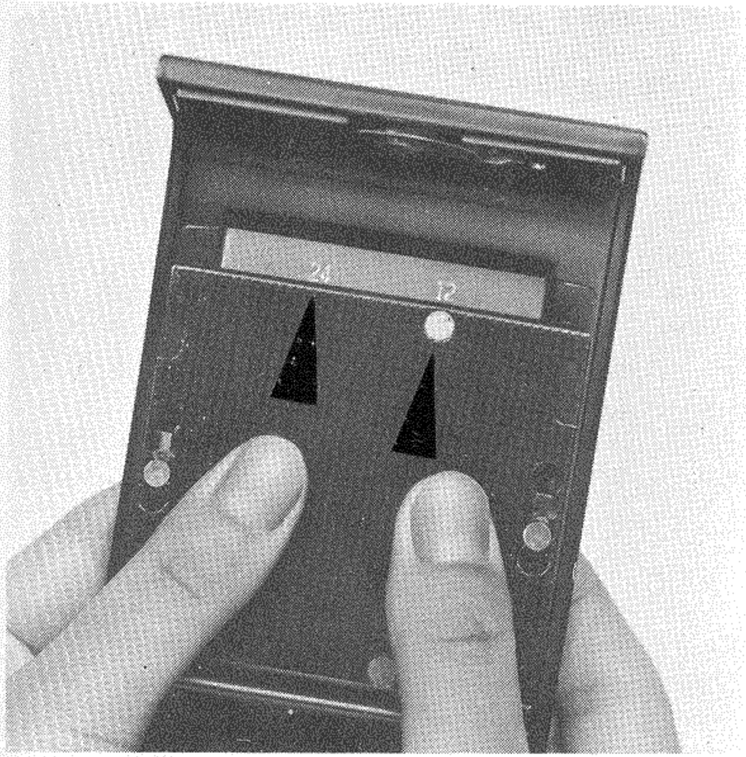
2

2. 120 and 220 roll films

120 roll film provides 12 2-1/4 × 2-1/4 exposures; 220 roll film provides 24 exposures of the same size. 120 type film has backing paper running its full length. 220 has paper leaders attached to the beginning and end of the film, thus saving space and allowing 24 exposures to fit the spool. Other than the number of exposures, however, a given film type will be identical in all ways, be it 120 or 220.

※ If you do not plan to shoot immediately, it is advisable to lock the shutter-release button according to the directions on Page 12. This will prevent you from wasting a frame due to accidental exposure.

3



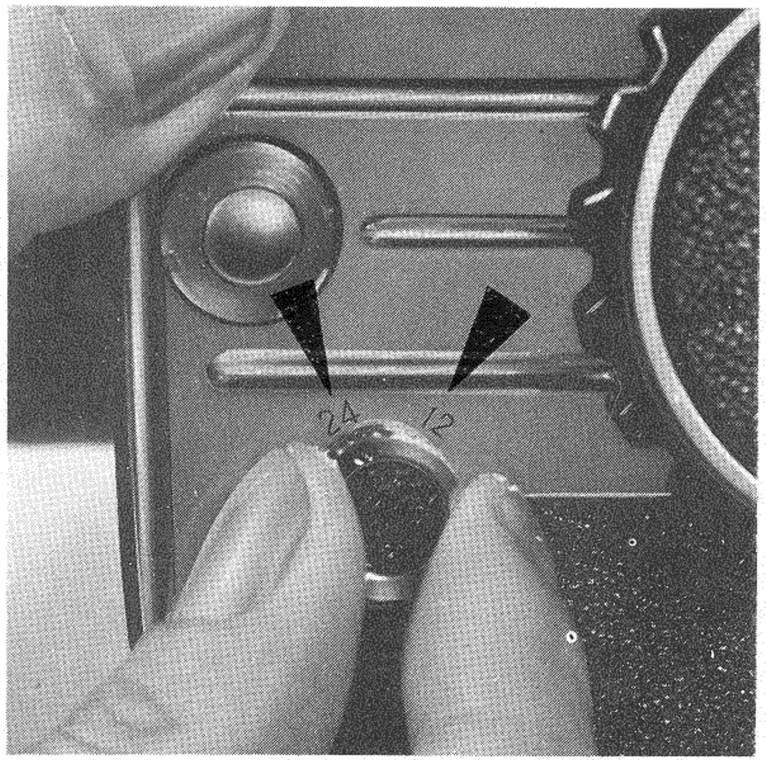
3. Position the pressure plate for 120 or 220 film

To remove the plate, press it in, slide it down and lift it out.

For 120 film, align the yellow dot with the yellow "12"

For 220 film, align the red dot with the red "24". Then replace the plate.

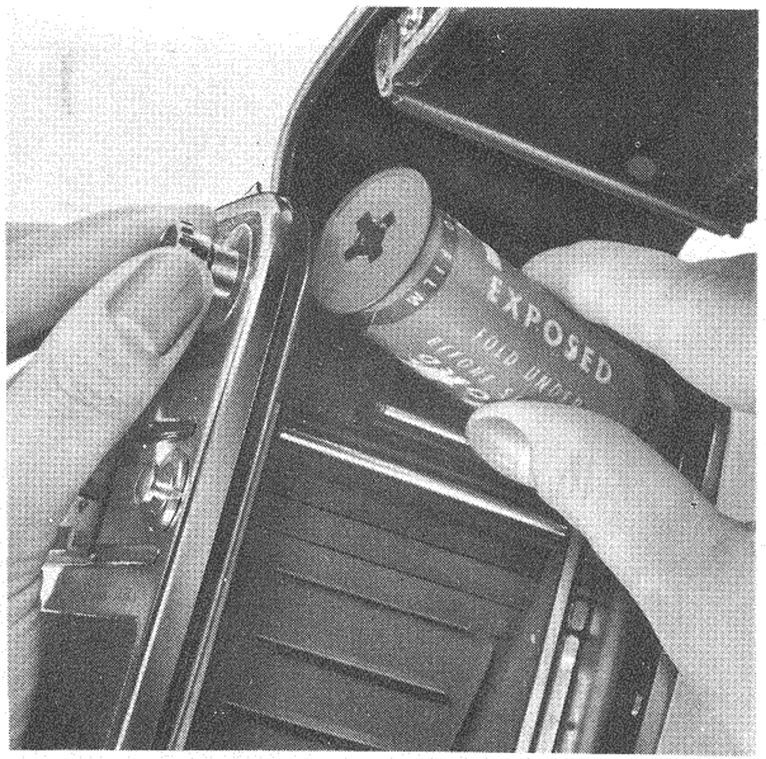
4



4. Set the frame counter for 120 or 220 film

Pull out the 12/24 frame counter selection button, align the dot with the "12" or the "24" depending on the type of film in the camera, push the button back into position. With the 12/24 frame counter properly set, the winding knob will be automatically released when you have made the last exposure (the 12th for 120 film: the 24th for 220 film), the film advance mechanism automatically releases.

5



5. Removing exposed film

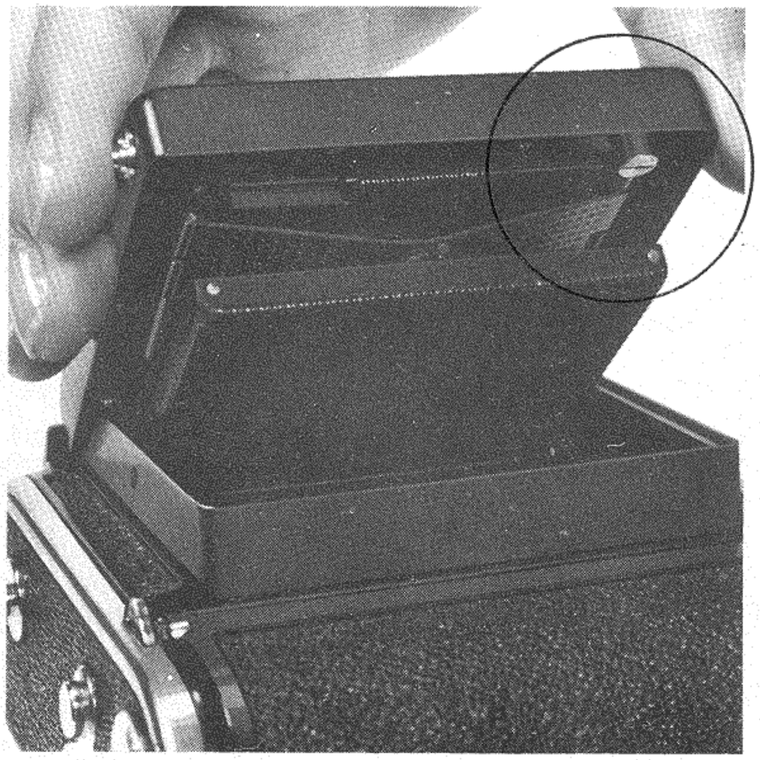
Wind the remaining film onto the take-up spool. Be sure this completed before opening the camera back.

Open the camera back and carefully remove the exposed film.

Move the empty feed spool into the take-up position (top) of the film chamber. It will now serve as the take-up spool.

OPERATING THE KOWA-SIX

1



1. Open the finder hood

Pull the knobs on the side of the front cover upward and the hood flips open. To close the hood, depress the front cover as you keep the hinge on either side of the hood lightly pushed in.

For fine focusing, push the button encircled in the illustration in the direction of the arrow, and the viewing magnifier will flip up. To close the viewing magnifier, push it inward until it is locked into its position.

2

2. Set the shutter speed

Align the desired shutter speed with the index mark. The scale is of even intervals and provided with a clickstop for each setting. Shutter speed may be set before or after the film is advanced.

Note: Do not set an intermediate (between click-stops) shutter speed. An intermediate setting may not be accurate, and there is the additional possibility of camera damage.

3

3. Set the aperture

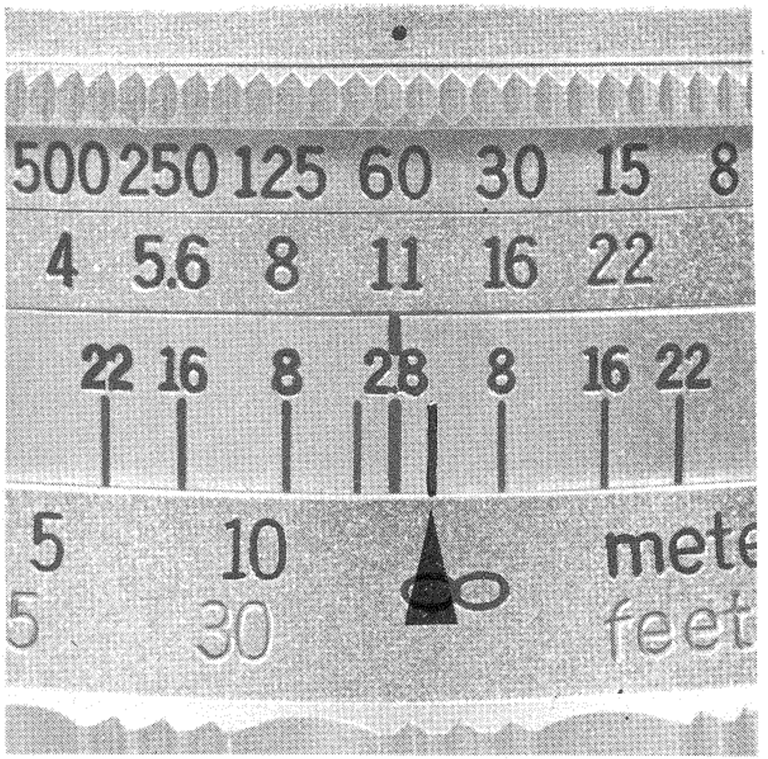
Turn the aperture selection ring until the desired f/stop is lined-up with the index mark. Click-stops are provided at full and half F stops.

The lens will automatically stop-down to the selected F stop when the shutter is released.

※It is advisable to use small apertures in infra-red photography. In most circumstances, the added depth-of-field will compensate for possible focusing error. Depth-of-fied increases as the lens is stopped down (aperture selection ring moved to higher numbered f/stops).

4

5



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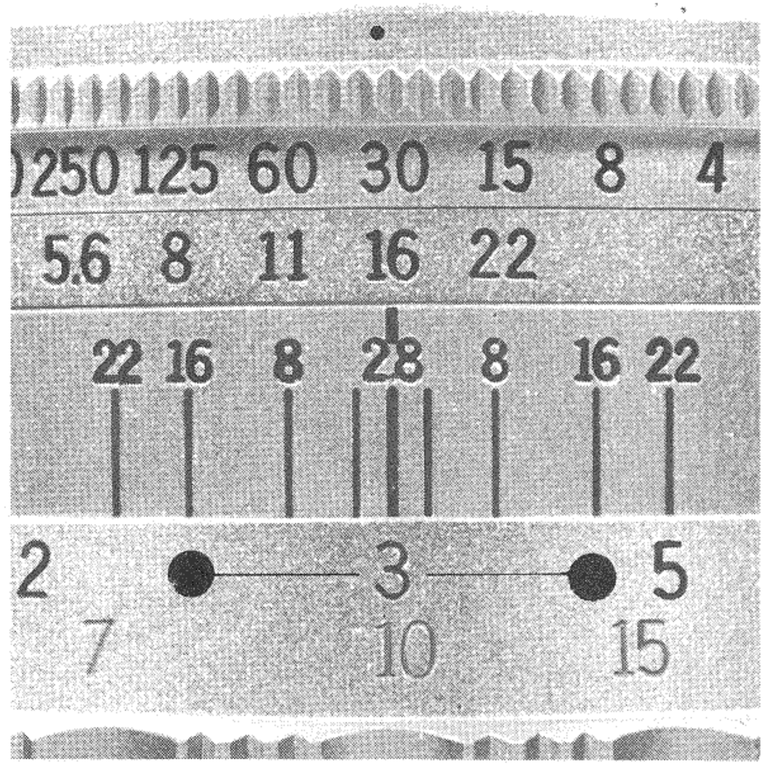


4. Focusing

Turn the focusing ring until the image on the viewing screen appears sharp. With all viewing screens (unless instructions for a specific screen state otherwise), critical focusing should be done with the center spot.

For less critical focusing, the distance may be estimated and set on the distance scale. To measure film to subject distance (applicable is some close-up applications) measure from the ϕ mark on the camera. This mark indicates the film plane.

5. Focusing for infra-red photography

It is always necessary to compensate for the different wavelength sensitivity of infra-red film. To do this, focus as usual. Then move the distance indication which has aligned with the index mark to the red line on the depth-of-field scale (as shown in the above picture). Generally, an R2 or O2 filter is used for infra-red work.

6. Depth of Field Scale

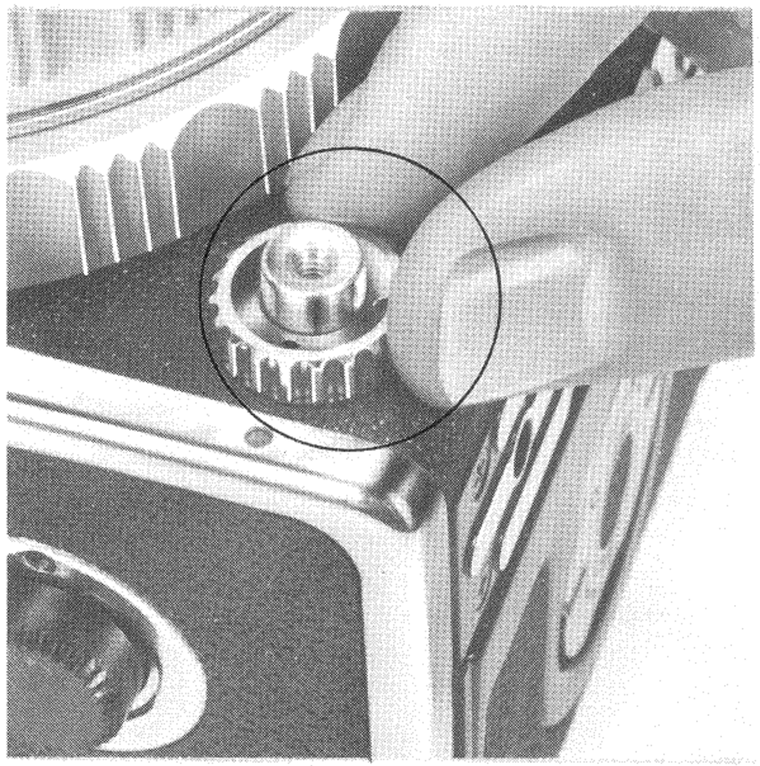
As this is a single-lens reflex camera, the range of sharp focus may be ascertainted on the viewing screen with the help of the depth-of-field preview lever. For an approximate check, use the depth-of field scale on the lens barrel. The picture shows depth-of-field at F/16, 3 meters (10 feet 2 inch).

※As the depth-of-field preview lever serves only to ascertain the stopping effects the diaphragm reverts to the fully open state the instant the lever is released.

7

8

9



7. Depth-of-field previewing

Being fully automatic diaphragm, the diaphragm is usually fully open and therefore the stopping effects, at taking aperture the depth-of-field or blur of image, cannot be seen.

If the depth-of-field preview lever is pulled down fully, the effect of diaphragm can be ascertained on the viewing screen.

8. Time exposure (T)

For a time exposure of whatever duration you wish, align the "T" on the shutter speed selection ring with the index mark. When the shutter-release button is pressed, the shutter will remain open until you turn the shutter speed ring to the "1" position.

The shutter will then close-down.

9. Shutter-release button lock

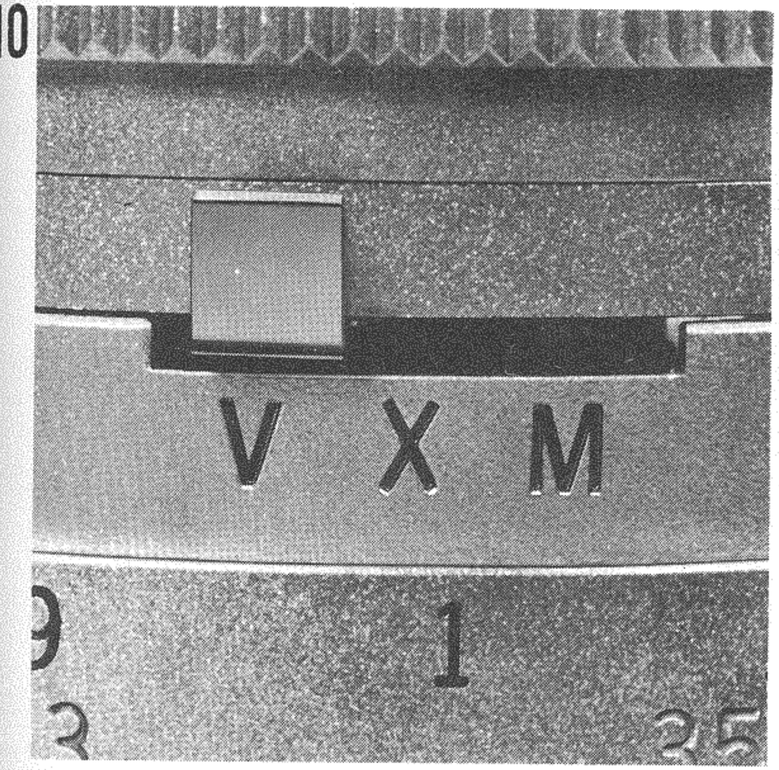
To lock the shutter-release button, turn the shutter-release lock ring, aligning the red dot on the ring with the red dot on the camera. To unlock the shutter, align the green dot on the shutter-release lock ring with the red dot on the camera.

※ It is advisable to lock the shutter-release button whenever the camera is loaded with film and not being used.

Flash Synchronization Settings

Type of Flash \ Setting	M	X (V)
M Class Bulbs	Synchronized at all shutter speeds.	Synchronized at shutter speeds of 1/30 sec. or less.
Electronic Flash	Not synchronized	Synchronized at all shutter speeds.

10



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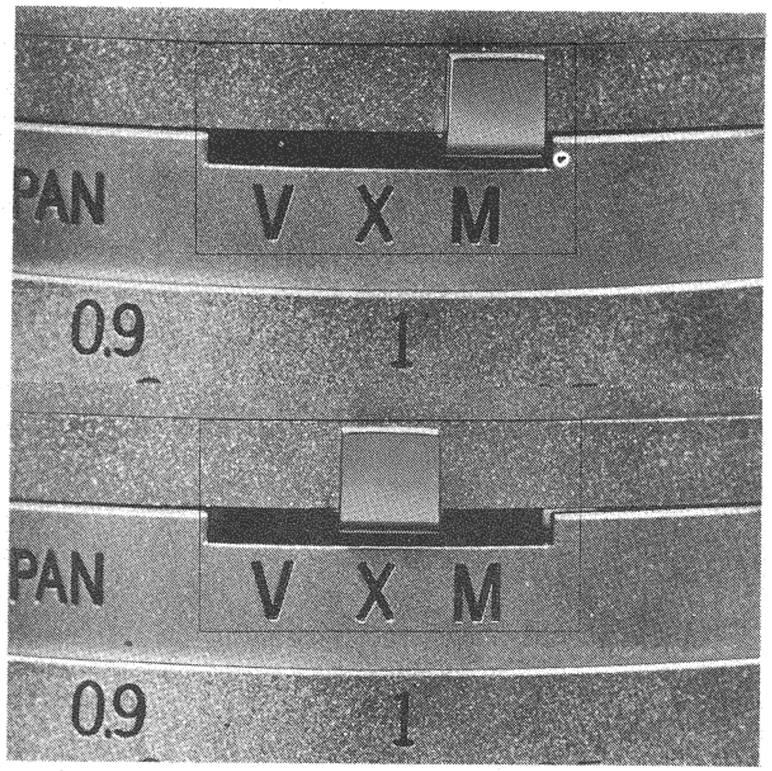


10. Self-timer

For a delayed shot, place the M/X flash synchronization and self-timer lever in the "V" position, make appropriate settings, and press the shutter. The self-timer will release the shutter in about 10 seconds.

The lever is concurrently the lever the selection of flash synchronization contacts "X,M"

11. Flash synchronization setting selection

TheKOWA-SIX, because of its between-the-lens leaf-type shutter, provides M and X flash synchronization at all shutter speeds. Selection is made by setting the M/X flash synchronization and self-timer lever according to the above table. Full synchronization for electronic flash is also provided at the self-timer ("V") setting

The shutter is fully synchronized for X-and M-settings. The synchronizer contact is of the coaxial type.

1. Set the lever to X (when using electronic flash) or M (when using flash bulb, M-class) according to flash type as shown in the picture. (See also the synchronization table.)
2. Insert the flash plug into the synchro-terminal, making sure that it is tight in contact.
3. Set the diaphragm according to the following formula

$$\frac{\text{Flash distance}}{\text{Aperture}} = \text{Guide-number of the flash}$$

Notes:

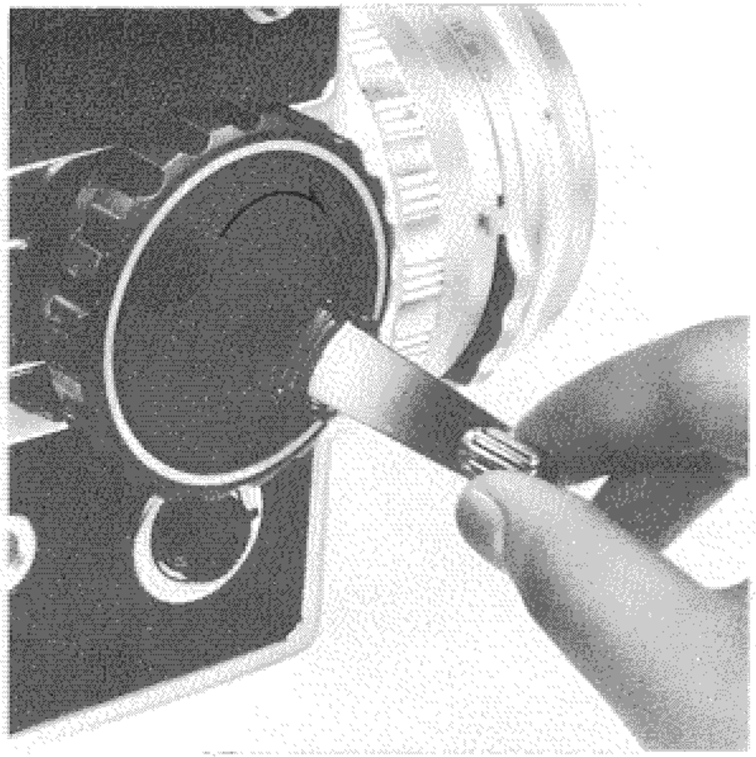
1. The guide-number is described in the manual for the flash.
2. In X-synchronization, a flashing takes place when the shutter is fully opened In M-synchronization, the flash-firing circuit is closed just before it is fully opened to catch the flash at maximum intensity.

***Controls and couplings are in the same position on all lenses for the KOWA-SIX**

INTERCHANGING LENSES

To remove a lens .....

1



1. Wind the film advance

When you wind the film advance, you move the mirror and light-baffle into the viewing position and automatically disengage the lens locking collar safety. This safety system prevents removal of the lens with the mirror and light-baffle in the up position, thereby eliminating the chance of ruining a frame.

2

2. Remove the lens

Push the lens locking lever and turn the lens locking collar counter-clockwise (with the camera facing you) until the index mark comes to a stop in a vertical position. Pull the lens straight out of the camera.

To mount a lens .....

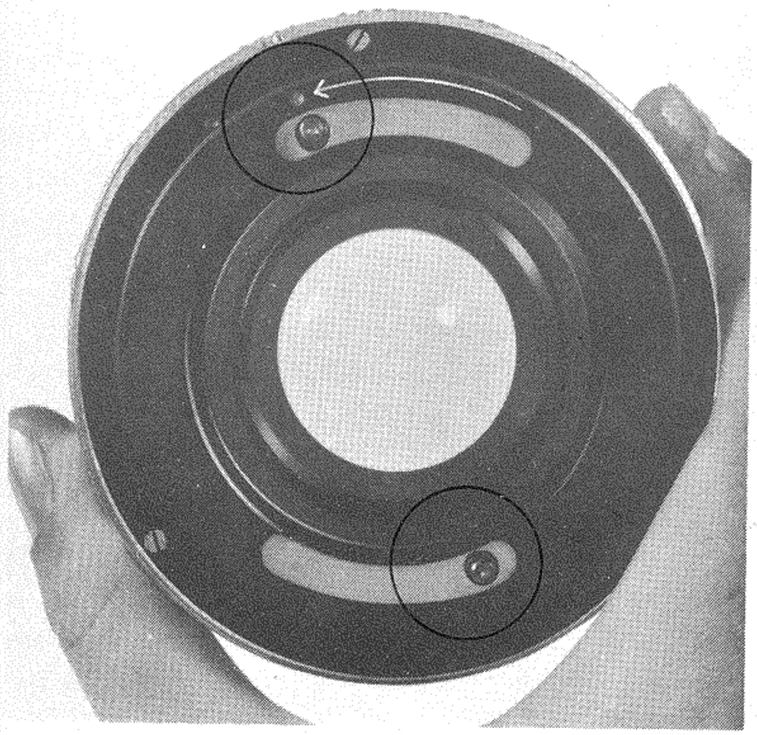
1

1. Wind the film advance

Be certain that the film advance is fully wound and that the index mark on the lens locking collar is in a vertical position.

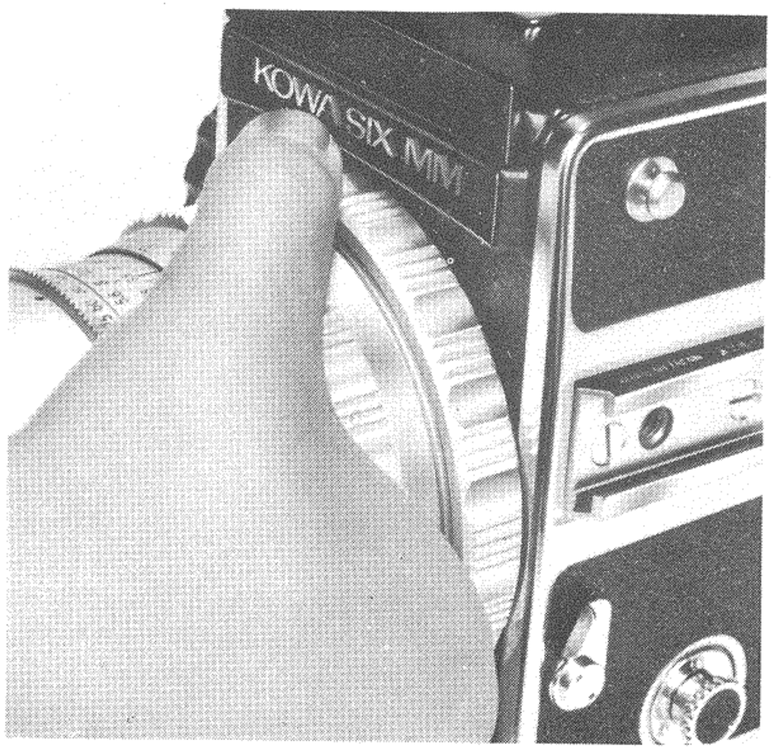
※The lens locking lever will automatically move to its locked position when you turn the lens locking collar. Do not block the action of the lens locking lever.

2



3

4



2. Be sure the lens is opened

When the shutter blades are open and the two pins are aligned with the red dots as shown above, the lens can be mounted. To bring the pins in line with the red dots, turn the pins as indicated by the arrow ***until they click into place.***

※ **Lenses cannot be mounted or dismounted without properly following all described steps.**

3. Align the lens and locking collar index marks

With the index mark on the lens barrel aligned with the index mark on the locking collar, slip the lens completely into the camera.

Be careful not to touch the small pin on the back of the lens. If you do, the shutter blades will close and the lens will not mount. If this happens, realign the pins with the red dots on the rear of the lens barrel.

4. Tighten the locking collar

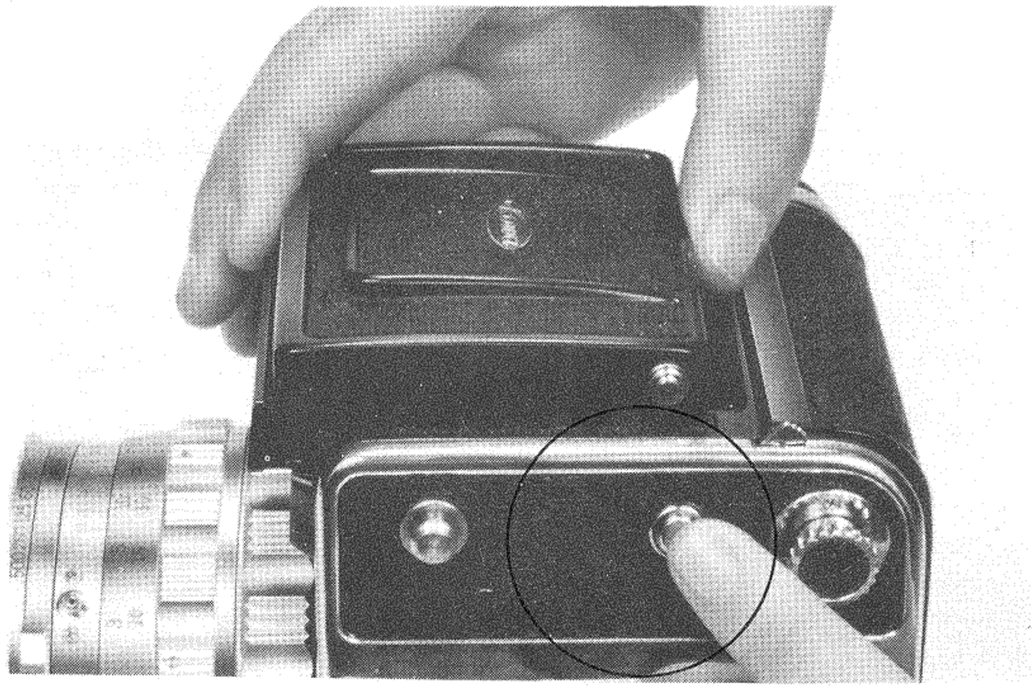
With the lens seated in its mount, turn the lens locking collar in a clockwise position (with the camera facing you) until it stops. (about 30°)

Since the shutter has already been wound, you are now ready to shoot. Be sure to unlock before releasing the shutter button.

INTERCHANGING VIEWFINDERS, VIEWING SCREENS

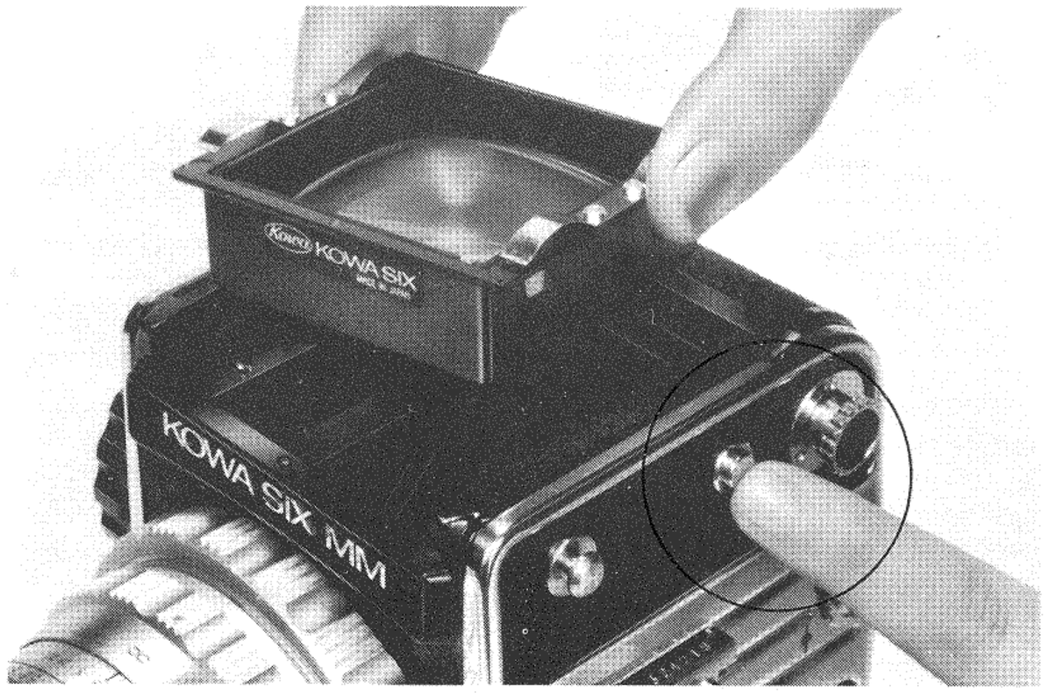
Interchanging Viewfinders

All viewfinders and viewing screens for your KOWA-SIX attach and detach in seconds. To remove a viewfinder, slide the viwfinder out towards the front of the camera while pressing the buttom indicated in the picture.
To attach a viewfinder, just slide it into the groove and it will be automatically locked.



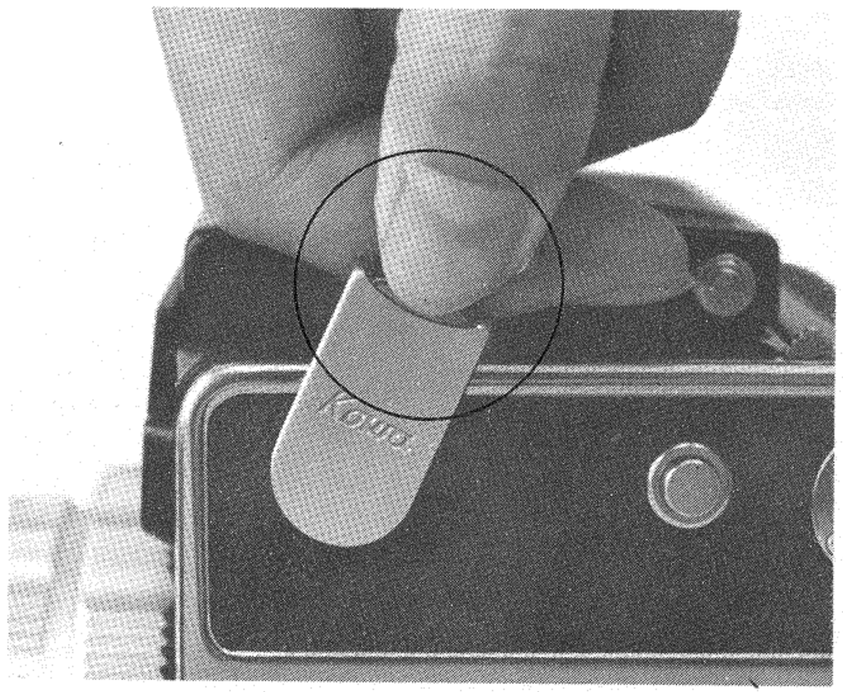
Interchanging Viewing Screens

To remove a viewing screen, first remove the viewfinder (see above). Then, with the camera in an over-turned position, press the interchangeable finder hood release button and the viewing screen will drop out.
It is advisable to let it drop into your cupped hand or onto a soft cloth to prevent scratching or marring of the surface.
To insert a viewing screen, hold the camera in an upright position. Bring the dot on the viewing screen in line with the dot on the camera. Then, while depressing the finder hood release button, drop the viewing screen into position.



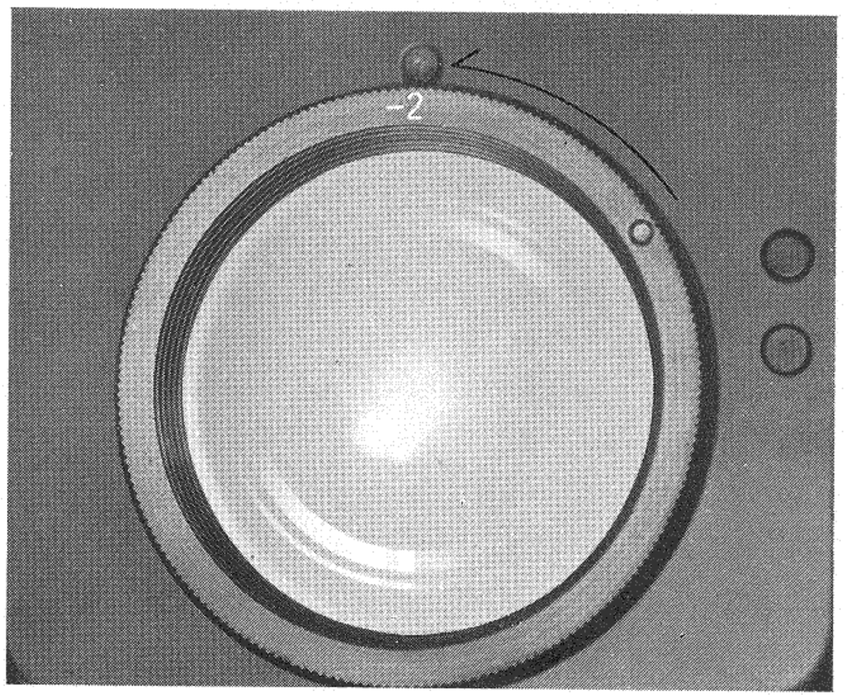
Attaching and Detaching Neck Straps

Front and rear strap studs are provided on your KOWA-SIX To attach a strap, place the eye of the strap tip over the stud and pull the strap. To remove the strap, press the spring plate on the strap tip, push it forward and pull the strap out.



Interchanging of Magnifiers

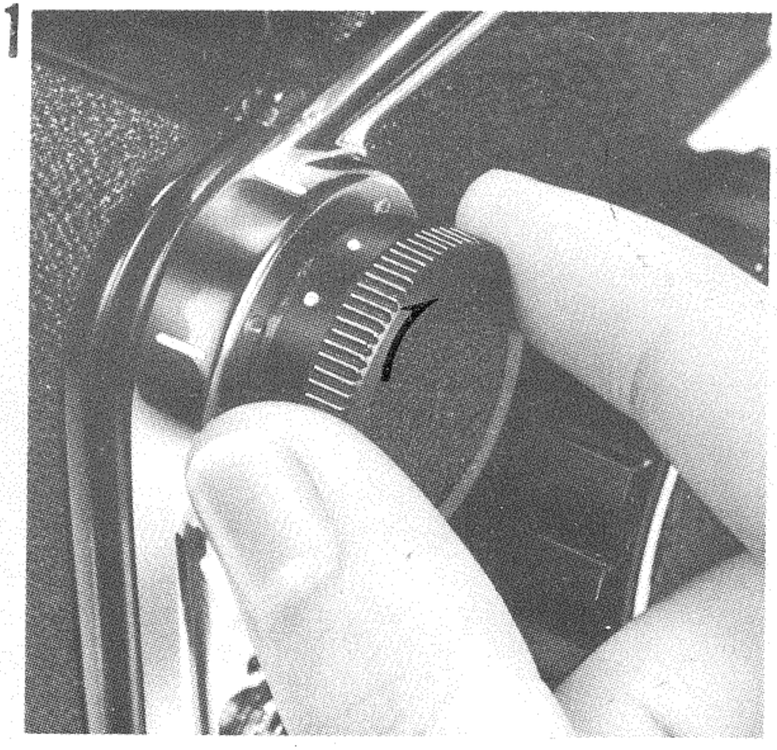
Magnifiers can be interchanged for eyesight correction. The magnifier may be detached by turning anticlockwise until the dots are aligned. Conversely, it may be placed in position by aligning the dots and turning clockwise until it stops. Magnifiers for interchange are available in seven types of −4, −3, −1, 0, +1, +2, +3 diopters.



MULTI-EXPOSURE
(MM VERSION ONLY)

To make double or triple exposures,, proceed with the following steps.

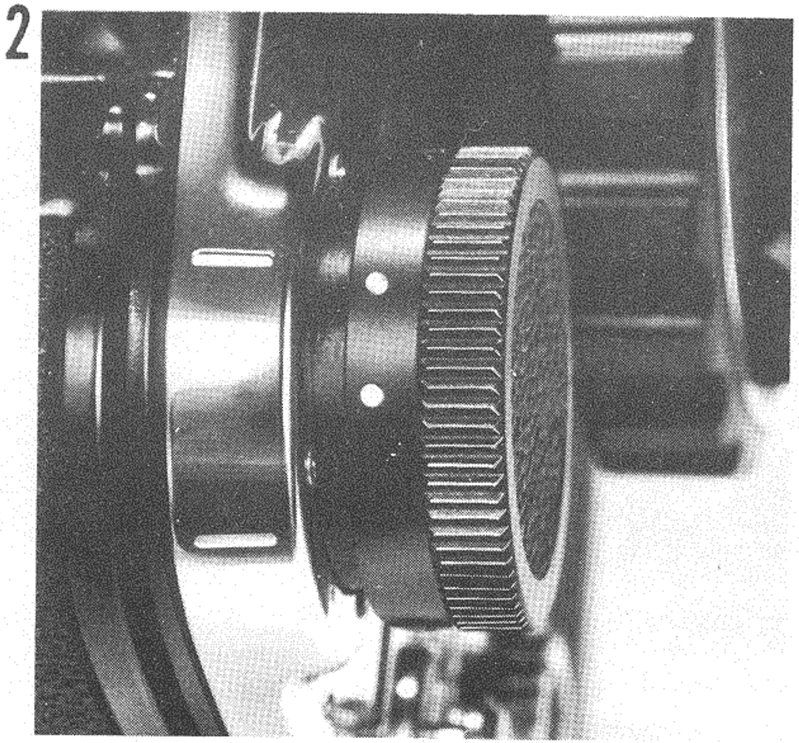
1



1. Set the multi-exposure knob

After winding film, turn the multi-exposure Knob in the directin of the arrow and match the red dot with the multi-exposure index (red line). This operation releases the double exposure prevention mechanism. Then taKe the first shot (the first exposure).

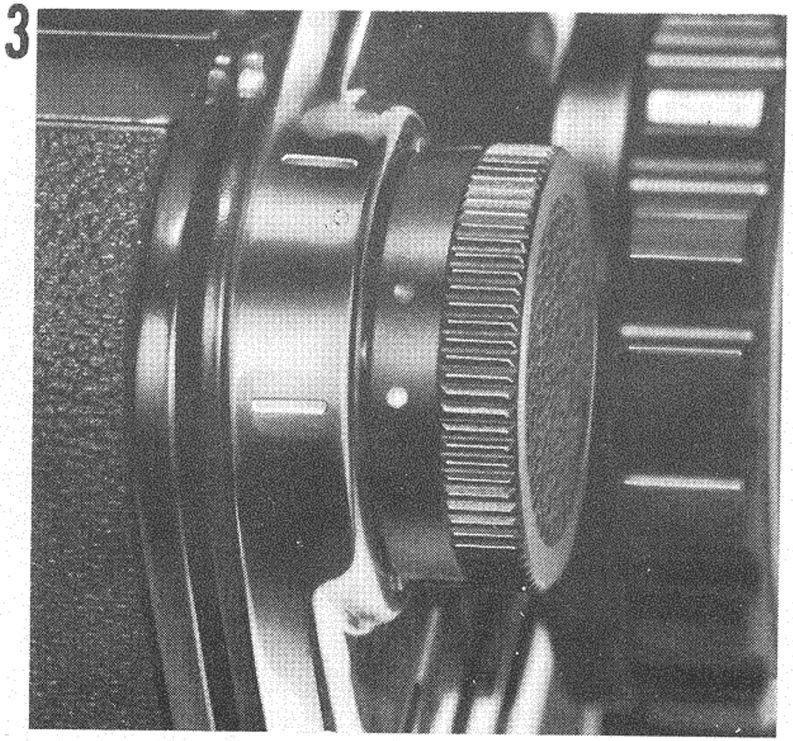
2



2. Making the second exposure

Turn the film windind knob. This operation leaves the frame in position and recocks the shutter. Make the second exposure. By repeating this operation. any number of subsequent exposures can be made on the same frame.

3



3. Return the multi-exposure knob

After necessary shots return the knob to its original position. This releases the multi-exposure device and restores the double exposure prevention system to normal. The yellow dot should now be aligned with the yellow line.

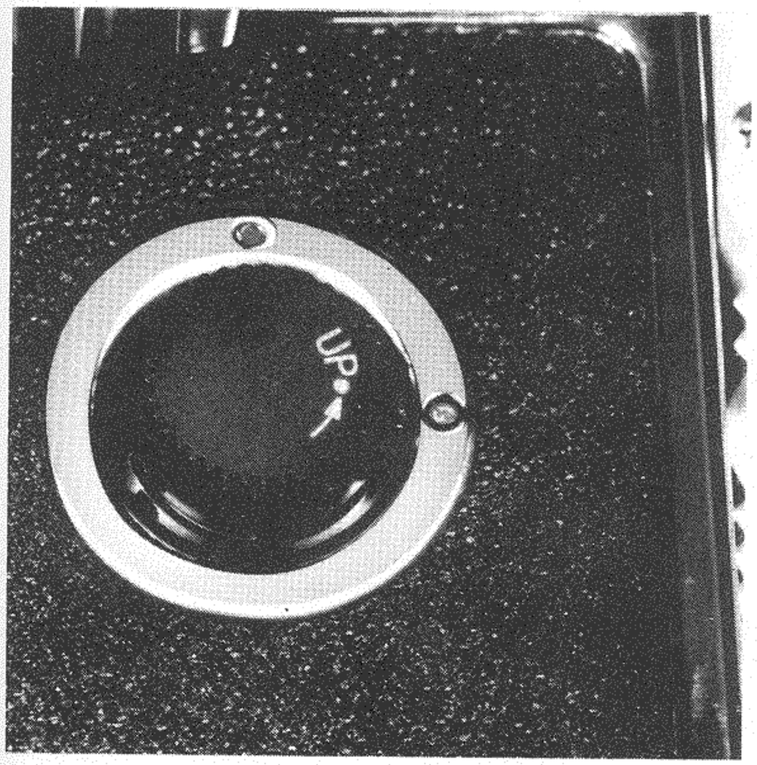
STOPPING MULTI-EXPOSURE

When you change your mind after setting camera for multiexposure, proceed as follows. Take your picture while keeping the knob in position, then return the knob to its normal, yellow line, position. After this, continue shooting as usual.

MIRROR-UP
(MM VERSION ONLY)

Wide-angle lenses for the KOWA-SIX, including the 19mm fish-eye, can be used without recourse to the mirror lifting process. However, in case of close-up and tele-photography, you can eliminate mirror shock by proceeding as follows;

1

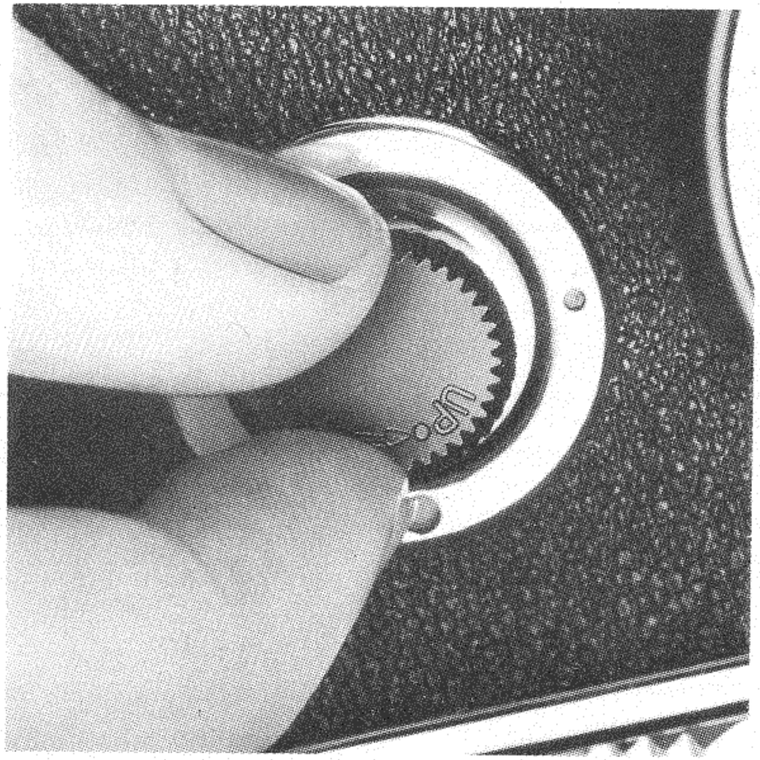


1. Advance the fim

Wind the film winding knob, which simulta neously cocks the shutter.

CAUTION: DON'T TURN THE MIRROR-UP KNOB PRIOR TO FILM WINDING.

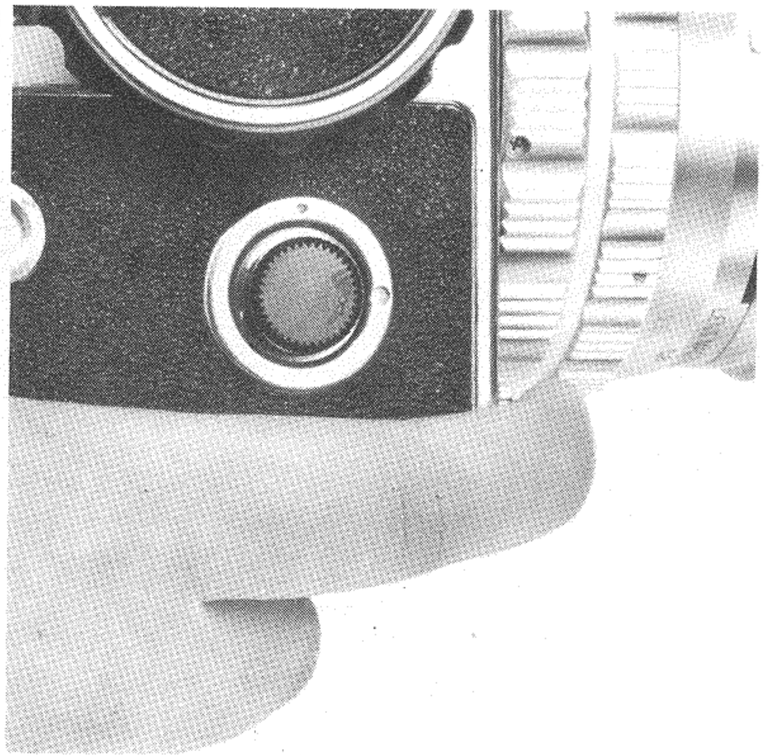
2



2. Turn the mirror-up knob

Turn the mirror-up knob in the direction of the arrow, until the red dot on the knob matches the index (red dot on the body).
A red mark appears in the signal window and indicates mirror-up presetting has been completed. The knob returns to its original position when released.

3



3. Mirror-up photography

Press the shutter button **two** times.
The first pressing lifts the mirror and light baffle, and the second pressing makes the desired mirror-up exposure.

CAUTION: DON'T TURN THE FILM WINDING KNOB BETWEEN THE ABOVE OPERATIONS. WINDING SHOULD ALWAYS BE MADE AFTER THE RED MARK DISAPPEARS FROM THE MIRROR-UP SIGNAL WINDOW.

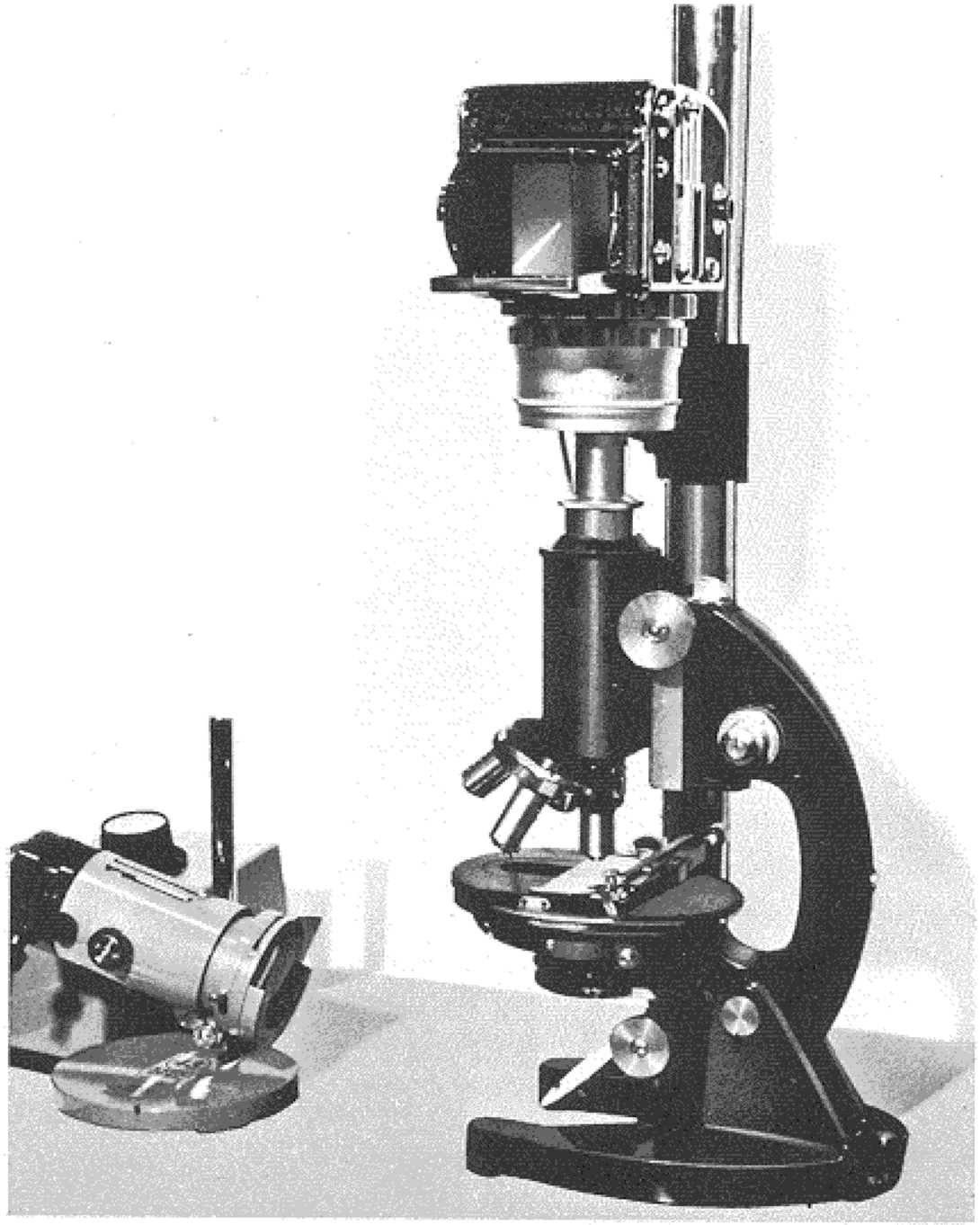
If mis-operated, the winding knob will not stop automatically and the film can be wound through to the end of the roll.

MICROSCOPE ADAPTER

You can take sharp photomicrographs with the help of KOWA-SIX Microscope Adapter MC-1.

The extremely clear view-finder of KOWA-SIX facilitates focusing and adjustment of the light source, which used to create problems in photomicrography. You simply replace the lens unit of your camera with MC-1, fix the camera body on the copy stand and attach MC-1 to the eye-piece of your microscope. Use of the Exposure Finder, an accessory, will greatly facilitate the precise determination of correct exposure.

*Detailed instructions are found in the "Microscope Adapter Instructions".



AUXILIARY LENSES

TELEPHOTOGRAPHY WITH 2X TELE-CONVERTER

2× tele-converter is a rear conversion lens which effectively doubles the focal length of the master lens.

It was originally designed for the 500mm super telephoto lens, but can be used with 150mm, 200mm and 250mm telephoto lenses as well, doubling their effective focal length to 300mm, 400mm and 500mm respectively.

Diaphragm and shutter coupling of the master lens remains when using with the conversion lens. Exposure factor is 4.

* Detailed description and instructions are provided in manual "2X TELE-CONVERTER INSTRUCTIONS" supplied with the converter.

CLOSE-UPS WITH KOWA-UP LENSES

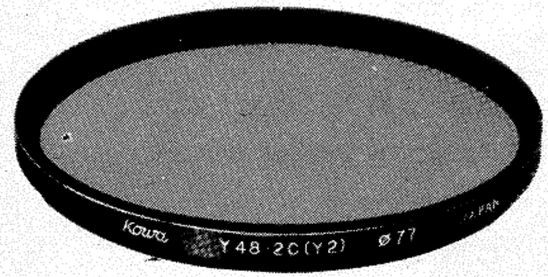
KOWA-UPs are auxiliary lenses for close-up photography. They are very convenient for field work. They allow focusing at closer distance than the minimum distance of master lens. No.1 (its focal length is 0.5m) is the most powerful, No.2 (1m) comes next and No.3 (2m) is the weakest of the three. No modification of exposure is necessary (exposure factor is 1.)

* Detailed description and instructions are provided in manual "KOWA-UP INSTRUCTIONS" supplied with the close-up lens.

Magnification at nearest distance

	55mm	85mm	110mm	150mm	200mm	250mm
lens only	0.19	0.14	0.20	0.13	0.11	0.08
with No.3	0.22	0.19	0.26	0.21	0.22	0.12
with No.2	0.24	0.23	0.31	0.29	0.32	0.34
with No.1	0.30	0.32	0.44	0.46	0.55	0.64

FILTERS



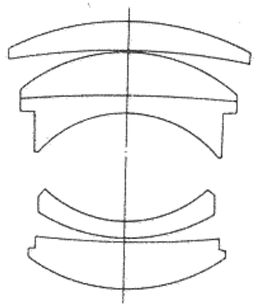
When you wish to contrast your B & W pictures or to use your daylight films under artificial lights, filters will offer effective results.
Filter sizes are given in the following lens descriptions.
19mm, 35mm and 40mm lenses are supplied with filter holder for gelatine filter. Spare filter holder is available.
Exposures must be modified by exposure factor which is given in the table on this page. (But if you use EXPOSURE FINDER or PRISM EXPOSURE FINDER, you will be free from troublesome exposure factor modifications.)
UV and 1A need no exposure increase(exposure factor 1).
Keep always clean the surface of filter.
Note: PL filter comes only in 67mm.

Types and Uses of KOWA Filters.

	Designation	Color	Exposure Facter	Application
For black & white films	UV	Colorless	1	To eliminate hazardous ultra-violet rays and protect lens.
	Y2	Light yellow	2	Widely used for enhancing the tone of photo taken outdoor.
	O2	Orange	4	Intensifies contrast in phtographing mountains, distant scenes, buildings and carvings.
	RO	Red	6	Gives higher contrast than O2.
	R1	Dark red	8	Used for infra-red photography.
	PO0	Yellowish green	2.5	Moderates tones of a photo of colorful subject; beautifies skin feeling in portraits.
For B & W/color	ND-4	Neutral grey	4	Moderated sensitivity for acquiring haze effect with iris opened.
	PL (polarization)	Neutral grey	3-4	Polarized filter for eliminating reflecting light caused by plane (For details, refer to manual for polarized filter.)
	1A (sky light)	Light pink	1	Removes ultra-violet rays that tends to make the photo blue-tinged, and protects lens.
For color films	* 82C	Light blue	1.5	Used when photographing in morning or evening whith daylight color film
	* 80B	Blue	3	Used when photographing with daylight color film by clear flash bulb illumination.
	* 80A	Dark blue	3	Used when photographing with daylight color film under reflector lamp illumination.
	* 81B	Light amber	1.5	Used when photographing with daylight color film in clouday day or at a shaded place in a fine day.
	85C (*85)	Amber	1.8	Used in daytime photo-taking with tungsten type A color film.
	85A (*85B)	Dark amber	2.2	Used in daytime photo-taking with tungsten type B color film.

* = Equivalent to Kodak Wratten Filter.

85mm F 2.8 STANDARD



Taking angle, 50°; construction, 5 elements in 4 groups; minimum focusing distance, 2.5 ft. (0.8m); minimum aperture, f/22. filter size 67mm; finish, black or chrome. Dimensions, 80×64mm, weight, 530g Lens hood, filters, leather case available.

NOTES: The following features apply to all KOWA lenses.

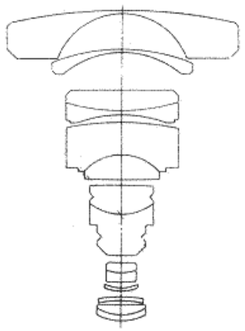
1. Bullt-in between-lens SEIKO #0 leaf shutter; T. 1-1/500 sec. M/X synchro-terminal, selt-timer.
2. Aperture scale with click stops at each half f/stop for fine setting.
3. Fully automatic diaphragm operation.
4. Direct helical focusing.
5. Infrared setting mark "R".
6. Depth-of-field preview lever.

※ Both shutter speed scale and aperture scale carry engraved markings at even intervals and in geometrical progression. Turning both rings by the same degree keeps the light value unchanged.

DEPTH-OF-FIELD TABLE

Apert.(F) / Dist.(m)	2.8	4.0	5.6	8.0	11.0	16.0	22.0
∞	∞ 51.79	∞ 36.31	∞ 25.98	∞ 18.24	∞ 13.31	∞ 9.20	∞ 6.74
10.00	12.32 8.43	13.68 7.90	16.06 7.29	21.75 6.54	39.26 5.80	∞ 4.88	∞ 4.11
5.00	5.50 4.59	5.75 4.43	6.12 4.24	6.77 3.98	7.82 3.70	10.57 3.32	18.46 2.96
3.00	3.17 2.86	3.25 2.80	3.35 2.72	3.53 2.62	3.78 2.50	4.30 2.33	5.15 2.15
2.00	2.07 1.94	2.10 1.92	2.14 1.88	2.21 1.84	2.30 1.78	2.47 1.70	2.71 1.61
1.50	1.54 1.47	1.56 1.46	1.58 1.44	1.61 1.41	1.65 1.38	1.73 1.33	1.84 1.28
1.20	1.23 1.18	1.24 1.18	1.25 1.17	1.27 1.15	1.29 1.13	1.34 1.10	1.40 1.07
1.00	1.02 0.99	1.02 0.99	1.03 0.98	1.04 0.97	1.06 0.96	1.09 0.94	1.12 0.91
0.90	0.92 0.89	0.92 0.89	0.93 0.89	0.94 0.88	0.95 0.87	0.97 0.85	1.00 0.83
0.80	0.81 0.80	0.82 0.79	0.82 0.79	0.83 0.78	0.84 0.78	0.85 0.76	0.87 0.75

19mm F4.5 FISH-EYE

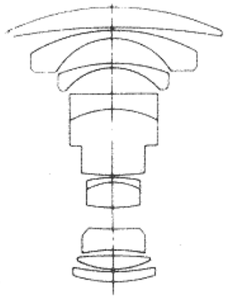


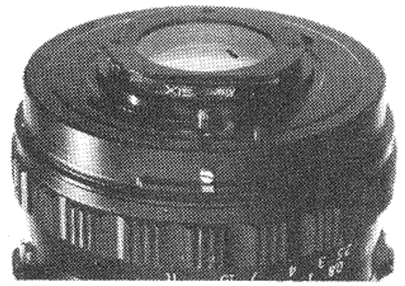
Taking angle, 180°; construction, 14 elements in 9 groups; minimum focusing distance, 1.25 ft; (0.4m) minimum aperture, f/22; filter size, 37.5mm square gelatine filter.
Dimensions, 136×168mm; weight, 2290g.
Equi-distance projection type fish-eye.
Supplied with a lens holder and filter holder in solid carrying case.
Spare gelatine filter holder available.

DEPTH-OF-FIELD TABLE

Dist.(m) \ Apert.(F)	4.5	5.6	8.0	11.0	16.0	22.0
∞	∞ 1.82	∞ 1.50	∞ 1.11	∞ 0.86	∞ 0.66	∞ 0.53
5.00	∞ 1.41	∞ 1.22	∞ 0.97	∞ 0.78	∞ 0.62	∞ 0.51
2.00	∞ 1.05	∞ 0.96	∞ 0.81	∞ 0.69	∞ 0.57	∞ 0.48
1.20	2.84 0.82	5.00 0.77	∞ 0.68	∞ 0.60	∞ 0.52	∞ 0.45
1.00	1.79 0.74	2.30 0.70	7.03 0.63	∞ 0.57	∞ 0.49	∞ 0.44
0.80	1.16 0.64	1.32 0.61	1.98 0.57	6.91 0.52	∞ 0.46	∞ 0.42
0.60	0.74 0.53	0.78 0.51	0.92 0.48	1.22 0.45	3.63 0.42	∞ 0.39
0.50	0.57 0.46	0.60 0.45	0.65 0.43	0.76 0.41	1.09 0.39	3.55 0.36
0.40	0.43 0.38	0.44 0.38	0.46 0.37	0.49 0.36	0.56 0.34	0.71 0.33

35mm F4.5 SUPER WIDE-ANGLE





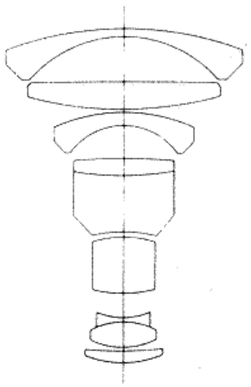
Gelatine filter holder clipped on lens back.

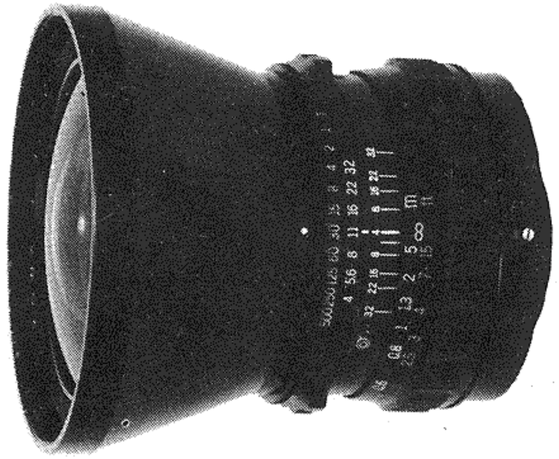
Taking angle, 98°; construction, 10 elements in 8 groups; minimum focusing distance, 1.25 ft (0.4); minimum aperture, f/22, filter size, 33mm gelatine filter,
Dimensions, 100×89mm; weight, 720g.
Supplied with a filter holder in leather case. Spare gelatine filter holder available.

DEPTH-OF-FIELD TABLE

Dist.(m) \ Apert.(F)	4.5	5.6	8.0	11.0	16.0	22.0	32.0
∞	∞ 5.80	∞ 4.69	∞ 3.32	∞ 2.46	∞ 1.73	∞ 1.30	∞ 0.94
5.00	34.78 2.76	∞ 2.49	∞ 2.07	∞ 1.71	∞ 1.34	∞ 1.08	∞ 0.83
2.00	2.92 1.54	3.30 1.46	4.63 1.32	9.65 1.18	∞ 1.00	∞ 0.86	∞ 0.70
1.30	1.60 1.11	1.70 1.07	1.97 0.99	2.47 0.92	4.44 0.82	∞ 0.72	∞ 0.62
1.00	1.16 0.89	1.21 0.87	1.32 0.82	1.51 0.77	2.02 0.70	3.50 0.64	∞ 0.56
0.80	0.89 0.74	0.92 0.72	0.98 0.69	1.07 0.66	1.27 0.61	1.68 0.57	4.01 0.51
0.60	0.65 0.57	0.66 0.56	0.68 0.55	0.72 0.53	0.79 0.50	0.91 0.47	1.23 0.44
0.50	0.53 0.48	0.54 0.48	0.55 0.47	0.57 0.46	0.61 0.44	0.67 0.42	0.80 0.39
0.40	0.42 0.39	0.42 0.39	0.43 0.39	0.44 0.38	0.45 0.37	0.48 0.36	0.53 0.34

40mm F4 SUPER WIDE-ANGLE





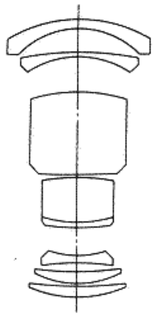
Gelatine filter holder clipped on lens back.

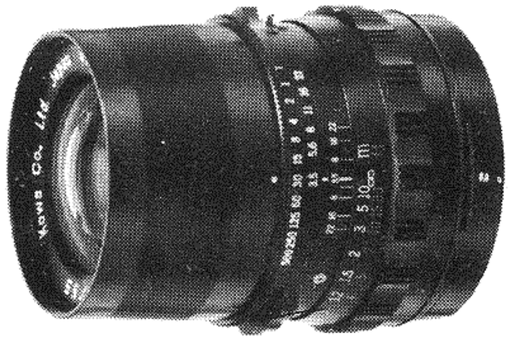
Taking angle, 90° construction 9 elements in 7 groupes; minimum focusing distance, 1.25 ft. (0.4m); minimum aperture, f/32 filter size, 33mm gelatine filter.
Dimensions, 100×106mm; weight, 900g.
Supplied with a filter holder in leather case.
Spare gelatine filter holder available.

DEPTH-OF-FIELD TABLE

Apert.(F) / Dist.(m)	4.0	5.6	8.0	11.0	16.0	22.0	32.0
∞	∞ 8.13	∞ 5.85	∞ 4.14	∞ 3.06	∞ 2.15	∞ 1.61	∞ 1.15
5.00	12.53 3.17	32.77 2.78	∞ 2.34	∞ 1.97	∞ 1.57	∞ 1.27	∞ 0.98
2.00	2.56 1.66	2.89 1.55	3.60 1.42	5.25 1.29	25.42 1.12	∞ 0.97	∞ 0.81
1.30	1.50 1.16	1.59 1.11	1.77 1.05	2.06 0.98	2.86 0.89	5.65 0.80	∞ 0.69
1.00	1.11 0.92	1.15 0.90	1.23 0.86	1.35 0.81	1.63 0.75	2.19 0.69	5.77 0.62
0.80	0.86 0.76	0.89 0.74	0.93 0.72	0.99 0.69	1.11 0.65	1.32 0.61	1.99 0.55
0.60	0.63 0.58	0.64 0.57	0.66 0.56	0.69 0.55	0.73 0.52	0.80 0.50	0.96 0.47
0.50	0.52 0.49	0.53 0.49	0.54 0.48	0.55 0.47	0.58 0.45	0.61 0.44	0.69 0.42
0.40	0.41 0.40	0.42 0.40	0.42 0.39	0.43 0.39	0.44 0.38	0.45 0.37	0.48 0.36

55mm F 3.5 WIDE-ANGLE



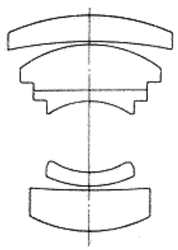


Taking angle, 72°; construction, 8 elements in 7 groups; minimum focusing distance, 1.5 ft. (0.5m); minimum aperture, f/22. filter size 67mm; finish, black, chrome finish available.
Dimensionsions, 80×98mm; weight, 725g.
Supplied in leather case.
Lens hood, filters available.

DEPTH-OF-FIELD TABLE

Dist.(m) \ Apert.(F)	3.5	4.0	5.6	8.0	11.0	16.0	22.0
∞	∞ 17.89	∞ 15.67	∞ 11.24	∞ 7.92	∞ 5.80	∞ 4.04	∞ 2.98
10.00	22.29 6.49	27.09 6.19	88.27 5.38	∞ 4.50	∞ 3.75	∞ 2.95	∞ 2.36
5.00	6.82 3.97	7.20 3.85	8.76 3.53	13.04 3.15	34.29 2.77	∞ 2.32	∞ 1.95
3.00	3.55 2.61	3.64 2.57	3.98 2.43	4.64 2.24	5.88 2.05	10.7 1.80	∞ 1.58
2.00	2.22 1.83	2.25 1.81	2.37 1.74	2.58 1.65	2.89 1.55	3.66 1.41	5.45 1.28
1.50	1.61 1.41	1.63 1.40	1.69 1.36	1.78 1.31	1.92 1.25	2.21 1.16	2.71 1.07
1.20	1.27 1.15	1.28 1.14	1.31 1.12	1.37 1.08	1.44 1.04	1.58 0.99	1.81 0.93
1.00	1.05 0.97	1.05 0.96	1.07 0.95	1.11 0.92	1.15 0.90	1.24 0.86	1.36 0.81
0.90	0.94 0.88	0.94 0.87	0.96 0.86	0.98 0.84	1.02 0.82	1.08 0.79	1.16 0.75
0.80	0.83 0.78	0.83 0.78	0.84 0.77	0.86 0.76	0.89 0.74	0.93 0.72	0.99 0.69
0.70	0.72 0.69	0.72 0.69	0.73 0.68	0.74 0.67	0.76 0.66	0.79 0.64	0.83 0.62
0.60	0.62 0.59	0.62 0.59	0.62 0.59	0.63 0.58	0.64 0.57	0.66 0.56	0.68 0.55
0.50	0.51 0.50	0.51 0.50	0.52 0.50	0.52 0.49	0.53 0.49	0.54 0.48	0.55 0.47

110mm F5.6 MACRO-lens

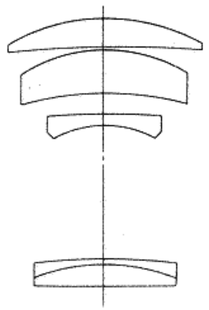


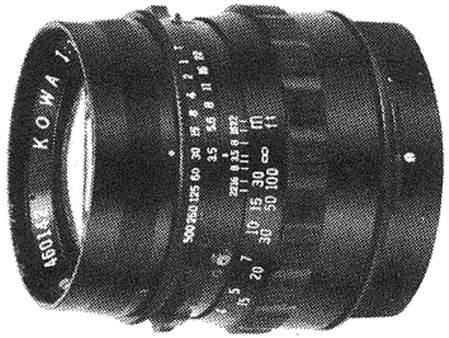
Taking angle, 40°; construction, 5 elements in 4 groups; minimum focusing distance, 2.5 ft (0.8m), minimum aperture, f/32; filter size, 67mm.
Dimensions, 80 × 80mm; weight, 680g.
Supplied in leather .case.
Lens hood, filters available.

DEPTH-OF-FIELD TABLE

Dist.(m) \ Apert.(F)	5.6	8.0	11.0	16.0	22.0	32.0
∞	∞ 43.49	∞ 30.51	∞ 22.25	∞ 15.36	∞ 11.23	∞ 7.78
20.00	36.69 13.79	57.31 12.18	194.84 10.64	∞ 8.79	∞ 7.29	∞ 5.69
10.00	12.87 8.20	14.68 7.61	17.84 6.99	27.91 6.16	88.36 5.40	∞ 4.48
7.00	8.27 6.08	8.97 5.76	10.03 5.40	12.53 4.90	17.93 4.41	66.05 3.79
5.00	5.60 4.53	5.91 4.35	6.34 4.15	7.22 3.85	8.69 3.55	13.26 3.15
4.00	4.37 3.70	4.55 3.58	4.79 3.45	5.27 3.25	5.99 3.03	7.81 2.74
3.00	3.20 2.84	3.29 2.77	3.41 2.69	3.64 2.57	3.95 2.44	4.63 2.25
2.50	2.63 2.39	2.69 2.34	2.77 2.29	2.91 2.20	3.11 2.11	3.50 1.97
2.00	2.08 1.93	2.12 1.91	2.16 1.87	2.24 1.82	2.35 1.76	2.56 1.66
1.70	1.76 1.66	1.78 1.64	1.81 1.61	1.87 1.57	1.94 1.53	2.07 1.46
1.50	1.54 1.47	1.56 1.45	1.58 1.43	1.62 1.40	1.67 1.37	1.77 1.32
1.30	1.33 1.28	1.35 1.27	1.36 1.25	1.39 1.23	1.42 1.21	1.49 1.17
1.20	1.23 1.18	1.24 1.17	1.25 1.16	1.27 1.15	1.30 1.12	1.35 1.09
1.10	1.12 1.09	1.13 1.08	1.14 1.07	1.16 1.06	1.18 1.04	1.22 1.01
1.00	1.02 0.99	1.03 0.99	1.03 0.98	1.05 0.97	1.06 0.95	1.09 0.93
0.90	0.92 0.89	0.92 0.89	0.93 0.88	0.94 0.88	0.95 0.87	0.97 0.85
0.80	0.81 0.80	0.82 0.79	0.82 0.79	0.83 0.78	0.84 0.78	0.85 0.76

150mm F 3.5 TELEPHOTO



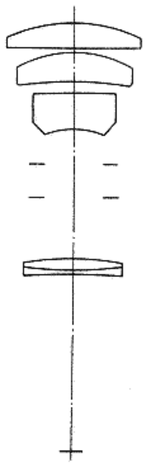


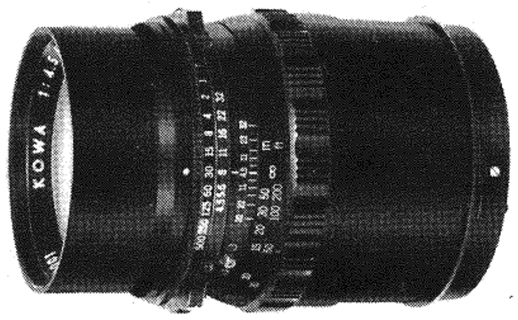
Taking angle, 26.5° construction, 5 elements in 4 groups; minimum focusing distance, 5 ft. (1.5m); minimum aperture, f/22. filter size 67mm; finish, black. chrome finish available.
Dimensions, 80×83mm, weight, 675g.
Supplied in leather case.
Lens hood, filters available.

DEPTH-OF-FIELD TABLE

Apert.(F) / Dist.(m)	3.5	4.0	5.6	8.0	11.0	16.0	22.0
∞	∞ 131.47	∞ 115.08	∞ 82.28	∞ 57.69	∞ 42.04	∞ 28.99	∞ 21.17
30.00	38.70 24.52	40.38 23.90	46.88 22.10	61.88 19.87	103.33 17.65	∞ 14.90	∞ 12.56
15.00	16.86 13.52	17.17 13.34	18.22 12.77	20.07 12.01	23.00 11.17	30.46 10.02	50.07 8.93
10.00	10.78 9.34	10.90 9.25	11.31 8.98	11.98 8.60	12.94 8.17	14.96 7.55	18.44 6.93
7.00	7.37 6.68	7.42 6.64	7.60 6.50	7.89 6.30	8.29 6.08	9.05 5.74	10.18 5.38
5.00	5.18 4.84	5.21 4.82	5.29 4.75	5.42 4.65	5.60 4.53	5.93 4.34	6.37 4.14
4.00	4.11 3.90	4.13 3.89	4.18 3.85	4.26 3.78	4.36 3.70	4.55 3.58	4.80 3.45
3.00	3.06 2.95	3.07 2.94	3.10 2.92	3.14 2.88	3.19 2.84	3.28 2.77	3.41 2.70
2.50	2.54 2.47	2.55 2.46	2.57 2.45	2.59 2.42	2.63 2.40	2.69 2.35	2.76 2.30
2.00	2.03 1.98	2.03 1.98	2.04 1.97	2.06 1.96	2.08 1.94	2.11 1.91	2.15 1.88
1.50	1.52 1.49	1.52 1.49	1.52 1.49	1.53 1.48	1.54 1.47	1.56 1.46	1.58 1.44

200mm F4.5 TELEPHOTO



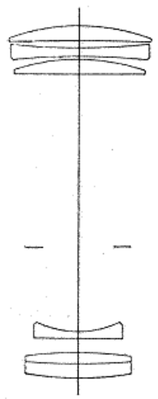


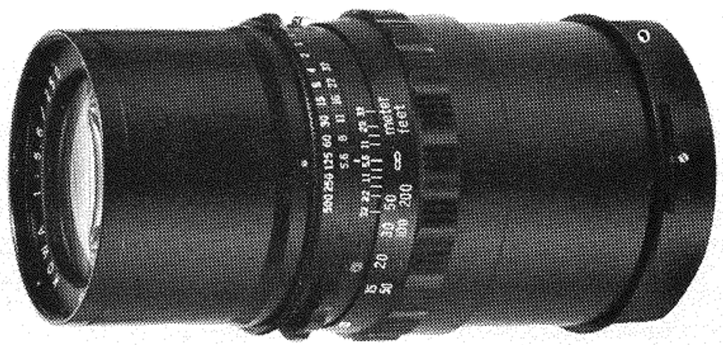
Taking angle 22°; construction, 5 elements in 4 groups; minimum focusing distance 8.2 ft. (2.5m); minimum aperture f/32; filter size 67mm.
Dimensions 80×113mm; weight, 830g.
Supplied in leather case.
Lens hood, filters available.

DEPTH-OF-FIELD TABLE

Apert.(F) / Dist.(m)	4.5	5.6	8.0	11.0	16.0	22.0	32.0
∞	∞ 178.37	∞ 143.41	∞ 100.51	∞ 73.21	∞ 50.46	∞ 36.81	∞ 25.44
50.00	69.16 39.20	76.33 37.24	98.69 33.58	155.96 29.91	5394.02 25.32	∞ 21.41	∞ 17.05
30.00	35.91 25.79	37.72 24.93	42.42 23.25	50.27 21.45	72.80 19.01	158.56 16.74	∞ 13.97
20.00	22.43 18.06	23.11 17.64	24.77 16.80	27.22 15.85	32.60 14.49	42.83 13.15	90.59 11.40
15.00	16.31 13.90	16.66 13.65	17.49 13.15	18.66 12.57	21.01 11.71	24.76 10.83	35.39 9.63
10.00	10.55 9.51	10.69 9.40	11.02 9.17	11.46 8.89	12.28 8.46	13.43 8.01	15.96 7.35
7.00	7.26 6.77	7.32 6.72	7.47 6.60	7.66 6.46	8.00 6.24	8.46 6.00	9.36 5.63
5.00	5.13 4.89	5.16 4.86	5.22 4.80	5.31 4.73	5.47 4.62	5.66 4.49	6.03 4.30
4.00	4.08 3.93	4.10 3.92	4.14 3.88	4.19 3.84	4.28 3.77	4.40 3.68	4.60 3.56
3.50	3.56 3.45	3.57 3.44	3.60 3.41	3.64 3.38	3.71 3.33	3.79 3.27	3.94 3.17
3.00	3.04 2.97	3.05 2.96	3.07 2.94	3.10 2.92	3.14 2.88	3.20 2.83	3.30 2.76
2.50	2.53 2.48	2.54 2.48	2.55 2.46	2.57 2.45	2.59 2.42	2.63 2.39	2.69 2.35

250mm F5.6 TELEPHOTO





Taking angle 18° ; construction 6 elements in 5 groupes, minimum focusing distance 12 ft. (4m); minimum aperture, f/32, filter size 67mm. ; finish, black, chrome finish available. Dimensions, 80×140mm; weight, 780g. Supplied in leather case.
Lens holder, lens hood, filters available.

DEPTH-OF-FIELD TABLE

Dist.(m) \ Apert.(F)	5.6	8.0	11.0	16.0	22.0	32.0
∞	∞ 223.87	∞ 156.88	∞ 114.25	∞ 78.73	∞ 57.41	∞ 39.65
50.00	64.06 41.05	72.87 38.13	88.04 35.02	135.08 30.85	379.90 27.01	∞ 22.40
30.00	34.47 26.58	36.83 25.34	40.29 23.95	47.78 21.95	61.61 19.96	119.81 17.36
20.00	21.86 18.45	22.76 17.86	24.01 17.17	26.43 16.14	30.10 15.05	39.22 13.55
15.00	16.00 14.13	16.47 13.79	17.10 13.38	18.27 12.76	19.91 12.08	23.45 11.11
10.00	10.42 9.62	10.61 9.47	10.86 9.28	11.30 8.99	11.88 8.66	13.00 8.17
7.00	7.20 6.83	7.28 6.75	7.39 6.66	7.58 6.52	7.82 6.35	8.27 6.10
5.00	5.09 4.92	5.13 4.88	5.18 4.84	5.27 4.77	5.38 4.69	5.57 4.56
4.00	4.06 3.95	4.08 3.93	4.11 3.91	4.16 3.86	4.22 3.81	4.33 3.73

TAKING ANGLE, PERSPECTIVE, AND DEPTH OF FIELD

A comparison of picture taking angles of the interchangeable lenses are illustrated here for study.

The shorter the focal distance is, the more the perspective is emphasized, the longer the focal distance becomes, the less apparent perspective becomes, and the foreground and background become closer.

The depth-of-field is studied on the view screen with the help of the depth-of-field lever, theoretically speaking.

a) The larger the lens opening used, the smaller the depth: conversely, the smaller the lens opening used, the greater the depth-of-field.

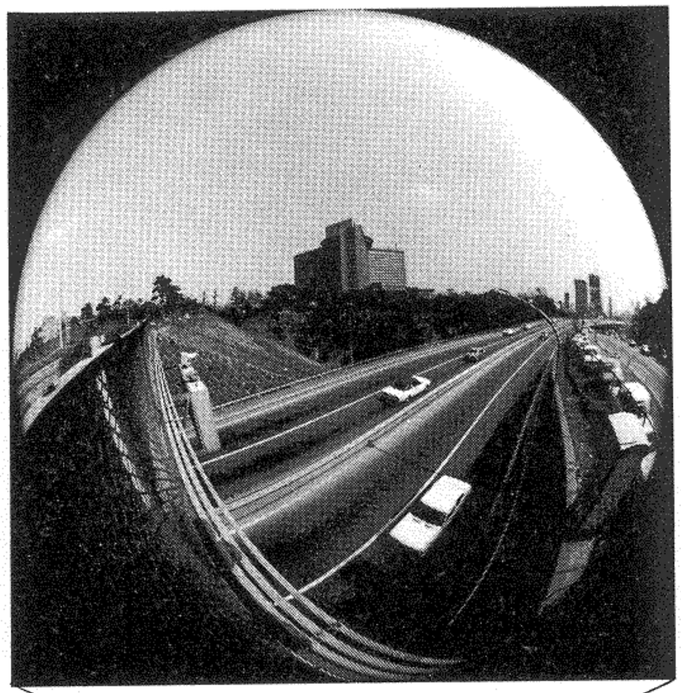
b) The depth-of-field is shallow in front of the point of focus and is deep in the back.

c) Depth-of-field also increases as the distance from the camera to the subject increases.

d) The shorter the focal length of the lens, the greater the depth: conversely, the longer the focal length, the smaller the depth-of-field.

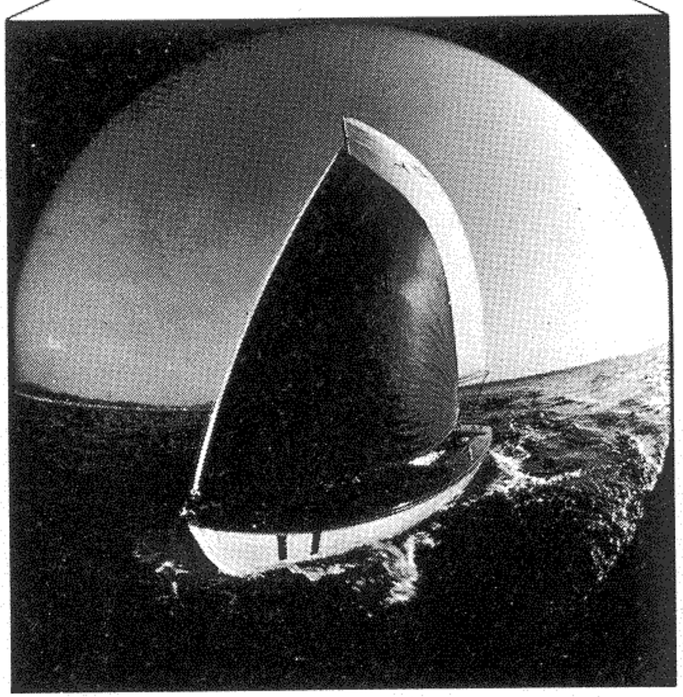
85mm F2.8

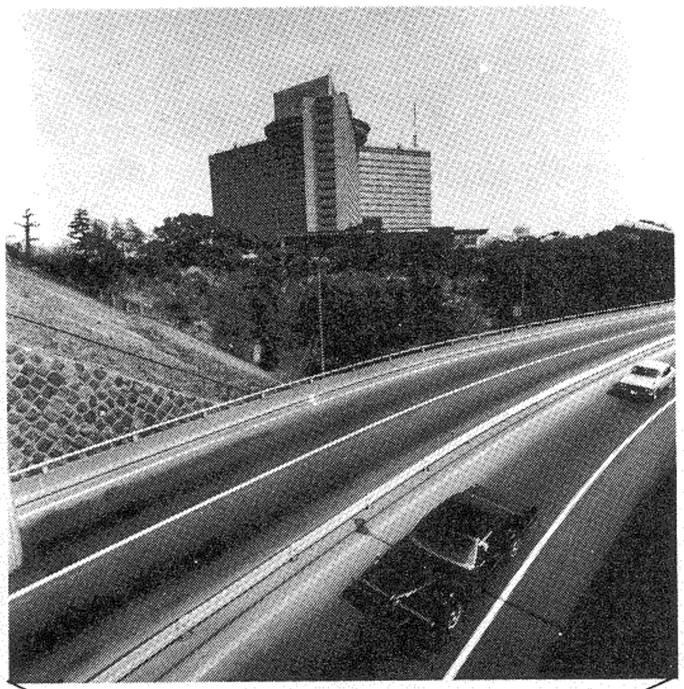
50°



19mm F4.5

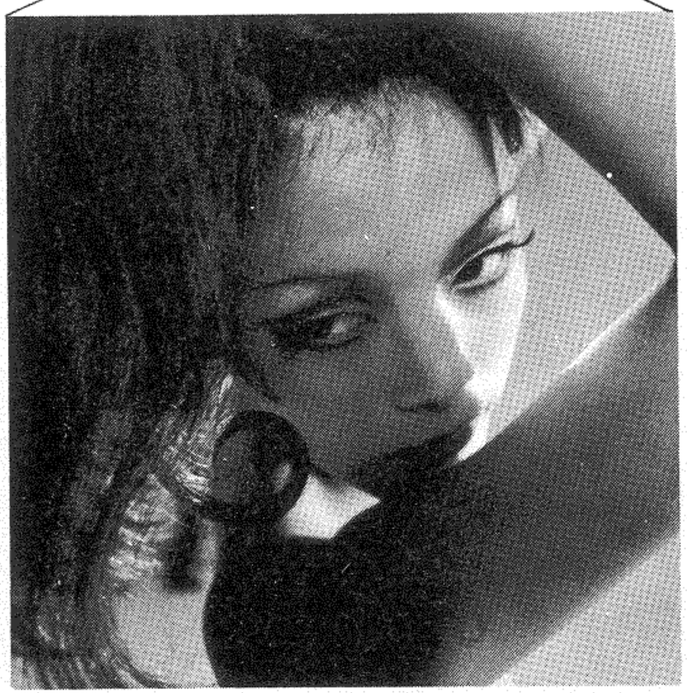
180°

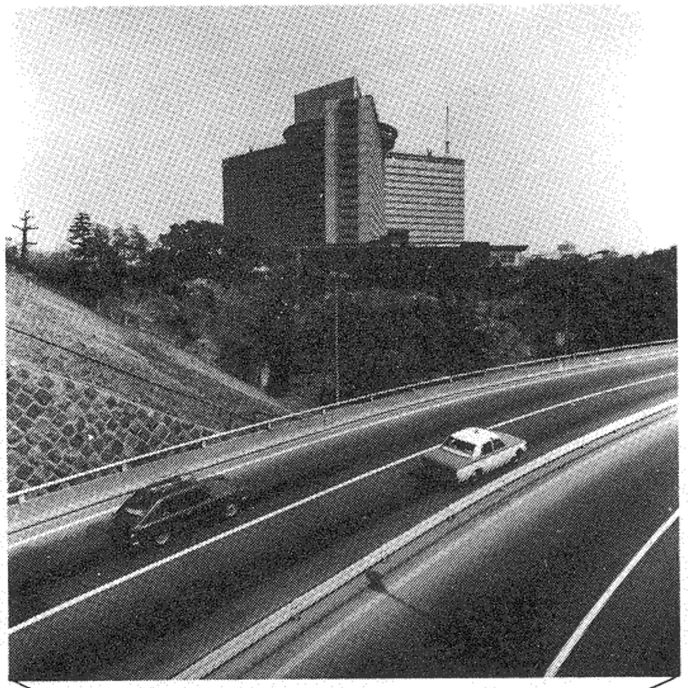




35mm F4.5

98°



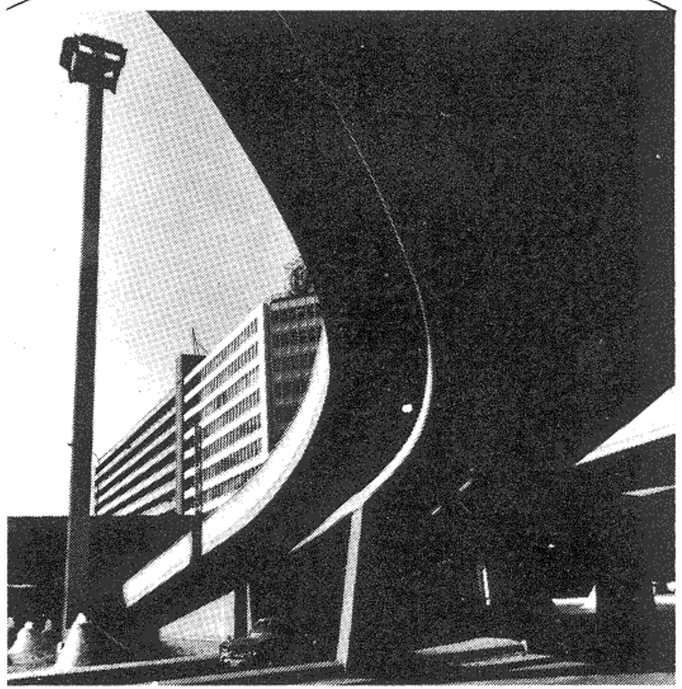


40mm F4

90°

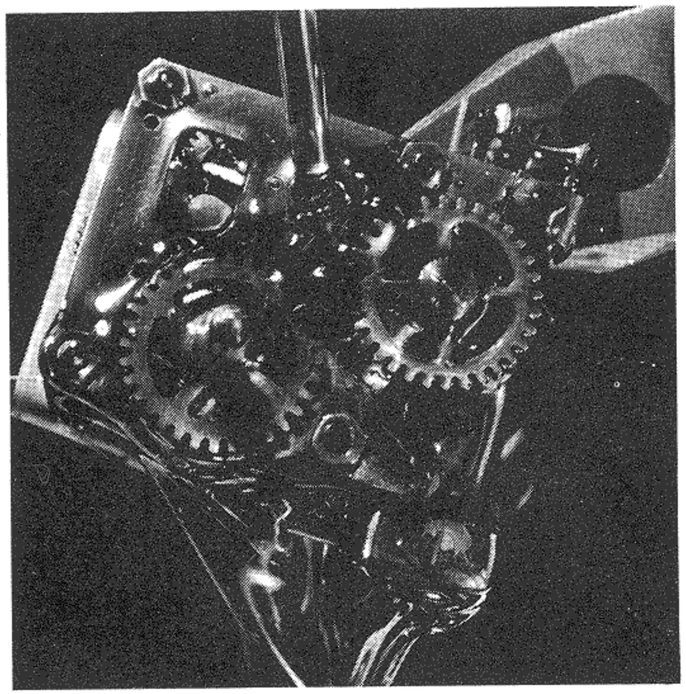
55mm F3.5

72°



110mm F5.6

40°

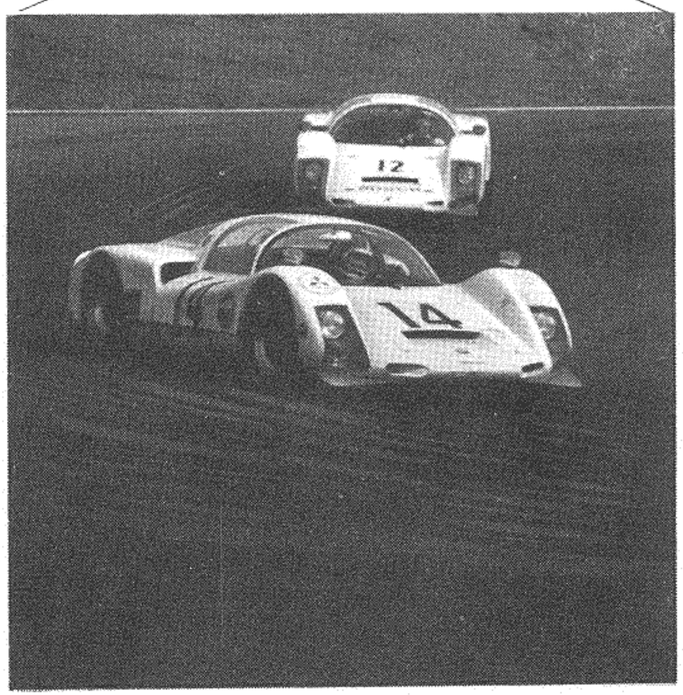


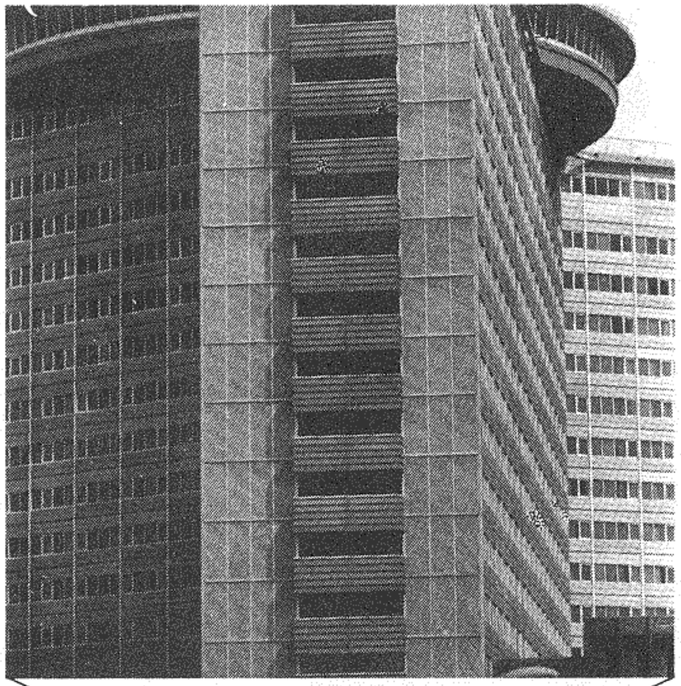
150mm F3.5

29.5°

200mm F4.5

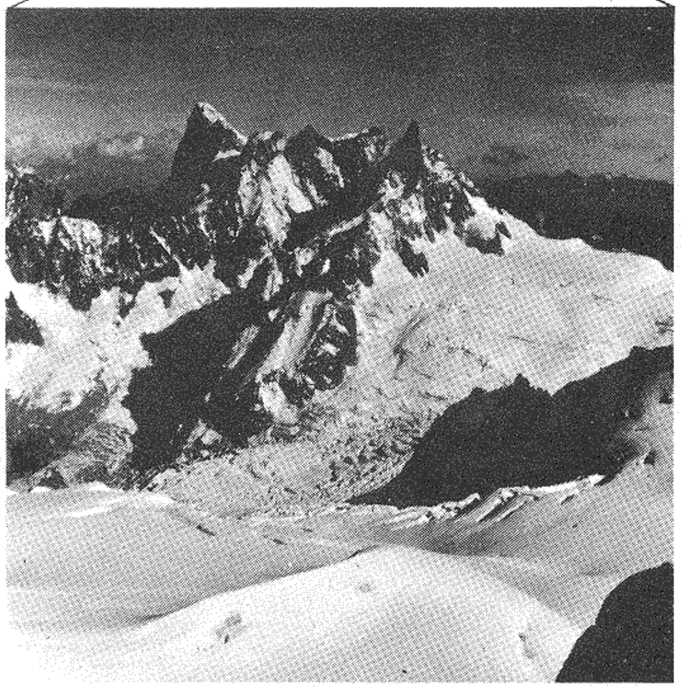
22°

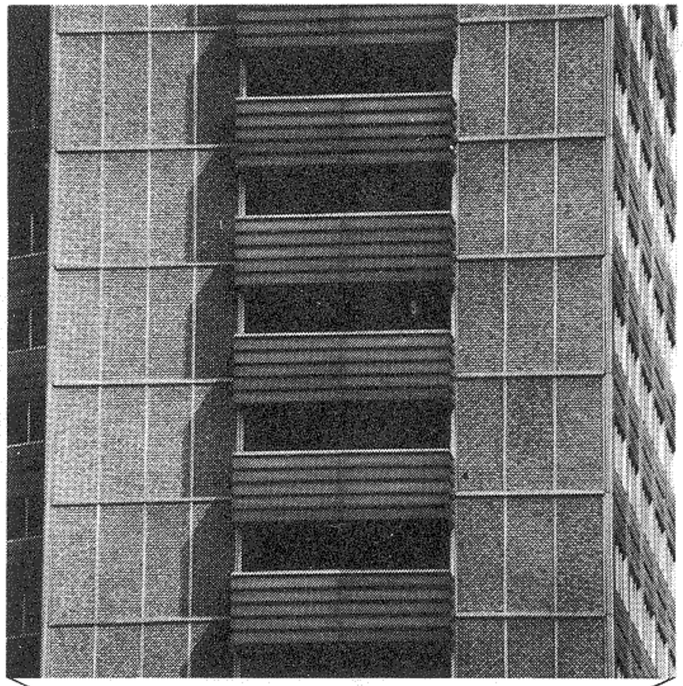




250mm F5.6

18°

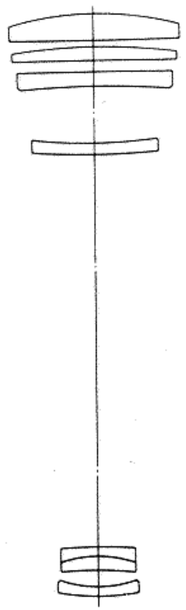




500mm F8

9°

500mm F8 TELEPHOTO



Taking angle, 9°; construction, 7 elements in 6 groups, minimum focusing distance, 26 ft (8m), minimum aperture, f/45, filter size, 95mm.
Dimensions, 102×320mm, weight, 2060g.
Supplied with lens holder and lens hood in solid carrying case.

DEPTH-OF-FIELD TABLE

Dist.(m) \ Apert.(F)	8.0	11.0	16.0	22.0	32.0	45.0
∞	∞ 605.20	∞ 440.59	∞ 303.40	∞ 221.10	∞ 152.50	∞ 108.91
100.00	119.17 86.21	128.43 81.99	147.61 75.81	179.96 69.55	284.42 61.17	1186.82 52.94
50.00	54.22 46.41	56.00 45.20	59.25 43.32	63.69 41.26	72.85 38.25	89.76 34.96
30.00	31.41 28.73	31.97 28.28	32.95 27.56	34.22 26.75	36.58 25.51	40.22 24.06
20.00	20.58 19.46	20.81 19.27	21.20 18.95	21.69 18.58	22.56 18.01	23.81 17.32
15.00	15.31 14.71	15.43 14.61	15.63 14.44	15.87 14.24	16.31 13.91	16.91 13.52
12.00	12.19 11.83	12.26 11.77	12.37 11.66	12.52 11.54	12.77 11.34	13.12 11.09
10.00	10.12 9.89	10.17 9.85	10.24 9.78	10.34 9.70	10.50 9.56	10.71 9.40
9.00	9.10 8.92	9.13 8.88	9.19 8.83	9.26 8.77	9.38 8.66	9.55 8.53
8.50	8.58 8.43	8.61 8.40	8.66 8.35	8.73 8.30	8.83 8.21	8.97 8.09

VIEWFINDERS

1 Magnifying Hood

Proofed against extranous light. Clear image may be observed in bright outdoors. Easy focusing. Field-of-view ratio 90%. Image magnification 0.8X. Eyesight is adjustable continuously from −3 to +4D. diopters.

2 Sports Finder

This is an open-frame flip-up type finder. It incorporates three frames for the taking angles of the 150mm tele-photo. 85mm standard. and 55mm wide-angle Kowa lenses.

3 Eye-level Prism Finder, horizontal viewing

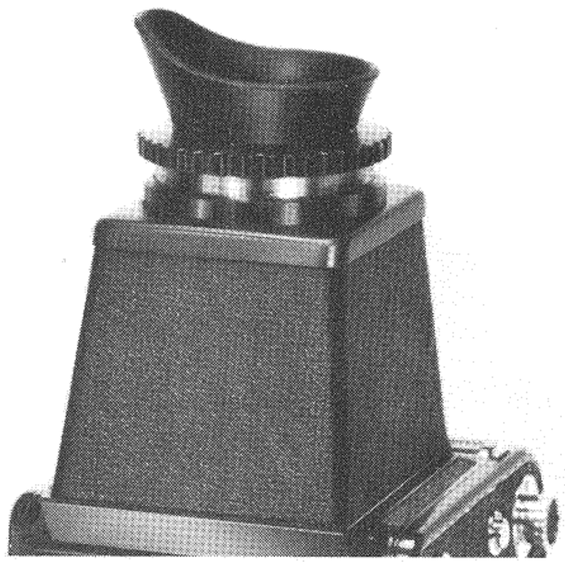
This is an eye-level viewfinder composed of two prisms. With a magnificatication of 0.7x, it provides a bright, erect, unreversed image.

4 Eye-level Prism Finder, 45° viewing

Especially useful for low-angle viewing. this viewfinder provides an erect. unreversed image with a magnifica-tion of 0.8X. The field-of-view ratio is 90%.

It is of versatile use for eye-level photographing.

1



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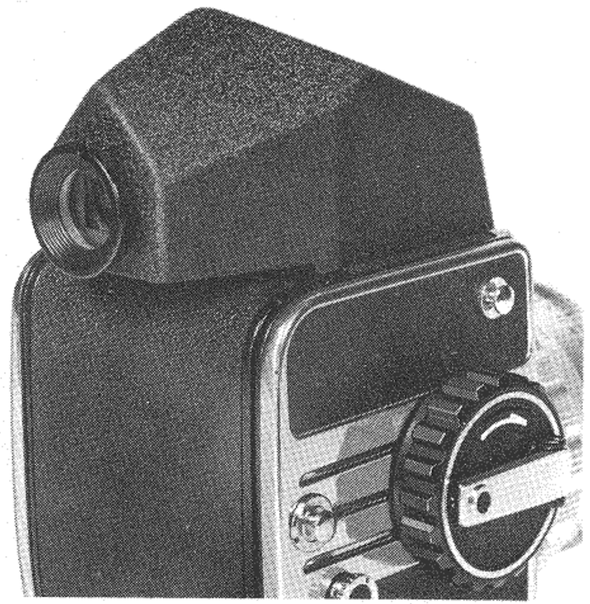

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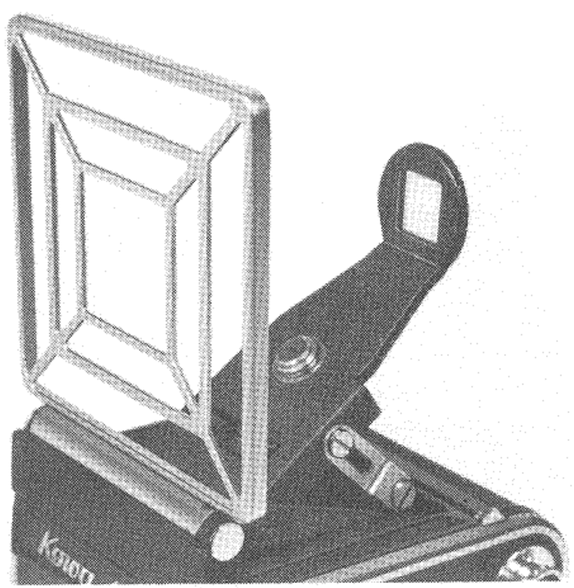

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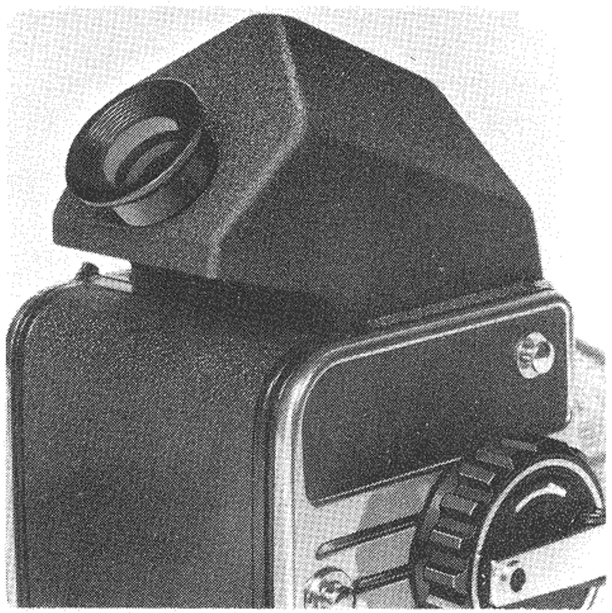
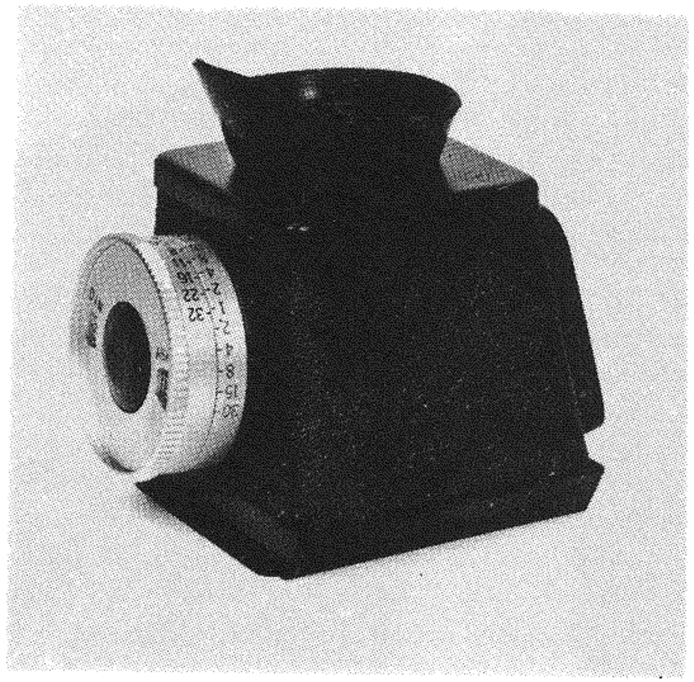


EXPOSURE FINDERS



EXPOSURE FINDER model-II

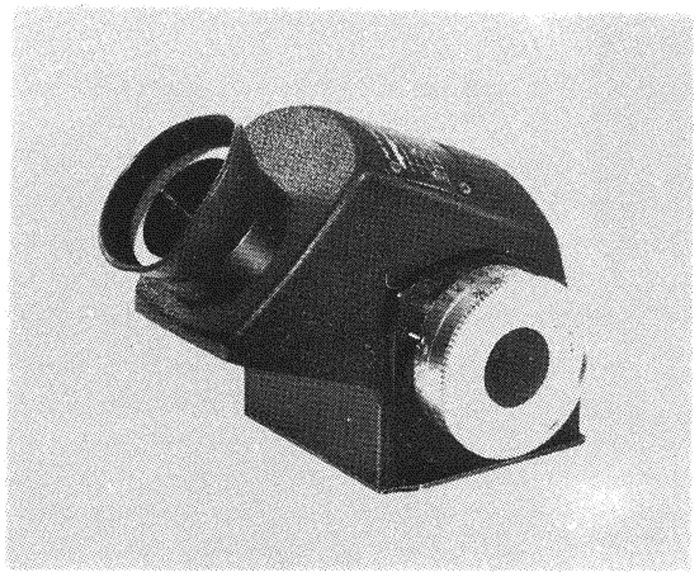
This is a magnifying hood with built-in through-the-lens exposure meter. It can be used with every KOWA-SIX interchangeable lens.

Four CdS cells measure average brightness of finder screen at full aperture, with minimum influence from small extraordinary bright lights. Stop-down measrement is equally possble.

When measuring, match the need in the viewfinder to the index by turning the dial knob and read off shutter speed and aperture combinations from dial.

Metering range is EV 2-17 (85mm standard, ASA 100). Power source is a 1.3V mercury battery. Power switch and battery test curcuit are provided.

Viewfinder covers 90% of film area and magnification is 1× (85mm standard, at infinity). It is adjusted to −2 diopter (fixed).



PRISM EXPOSURE FINDER

This is a 45° prism finder with built-in through-the-lens exposure meter. It can be used with every KOWA-SIX interchangeable lens. Finder magnification is 0.73×(85mm standard, at infinity), finder view covers 90% of film area, and gives an erect, unreversed image of subject.

It is adjusted to −1 diopter, but can be adjusted to user's individual need by changing the eyepice. Interchangeable eyepieces are available with a range from −4 to +3 diopter (1 diopter steps).

Exposure meter measures average brightness of opposite finder screen at full aperture. Stop-down measurement is equally possible. It is an uncoupled through-the-lens (TTL) exposure meter using meter needle matching to a fixed index.

Metering range is Ev 2−17 (ASA100, 85mm standard). Power source is a 1.3V mercury battery. Weight: 460g

* Detailed description and instructions are given in manual supplied with the finders.

INTERCHANGEABLE VIEW SCREENS

1 **Standard All-purpose Viewing Screen (Plain matte)**

Supplied with your Kowa SIX, the matte fresnel viewing screen has a 10mm fine-ground plate focusing spot in the center.

2 **Split-image**

This is a fresnel matte viewing screen with split-image of inclination 10° at 3mmϕ center focusing spot

3 **Checker-board lines**

This fresnel matte viewing screen has engraved vertical and horizontal reference lines at intervals of 11mm and a 10mmϕ fine focusing spot in the center

4 **Checker-board lines with Split-image**

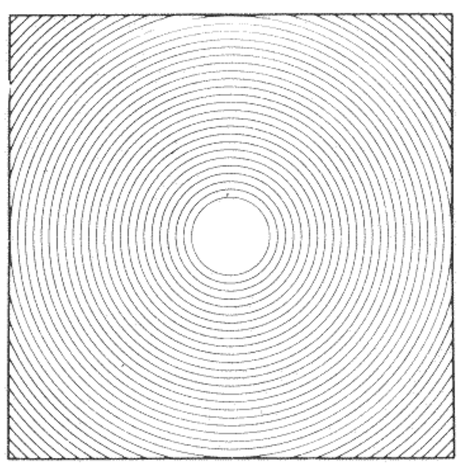
This is a mixed type viewing screen composed of the "split-image" and "checker-board lines" combined

5 **Diagonal split-image**

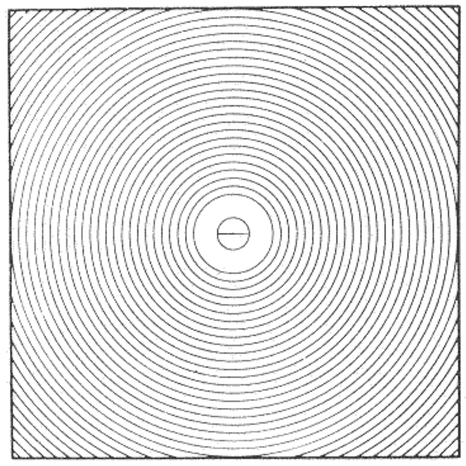
Center split-image prism line is angled 45° from vertical. Other specifications are the same as the "Split-image" screen. It is more effective than the conventional split-image when the subject has no clear vertical lines.

6 **Micro-diaprism**

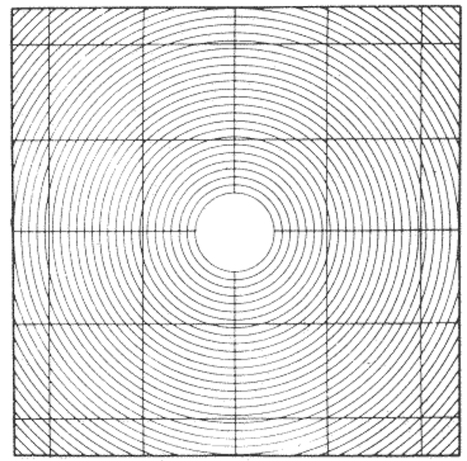
Center spot with a diameter of 4mm has a micro-diaprism with an inclination of 9°. Other specifications are the same as the "Matte" screen. It is suited for general use, specially for telephotography and photomacrography.



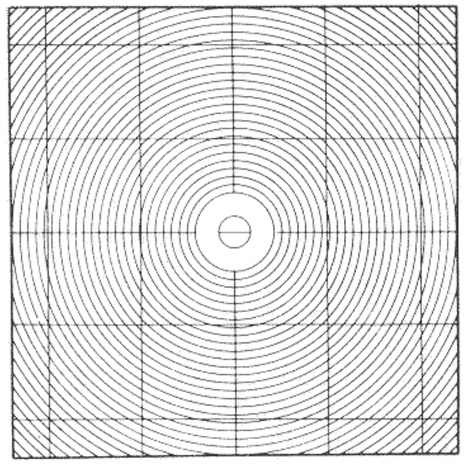
1. Standad All-purpose Viewing Screen (Plain matte)



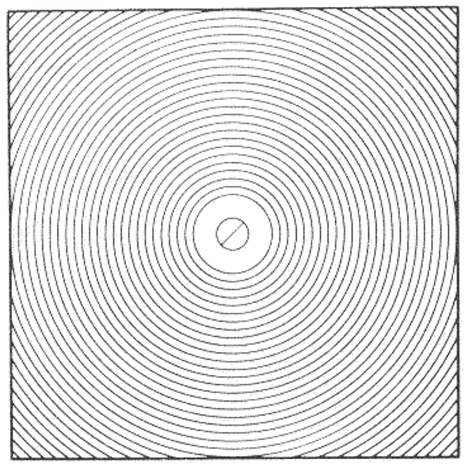
2. Split-image



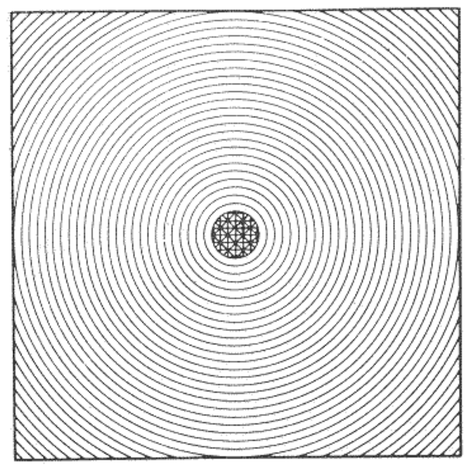
3. Checker-board lines



4. Checker-board lines with Splitimage

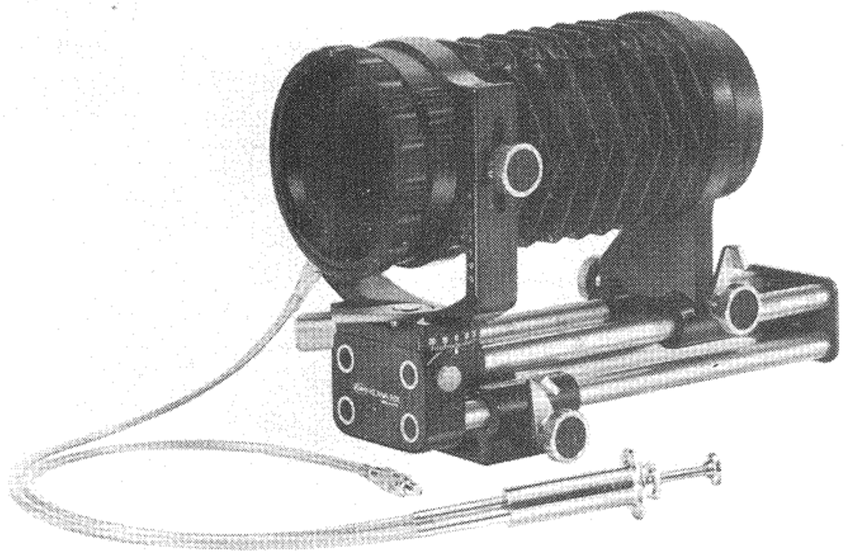


5. Diagonal split-image



6. Micro-diaprism

CLOSE-UP PHOTO WITH EXTENSION BELLOWS



This is an extension bellows for KOWA SIX macro-photography.
It is provided for KOWA-SIX type II, but, can be used with the conventional type KOWA-SIX incuding the MM versions.
In this case, the mount ring of the extension bellows should be adjusted to the camera body. Some slight shadow will appear on your film corners.
Bellows extension is 14.5 cm.
Following table gives the subject-to-film distance and magnification.
The front mounting ring can be shifted, raised and lowered, by 15mm each, and swung forward and backward by 20° each at center click point.
It is provided with magnification scales on guide rails for 55mm, 85mm, 110mm and 150mm lenses.
Attached cable release retains coupled facility of the lens (shutter and diaphragm) and body mechanism (mirror etc.).

Magnification and subject-to-film distance table

Lens	subject-to-film distance	magnification
55mm F 3.5	23 - 36 cm	1.5 - 4.3×
85mm F 2.8	34 - 44	0.94 - 2.8
110mm F 5.6	44 - 50	0.74 - 2.2
150mm F 3.5	60 - 66	0.53 - 1.6

* Detailed description and instructions are given in manual "EXTENSION BELLOWS INSTRUCTIONS" supplied with the extension bellows.

CLOSE-UP PHOTOGRAPHY WITH EXTENSION TUBES

Kowa extension tubes T1, T2, and T3 may be used separately or in any combination. Full automatic lens operation is not affected by the extension tubes. Attaching or detaching is done in the same way as for interchangeable lens.
When using extension tubes, the speed of the lens is effectively reduced because of the greater distance the light must travel within the camera to reach the film plane. This effective F/stop reduction increases as more extension tubes are added. To compensate for this effect, increase exposure according to the exposure factors given in the table.

NOTE: 1. When using extension tubes, depth-of-field becomes extremely shallow. Focusing, therefore becomes very critical. It is advisable to use as small an F stop (larger F stop number) as possible for increasing depth-of-field.
2. In close-up photography, the effect of camera or subject movement is greatly magnified. Therefore, to obtain maximum sharpness, it is important to use a tripod or other support for the camera.
3. **In close-up photography lift the mirror up as far as circumstances permit. (You can substitute self timer for mirror-up).**

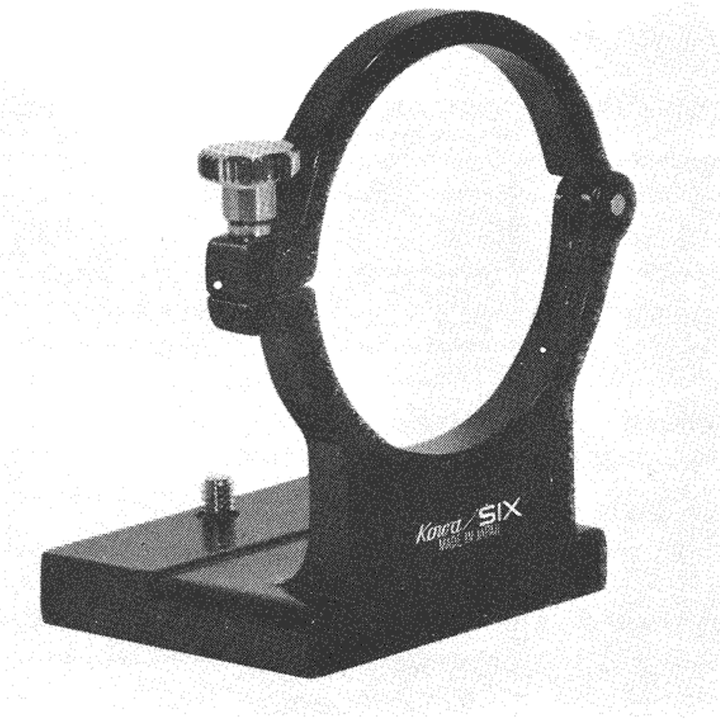
Extension Tubes		Minimum Taking Distance				Image Magnification			
Combinations	Flange Length	55mm	85mm	110mm	150mm	55mm	85mm	110mm	150mm
T_3	16mm	30cm	44cm	56cm	95cm	0.5×	0.3×	0.3×	0.2×
T_2	32 〃	27	37	48	78	0.8	0.5	0.5	0.4
T_1	75 〃	28	33	43	63	1:6	1.0	0.9	0.6
T_2+T_3	49 〃	27	34	45	69	1.1	0.7	0.6	0.5
T_1+T_3	91 〃	29	34	43	61	1.8	1.2	1.0	0.7
T_1+T_2	107 〃	30	34	43	60	2.1	1.4	1.2	0.8

Image Magnification ×	0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2
Exposure Factor	1.4	2.0	2.6	3.2	4.0	4.8	5.8	6.8	7.8	9.0	10.2

OTHER ACCESSORIES

Lens hoods for 55, 85, 110, 150, 200, 250mm lenses

Are recommended for use whenever possible to guard against off-angle light which will cause flare in your picture. They are made of anodized aluminum metal, except the rubbermade hood for 85mm.

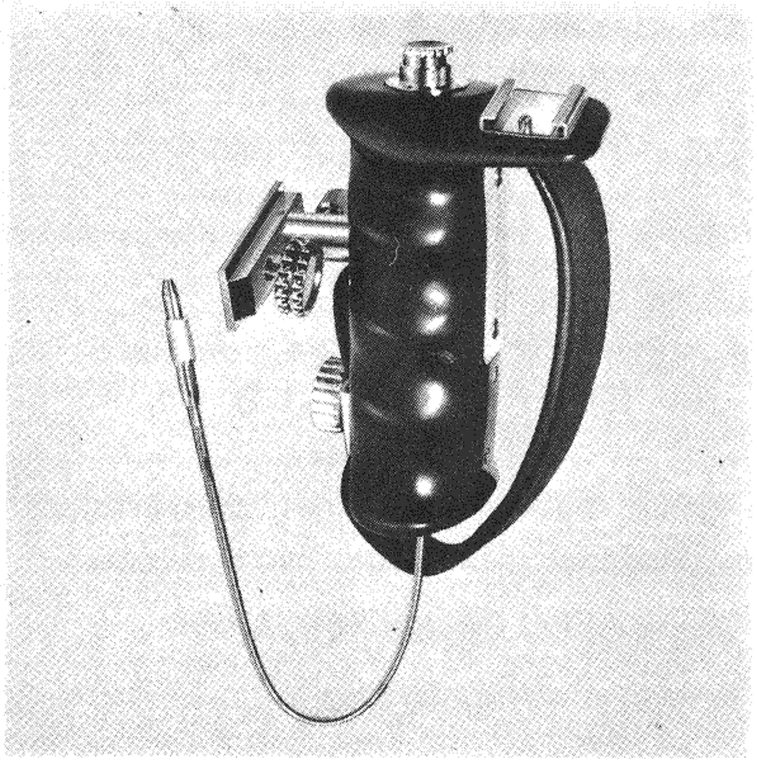


Lens Holders

Three lens holders are provided for 19mm, 250mm and 500mm lens respectively. Each holder is attached to tripod mount and the ring is clamped to hold steady the lens barrel. Screw sizes are in two types U 1/4 and U 3/8.

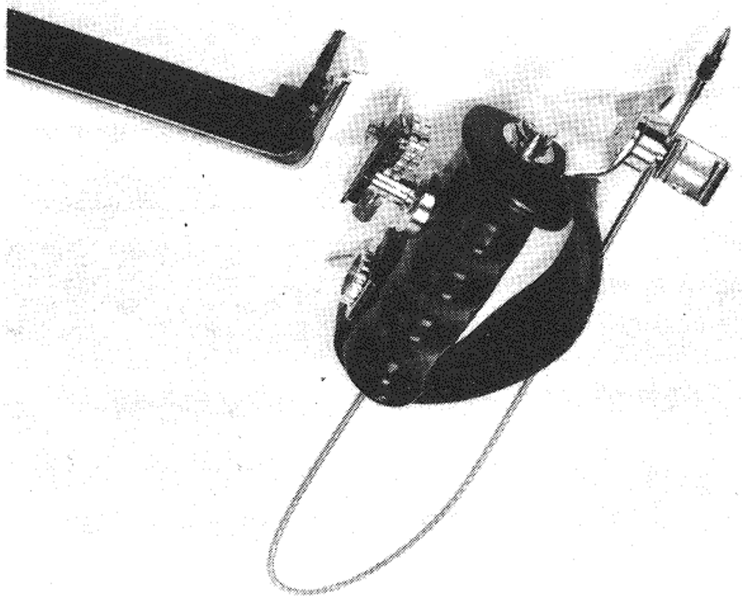
Focusing Handle

The Focusing Handle is a lever used when fast focusing action is important. It attaches to all Kowa /SIX lenses around the focusing ring.



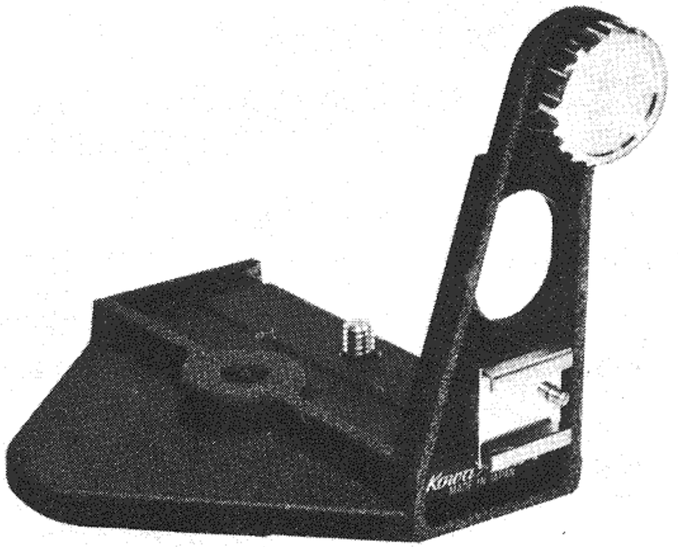
Hand Grip

Ideal for extra steadiness in hand-held shooting, the Sports Grip attaches to the accessory shoe on the camera. It has its own accessory shoe, a cable release which attaches to the shutter release button on the camera, and a shutter release button with a lock.



Free Angle Hand Grip

This is a new hand grip with a turning joint which facilitates picture taking in low or high angle. With attached L-bracket, this hand grip is used also for other cameras.



Tripod Head

The Tripod Head gives you added camera stability It attaches to the base of the camera and the combined camera/Tripod Head is then attached to a tripod. With the Tripod Head, you can change film with the camera still mounted on the tripod.

KOWA-SIX SYSTEM (as of February, 1973)

All cameras, camera bodys and lenses are finished in black, but items marked wisth * marks are available in chrome finish.

CAMERAS AND BODYS

* KOWA-SIX, standard model, version II.
  * KOWA-SIX Body
* KOWA-SIX MM, version II
  * KOWA-SIX MM Body
  * KOWA LENS-S 85mmF 2.8 Standard

INTERCHANGEABLE LENSES:

KOWA 19mm F 4.5	Fish-eye, with lens holder & gelatine filter in carrying case
KOWA 35mm F 4.5	Super wide-angle, with filter holder in leather case
KOWA 40mm F 4	Super wide-angle, with filter holder in leather case.
* KOWA 55mm F 3.5	Wilde angle with case; lens hood available
KOWA 110mm F 5.6	Macro, with case; lens hood available
* KOWA 150mm F 3.5	Telephoto, with case; lens hood available
KOWA 200mm F 4.5	Telephoto, with case; lens hood avalilable
* KOWA 250mm F 5.6	Telephoto, with case; lens holder & lens hood available
KOWA 500m F 8	Super telephoto, with lens holder & lens hood in carrying case

AUXILIARY LENSES:

KOWA-UPs No.1, 2, 3, Close-up lenses
KOWA 2X-Tele-converter

INTERCHANGEABLE FINDERS:

Prism finder, horizontal viewing
Prism finder, 45° viewing
Prism exposure finder, 45° viewing, TTL
Exposure finder II, TTL
Magnifynig hood
Sports finder

FINDER ACCESSARIES:

Magnifying lenses; +3, +2, +1, 0, −1, −3, −4, diopters
Oculars for Exposure prism finder; +3, +2, +1, 0, −2, −3, −4 diopters
Viewing screens; split-image, checkerboard lines, checkerboard lines with split-image, diagonal split-image, micro diaprism

ACCESSARIES FOR PHOTOMACRO OR MICRO-GRAPHY

Extension tubes; T1, T2, T3
Extension bellows
Microscope adapter

OTHER ACCESSARIES:

Focusing handle
Hand grip
Free-angle hand grip
Tripod head
strap, caps
Filters; for color; 80A, 80B, 81B, 82C, 85A, 85C
for B&W; UV, Y2, O2, R0, R1, PO0
for color and B&W; 1A, ND4, PL

KOWA-SIX MM SPECIFICATIONS

Type:	Leaf-shutter 2-1/4-square (6 × 6) single-lens reflex camera.
Film Acceptance:	120 (12 exposure) or 220 (24 exposure) roll film; flip-over 12/24 pressure plate.
Standard Lens:	KOWA 85mm F 2.8.
Lens Mount:	Positive Kowa bayonet with locking-collar; mount/dismount lever.
Shutter:	# 0 Seiko SLV between-the lens leaf-shutter; 1-1/500 sec. plus T; self-timer; M and X flash synchronization at all speeds. Same for all lenses.
Focusing:	Direct helicoid type.
Viewing System:	Interchangeable through-the-lens system. Standard system includes waist-level finder hood with pop-up magnifier; matte fresnel viewing screen with fine-ground plate focusing spot; interchangeable magnifying glass (adjustable to individual need from −4 to +3 dioptors)
Diaphragm:	Fully automatic; depth-of-field preview lever. Same for all lenses.
Film Wind:	360° knob with flip-out crank advances film and winds shutter; stops automatically on first frame; multi-stroke winding possible; automatic double-exposure prevention. multi-exposure possible
Frame Counter:	Automatic zero-reset; 12/24 selection.
Mirror	None quick return mirror, returns by winding, mirror-up possible.
Camera Back:	Hinged and removable.
Dimensions:	137 × 118 × 157 mm. (5-3/8 × 4-9/16 × 6-3/16 inch)
Weight:	1,750 grams. (3 lb 12 oz)

Kowa Company, Ltd.

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Printed in Japan