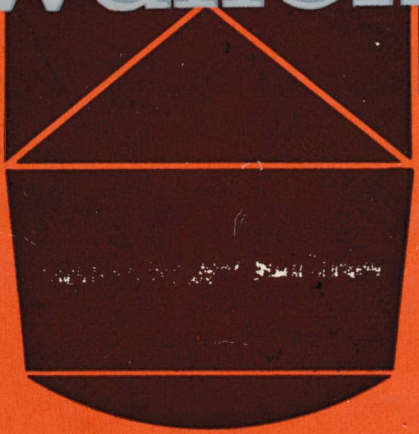
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kowaflex E



Kowa

KOWA COMPANY, LTD.

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YOUR CAMERA — KOWA FLEX-E

The KOWA FLEX-E in your hand is glad it has found a good master. Believing it will give you a lasting satisfaction, KOWA offers you congratulations on your new possession and expresses its thanks for your patronage.

Your camera was born in the Electrics & Optics Devision of the Kowa Company, Ltd., which is a jack-of-all-trades manufacturer producing not merely KOWA pharmaceutics with the popular "frog" mark and various textile goods but also many types of optical instruments including cameras, lenses and telescopes, and electric equipment like television sets and transistor radios—all known for the famous "KOWA" brand. KOWA cameras and Prominar lenses, especially, have an established reputation throughout the world. At the 1958 World Fair in Brussels, they were recognized as best-ranking products in the world and won the **Grand Prix d'Honour**. In the motion picture field, KOWA holds a leading position. Its projection lenses are being used at over 5,000 movie theaters; and in Cinemascope and 70 mm extra wide-angle cameras and projectors, Prominar lenses have been decidedly preferred. Out of the modern plant facilities and rich technical experience that have produced all these products—has emerged your KOWA FLEX-E!

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NAMES OF PARTS



Mike Butkus
Digitally signed by Mike Butkus
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Date: 2021.03.30 19:48:14 -04'00'

Sixty series

Lens: Prominar F2, 50 mm (4 components consisting of 6 elements), with fully automatic, minimum stop F16; conversion lenses applicable—telephoto lens F4, 86 mm; wide-angle lens F4, 36 mm.

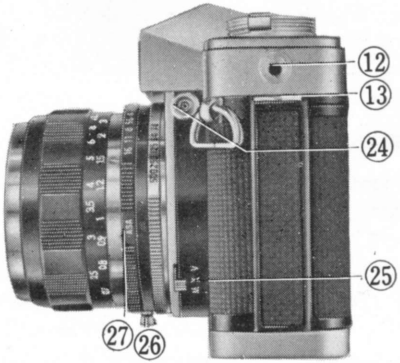
Shutter: Seikosha-SLV, B.1～1/500 sec, behind type, with self-timer and "M" and "X" contact points for synchronization.

Exposure meter: Built in and perfectly coupled, with needle in finder; zero method type; film sensitivity scale ASA10～1600.

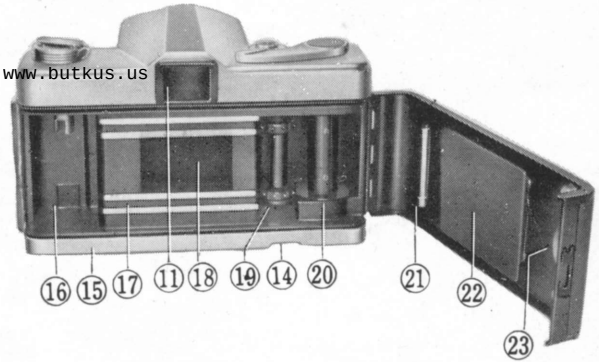
Finder: Pentagonal prism type, eye-level, single-lens reflex finder, with plano-convex and Flesnel lens.

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① Winding lever
② Shutter Release button & release hole
③ Film counter
④ Light receiving surface of coupled exposure meter
⑤ Shutter speed control ring
⑥ Diaphragm ring/film sensitivity scale ring
⑦ Focusing device
⑧ Film rewinding crank
⑨ Strap ring
⑩ Prominar F2 lens
⑪ Finder eyepiece
⑫ Accessory shoe mounting hole
⑬ Back cover lock
⑭ Rewind button
⑮ Tripod mounting hole
⑯ Film chamber
⑰ Guide rail
⑱ Focal plane
⑲ Film supply sprocket
⑳ Take-up spool
㉑ Film holder roller
㉒ Film pressure plate
㉓ Back cover lock holder
㉔ Contact point for synchronization
㉕ M-X-V switch lever
㉖ ASA change lever
㉗ ASA scale window



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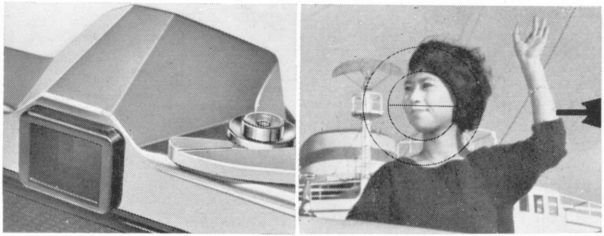
Focusing device: Straight helical forward and backward movement; minimum close-up distance 70 cm; split image focusing (by tallying upper and lower halves), with focusing geass.

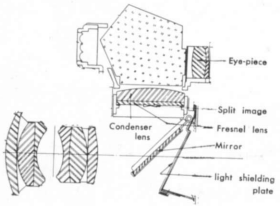
Film handling: Film winding by lever; 180° rotation per lever action; lever provided with " trigger "; self-cocking for preventing double exposure; film rewound by pressing " R " button just once and turning crank.

Size, weight: 138×94×87 mm, 890 g

Others: Quick return mirror, self-resetting film counter, accessory shoe mounting hole, various accessories including close-up lenses.

FEATURES TO BE UTILIZED

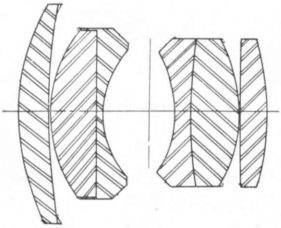


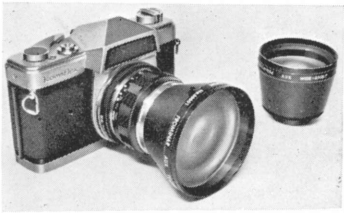


The biggest advantage of this pentagonal prism type single-lens reflex camera is that it gives you a photograph faithfully reproducing the image you see in the finder. You cannot make any mistake about the scene since you are looking at the image actually coming through the objective lens, and at the same time you can make sure that the image is in focus. The KOWA FLEX-E allows you to photograph the object of your choice at the desired instant in the desired composition. This is the first feature of the camera you should effectively utilize. This requires a complicated and technically perfect mechanism, but the problem has successfully been solved by the KOWA engineers, who have developed, for the first time in the world, a completely automatic, instantaneous return diaphragm, thus giving you more light in the finder. Also, a quick return mirror avoid the inevitable disappearance of the image in the finder to an instant following the shutter release. All this action touched off by the shutter release is achieved with extreme smoothness.

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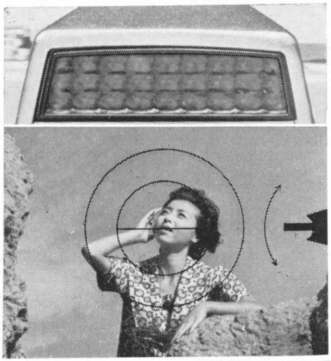


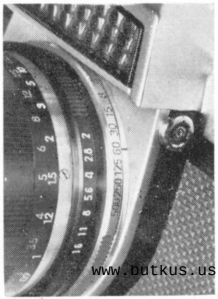
SUPERIOR PROMINAR F2 LENS, SEIKOSHA-SLV SHUTTER

The performance of a camera depends on its lens. The large-diameter (50 mm) Prominar F2 lens ensures maximum camera performance with sufficient resolution and sharpness. Improved from the reputable Gauss lens, it consists of six elements in four components and has enough luminosity to allow you to take snap shots without difficulty even at night. Especially, the clarity it shows when diaphragm is opened fully will give you full satisfaction. The completely automatic built-in diaphragm, which stops down to the desired aperture only for a moment when the shutter is released, saves you the trouble of setting the diaphragm after studying the object with maximum light in the finder. Moreover, being a single-lens reflex camera, it can freely make use of telephoto and wideangle conversion lenses.

The shutter, Seikosha-SLV, also is a superior product specially designed for single-lens reflex cameras. It is not merely extremely accurate but also designed, for the first time in the world, so as to function with the automatic diaphragm, which is indispensable in any single-lens reflex camera, and with the quick-return mirror. The smooth action of the whole coupled system is, indeed, unrivalled in the world.







LEAVE EXPOSURE CONTROL TO THE CAMERA

Automation is all in the world today. Even in taking pictures, almost everything can now be left to the camera, including exposure control as in your KOWA FLEX-E. The high-performance built-in electric exposure meter functions in perfect response to the three exposure determinants—film sensitivity, shutter speed and diaphragm. To obtain proper exposure, all you have to do is to bring the needle of the exposure meter into agreement with the fixed exposure index in the finder. Moreover, the responsive range of the meter is wide enough to cover the full performance range of the camera.

With exposure setting thus left to the camera and image accuracy to the reliable pentagonal prism reflex finder, you can concentrate your camera-eye on the appearance of the object. If only you watch it carefully, the faithful camera will do the rest of the work and make a masterpiece for you.

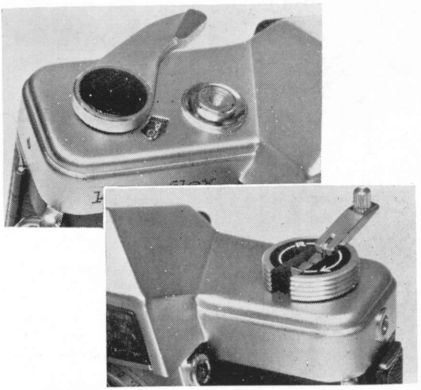
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QUICK SHOOTING WITH CONVENIENT DEVICES

A single-lens reflex camera with a most accurate finder will not be very attractive if it is as slow in action as conventional cameras. Your KOWA FLEX-E is completely free from such dullness. It enables you to take successive shots as quickly as any 35 mm camera. In other words, it is a pentagonal prism single-lens reflex camera incorporating all the advantages of the 35 mm camera.

Once you start using your KOWA FLEX-E, you can take pictures so quickly that you will soon forget it is a single-lens reflex camera. This advantage should be fully utilized. The film winding lever (turning the take-up spool 180° per action) with an extra "trigger," which can easily be operated by the finger for quick shooting, the automatic film counter with a self-resetting device, the rewind switch button which must be pressed just once for quick film replacement, the crank rewinder, the compact size and light weight of the camera for easy handling—all these features contribute to the quick shooting efficiency of the KOWA FLEX-E.

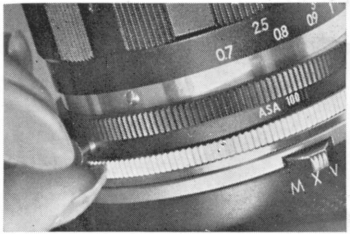




HOW TO USE YOUR KOWA FLEX-E

Here is how to handle your KOWA FLEX-E. For further details, please refer to the following sections :

How to insert film 11
How to use the coupled exposure meter most effectively 13
Sharp focusing 17
How to take out exposed film 19
Close-ups 21
Synchronized shots 22

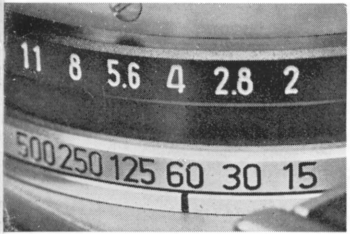


① First, turn ASA scale for agreement with sensitivity of film used (50 for S, 100 for SS).

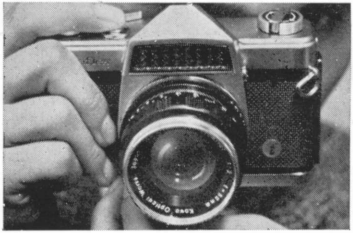


④ Turn focus control ring on objective lens, and thus bringing out helicoid, focus image in finder. This can be achieved either by

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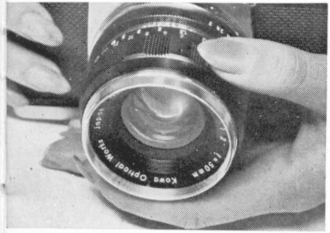


② Consider shutter speed with priority. Set shutter at a speed considered appropriate for object chosen.

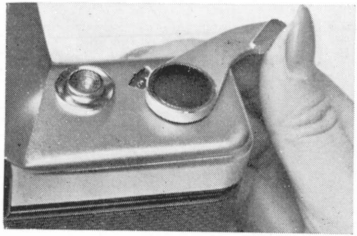




③ Hold Camera in position, turn face of exposure meter straight to object, operate diaphragm ring to move exposure meter needle in finder and bring it into agreement with fixed exposure index.



making upper and lower halves of split image agree with each other or by sharpening blurred image around split image in center.



⑤ Shutter cannot be released until film is wound and snutter set again. Snutter speed may be cnanged eitner before or after film winding.



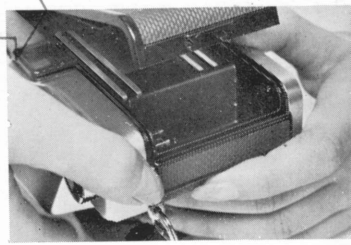
⑥ Now is the chance ! Keep object in desired composition and press shutter release button without letting camera sway—and your picture is taken.

HOW TO INSERT FILM

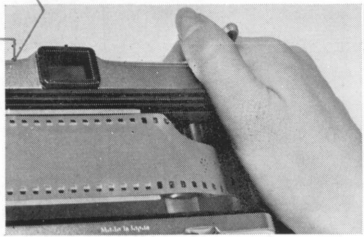
Film Types

There are black-and-white film and color film, and each is divided into various sensitivity grades. In black-and-white film, sensitivity usually decreases as the grain becomes smaller. Whether black-and-white or color, film contained in a patron is used—available in such lengths as 20-exposure and 36-exposure rolls.

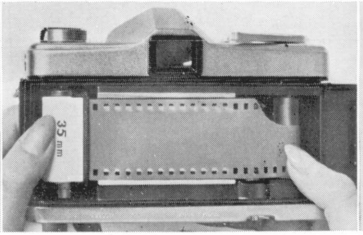
- In replacing the exposed film, always make sure that it has been rewound.
- Film replacement should be done not in direct sunlight but preferably in a dim place, and with care.



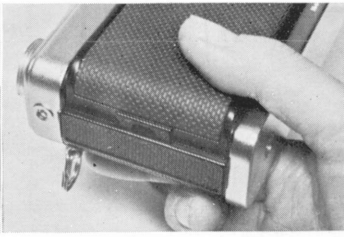
Open back cover. As lock is slipped out, back cover will automatically open by spring pressure.



Accurately fit perforations on both sides with sprockets. With film wound this far at beginning, trouble will not happen during its progress.

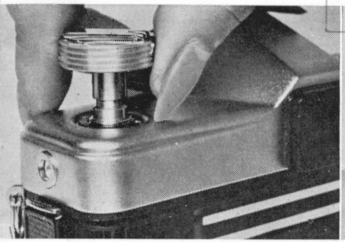


Reconfirm film position. Film should be set as in this photo. Be sure it is set right, and preclude any failure.

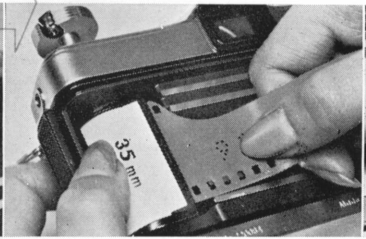


Close back cover. As it is designed to lock automatically, you have only to press it lightly to snap it shut if parton is in right position.

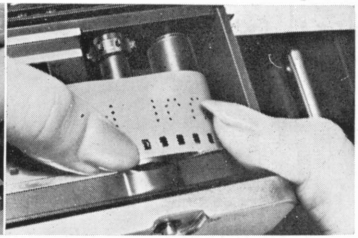
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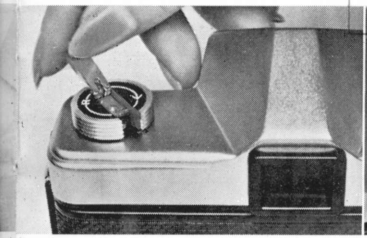
Prepare film chamber. Bring up crank rewinder shaft to make room for patron in film chamber.



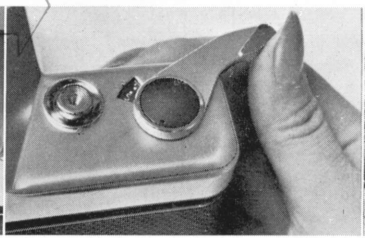
Put patron in. With projecting side of patron shaft down, insert it carefully into film chamber.



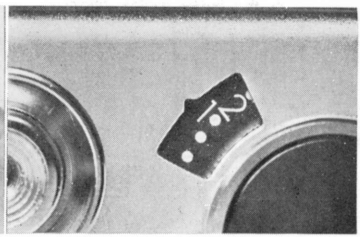
Slip end of film into groove on spool surface. To adjust groove position or take up slack of film, turn lower end of spool as shown in this photo.



Remove slack of film inside patron. With rewinding crank previously turned lightly in direction of arrow, it will turn in opposite direction as film is wound, telling you that film is being led out normally.



Wind film by two waste exposures. To take up already exposed film and prepare unexposed part of film on focal plane, wind film by two waste exposures and release shutter.

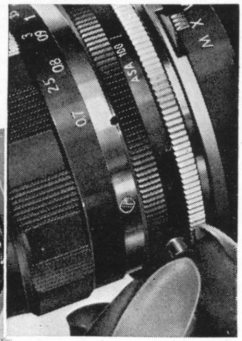


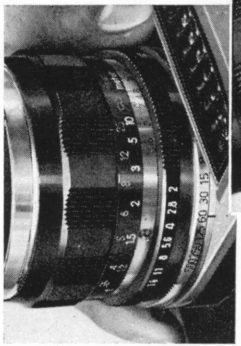
Now you have "1" on film counter. When you closed back cover, you had "S" on counter. After waste film winding, exposure number "1" appears, and camera is ready for shooting.

HOW TO USE THE COUPLED EXPOSURE METER MOST EFFECTIVELY

Exposure is determined by three factors—film sensitivity, shutter speed and diaphragm. The KOWA FLEX-E has a high-performace built-in exposure meter by which these three can be adjusted in perfect coordination. The first factor, sensitivity, is indicated on the film roll and the camera can be set accordingly. Of the other two factors, which should be set first? You may be puzzled because proper exposure can be obtained either way by making the needle agree with the index in the finder. If you adjust the two and obtain, say, "F16 and 1 sec," the swaying of your hand may show in the picture if you do not use a tripod even though the exposure is appropriate. Hence you have to consider whether to set the shutter speed first or the diaphragm, and if you know which, you can use the coupled exposure meter more effectively. Of these two ways, setting the shutter speed first is preferable, for if your shutter speed is wrong, your picture is more likely to suffer from fatal camera movement or object movement. On the other hand, the coupled exposure meter of the KOWA FLEX-E allows you, when you have a special diaphragm effect in mind, to obtain proper exposure by setting the diaphragm first and adjusting the shutter speed accordingly.

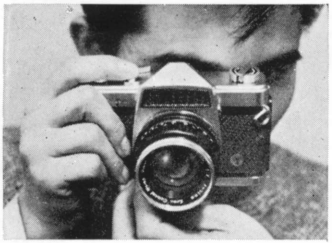
① Set ASA

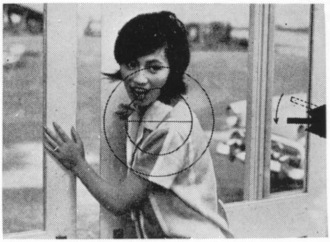




② Determine shutter speed

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IN ORDINARY CASES

① **Set the ASA film sensitivity.**

The sensitivity scale inside the diaphragm ring is set by the button shown in the photo. Pinch the button and pull it up, then turn the ring thus freed and bring the desired sensitivity indication in the ASA window.

② **Set the shutter speed first.**

Turn the shutter speed control ring and set it at a speed considered best for the object in its current condition. The general standard for ASA 100 film is 1/250 sec for an outdoor shot in fine weather, 1/125 sec when it is cloudy, and 1/60-1/30 sec for an indoor shot.

③ **Make the exposure meter needle agree with the fixed exposure index.**

Hold the camera in your hand and turn the face of the exposure meter straight to the object. Watch the index in the finder while you turn the diaphragm ring. When the exposure meter needle has been brought on the fixed index, you have obtained the right degree of exposure, and its value can be read on the diaphragm ring.

CAUTIONS

① If the desired indication does not appear in the sensitivity window, you can obtain it by turning the shutter speed ring.

② If repeated diaphragm adjustments fail to bring the exposure meter needle on the fixed index in the middle, either the predetermined shutter speed is too low or it is too high. Change the shutter speed and try it again.

③ If the desired needle-index agreement is not achieved in spite of all this, the right exposure is outside the capacity range of the meter.

④ While determining your exposure, be careful not to let the face of the meter be clouded by your fingers.

HOW TO DETERMINE YOUR EXPOSURE MORE ACCURATELY





With counterlight, picture becomes dim.

Take mean value for better effect.



As you hold your camera for a shot, the face of the exposure meter is roughly turned in the direction of the object, and you may determine the exposure in that position if you wish. However, if the object is something special, or when the exposure should be set more accurately, you will need the following information on "how to determine the exposure more accurately":

① Measure it near the object as a rule.

The exposure meter of the KOWA FLEX-E utilizes reflected light. That is, the face of the meter must rightly receive the reflected light from the object. If possible, walk over from the photographing position to approach the object—if it is a human body, hold the camera at a distance of about 30 cm from the face of the person to be photographed, so that the reflected light from the face may be measured accurately.

If the object is in strong light-and-shade contrast, similarly approach it and measure the light

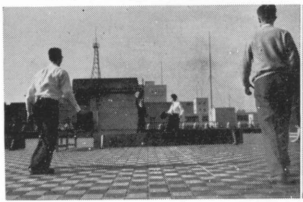
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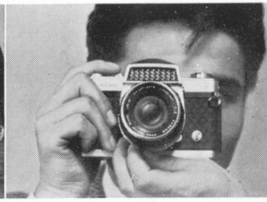
and dim parts separately and take the meam value for the best exposure. If, with counterlight, a light image of a human object is desired, approach the person that appears shadowy and measure the reflected light. If you keep the photographic position, the abundant counterlight will directly get into the face of the meter and cause an error in the measurement.

② For a landscape shot, measure the ground luminosity.

When photographing scenery, it is generally impossible to approach the object, and you may measure its luminosity in the photographic position. Be careful, however, which way the face of the meter is turned. Especially, when your scene contains a light sky, its lightness often disturbs the exposure meter. If your main object is on the ground, turn the meter face a little downward and measure primarily the lightness of the ground.

① With meter face turned upward, you get a dim picture.





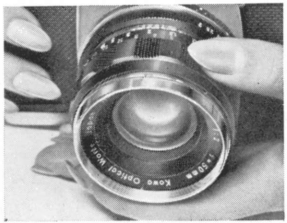
② Turn meter face downward, and you will obtain correct exposure.





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SHARP FOCUSING





① Out of focus



② In focus

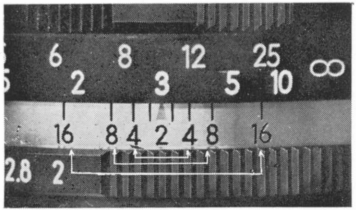
Since yours is a single-lens reflex camera, you may naturally bring the object into focus as sharply as you see it in the finder by bringing out the lens helicoid. The KOWA FIEX-E, however, gives you another means of focusing—a split image in the center of the focusing screen. By making the upper and lower halves of the image agree with each other, you can optically ensure the most accurate focusing. If the two halves are horizontally deviated from each other, the object is out of focus; if they are in agreement, it is perfectly in focus.

The area around the split image is frosted glass for determining the right focusing, or the focusing screen, and the coaxial circle is a Flesnel lens for evenly illuminating the entire focal plane. Also for lighting up the focal plane, a plano-convex lens is used under it.

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FOCUS DEPTH & ITS USES

Arrow-marked width are focusing ranges.



f4



f16



Some pictures look better for blurred foreground and background whereas others are impressive because of their overall sharpness resulting from a wide focusing range. This range of proper focusing is called the focus depth, which, if utilized effectively, will make your picture much more attractive.

The focus depth ① decreases as the object comes closer, ② increases as the diaphragm becomes smaller, and ③ is larger behind than before the point in focus. With these in mind, utilize the focusing range most effectively to take better pictures. For focus depth values for the Prominar F2 50 mm lens and with various conversion lenses, refer to the table at the end of this leaflet. The width can also be read roughly from the focus depth scale marked at the base of the lens along with the distance scale.

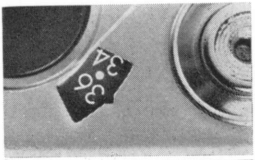
HOW TO TAKE OUT EXPOSED FIIM

When all the exposures have been made, the film can no longer be wound, letting you know that it has all been spent. The exposed film in this condition is bare in the camera, and unless it is wound back into the patron, you cannot open the back cover and replace it with a new roll of film.

First, press the "rewind" switch button on the bottom of the camera. Now it is possible to rewind the film. Next, turn up the rewinding crank and wind back the film before opening the back cover. You have to press the switch button just once, for the switch will automatically return to the "forward" position as the new film is put in and wound.

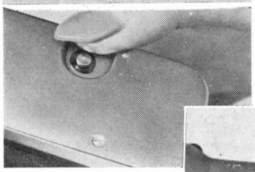
CAUTION

Do not let the film be rewound entirely into the parton, for light leakage may result. Stop rewinding the film while its end is still out of the parton, as before the film was used. You will see when to stop from the feel of the rewinder.



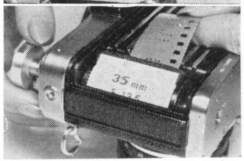
① With all exposures made, film can no longer be wound.

② Press "rewind" switch button—





③ —and carefully rewind film by turning rewinding crank.

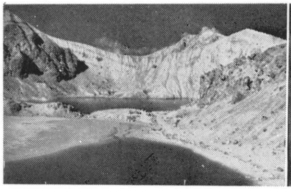


④ Take out patron.

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TELEPHOTO & WIDE-ANGLE SHOTS

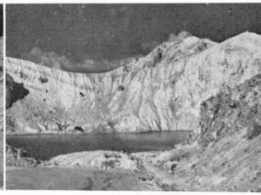
f2 50 mm



f4 36 mm

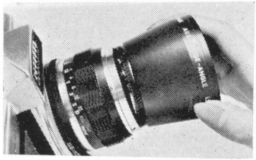


f4 86 mm



Just screw in a conversion lens over the Prominar objective, and your KOWA FLEX-E is ready for a telephoto or a wide-angle shot. Being a single-lens reflex camera, it does not require a special finder. You can just look into the existing finder and see the telephoto or wide-angle image to be photographed. However, since F4 is the limit, your diaphragm will be no larger than F4 if you take a higher position on the diaphragm scale.

Prominar conversion lenses for the KOWA FLEX-E are introduced in the table here as to their types and performance. For their focus depths, refer to the table at the end of this leaflet.



Telephoto conversion lens

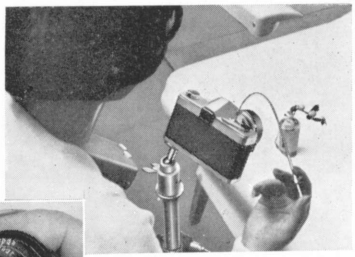
Wide-angle conversion lens





Type	Luminosity	Resultant focal distance	Composition	Shotting angle
Telephoto	F4	86 mm	6 elements in 2 components	29°
Wide-angle	F4	36 mm	4 elements in 2 components	62°

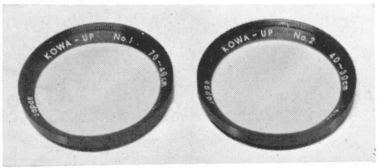
CLOSE-UPS & COPIES



Close-up lenses No. 1 (for 70～40 cm) and No. 2 (for 40～30 cm) are available for the KOWA FLEX-E. Just screw in the close-up lens over the objective, and your comera is ready for a close-up or a copying shot. Being a single-lens reflex camera, it saves you the trouble of adjusting the field of view in the finder and of delicate focusing within a very small focus depth. The image as you see in the reflex finder will be reproduced accurately in your picture.

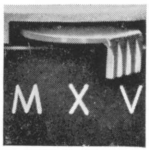


Close-up lens is screwed in over objective lens. With both No. 1 and No. 2 used, you can approach object down to 25 cm.



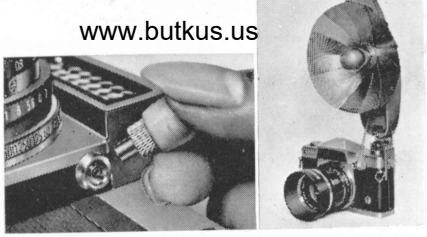
Take Pictures of Yourself With the Self-Timer

A self-timer is attached to the Seikosha-SLV shutter used in this camera. This enables you to take a picture of youself. Just turn the lever of the synchronization contract switch to "V," prees the release button and join the scene to be photographed. The self-timer works in about eight seconds.



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SYNCHRONIZED SHOTS



For High-Speed Synchronization

Flash bulbs are divided into two characteristic classes, M and F, plus "strobo" bulbs which may be called Class X. The camera has a switch for two contact points, M and X. For accurate synchronization with the shutter, especially when its speed is high, it is important to choose the proper contact point for the flash bulb used. The table on the right shows which point should be chosen for various bulb classes. Generally, when a flash bulb is to be used, take point M and use an "M" bulb; when a "strobo" bulb is to be used, take point X. This is the usual and most appropriate procedure. The size of the bulb and the amount of light it provides have nothing to do with this.

How to Determine Exposure for Synchronized Shooting

Proper exposure can easily-be figured out from the "guide number," or the exposure index, indicated on the case of the flash or "strobo" bulb, by employing the following equation:

$$\frac{\text{Guide number}}{\text{Camera distance}} = \text{diaphragm for proper exposure}$$

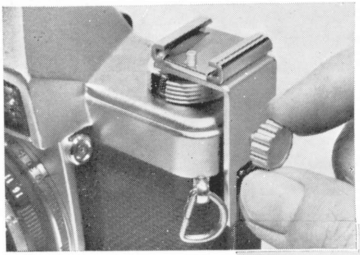
$$\frac{\text{Guid number}}{\text{Required diaphragm}} = \text{Camera distance for exposure}$$

Contact point / Flash bulb	Point M	Point X
	M X V	M X V
Class M	Perfect synchronization at all speed	Synchronized at B.1~1/30″
Class F	Improper	Synchronized at B.1~1/60″
Strobo bulbs	Not synchronized	Perfectly synchronized at all speeds

ACCESSORIES FOR SPECIFIC PURPOSES

Detachable Accessory Shoe

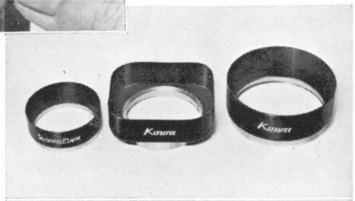
Mounted over the rewinding crank and fixed by a screw on the side (see photo), it can be used conveniently for mounting a synchronized flash gun, etc. Also, around the finder eyepiece, there is a groove for mounting lens accessories.



① Mounting accessory shoe

Lens Hoods

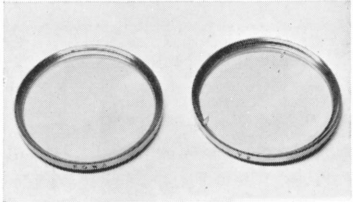
A " blind " for protecting the lens from random rays and ensuring the clarity of the picture, the lens hood is indispensable for seashore, mountain, snow scene and indoor shooting. Three types of hoods are now available, for use with the various lenses, all perfectly designed for mounting over the lens by screwing in.



② (From left) Standard hood, Wide-angle hood, Telephoto hood

Special Filters

Numerous filters are available for specific purposes such as removing ultraviolet rays harmful in your picture, strengthening the light-and-shade contrast, and accentuating or exaggerating the color tone.



③ Filters UV and Y2

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HANDIE YOUR CAMERA WITH CARE, AND KEEP IT CLEAN.

◎ Moisture, oil and dust are the greatest enemies of your camera. Don't keep it long in your desk. Bring it out in the sun and use it.

◎ Don't wind the film before a slow shutter release is completed, or the camera may develop trouble.

◎ Don't leave the shutter long in charged condition. Form the habit of winding the film just before a shot.

◎ When a flash bulb or the self-timer is not in use, keep the contact point switch in the "M" position (see insert).

◎ In a rainy season, take the camera out of the moistured leather case and keep both the camera and the lenses in a dry place.

◎ Lenses and the camera body should be cleaned by first wiping them well with the attached lens brush and then lightly polishing them with a serviette or soft skin.



◎ Drops of moisture found on the lens should be absorbed by a twist of paper before the lens is wiped.

◎ Should the camera be dropped into sea-water, wash it with plain water, and then with kerosene, and immediately send it to a rapair shop.

◎ Remember to jot down the lens and camera body numbers.

◎ If the camera is in troble, amateur remedies will merely make it worse Alaways send the camera to one of the service stations immediatly !



STANDARD 50 mm FOCUS DEPTH

(in meters)

f	2	2.8	4	5.6	8	11	16
∞	∞ 38.19	∞ 27.33	∞ 19.16	∞ 13.71	∞ 9.62	∞ 7.03	∞ 4.86
10	13.48 7.96	15.66 7.36	20.70 6.61	36.44 5.83	∞ 4.95	∞ 4.18	∞ 3.32
5	5.73 4.44	6.08 4.25	6.70 4.00	7.76 3.70	10.20 3.34	16.87 2.97	∞ 2.52
3	3.24 2.80	3.35 2.72	3.52 2.62	3.79 2.49	4.27 2.32	5.09 2.15	7.53 1.90
2	2.10 1.91	2.51 2.14	2.21 1.83	2 31 1.77	2.48 1.69	2.72 1.59	3.27 1.46
1.5	1.55 1.45	1.58 1.43	1.61 1.40	1.66 1.37	1.74 1.32	1.86 1.27	2.08 1.18
1.2	1.24 1.17	1.25 1.16	1.27 1.14	1.30 1.12	1.35 1.09	1.41 1.05	1 54 1.00
1	1.02 0.98	1.03 0.97	1.05 0.96	1.07 0.95	1.10 0.92	1 14 0.92	1.21 0.86
0.9	0.92 0.88	0.93 0.88	0.94 0.87	0.95 0.86	0.97 0.84	1.01 0.82	1.06 0.79
0.8	0.81 0.79	0.82 0.78	0.83 0.78	0.84 0.77	0.86 0.75	0.88 0.74	0.92 0.71
0.7	0.71 0.69	0.71 0.67	0.72 0.68	0.73 0.67	0.74 0.66	0.76 0.65	0.79 0.63

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CONVERSION WIDE-ANGLE 36 mm LENS FOCUS DEPTH

(in meters)

f	4	5.6	8	11	16
∞	∞ 11 41	∞ 8.17	∞ 5.74	∞ 4.20	∞ 2.91
10	9.18 3.57	13.49 3.01	46.36 2.74	∞ 2.34	∞ 1 89
5	3.29 2 12	3.69 1.98	4.55 1.81	6.43 1.63	21.32 1 40
3	1.78 1.38	1.88 1.32	2.08 1.25	2.38 1.16	3.17 1.04
2	1.13 0.97	1.17 0.94	1.24 0.96	1.34 0.86	1.55 0.80
1.5	0.84 0.75	0.86 0.73	0.89 0.71	0.94 0.68	1.04 0.64
1.2	0.67 0.61	0.68 0.60	0.70 0.59	0.72 0 57	0.78 0.54
1	0.55 0.51	0.56 0.51	0.57 0.50	0.59 0 48	0.62 0.47
0.9	0.50 0.47	0.50 0 46	0.51 0.45	0.52 0.44	0.55 0.43
0.8	0.44 0.42	0.45 0.41	0.45 0.41	0.46 0.40	0.48 0.39
0.7	0.39 0.37	0.39 0.37	0 40 0.36	0.40 0.36	0.42 0.35

CONVERSION TELEPHOTO 86 mm LENS FOCUS DEPTH

(in meters)

f	4	5.6	8	11	16
∞	∞ 55.54	∞ 39.77	∞ 27 89	∞ 20.23	∞ 14.03
10	60.15 19.14	105.98 16.85	∞ 14.30	∞ 12.04	∞ 9.53
5	19.39 11.52	22.48 10.66	29.58 9.59	48.99 8.53	∞ 7.30
3	10.14 7.50	10.91 7.13	12.32 6.65	14.71 6.12	21.80 5.42
2	6.32 5.21	6.61 5.03	7.09 4.79	7.80 4.51	9.39 4.13
1.5	4.58 3.95	4.72 3.87	4.96 3.73	5.29 3.56	5.92 3.31
1.2	3.58 3.21	3.67 3.14	3.81 3.05	3.99 2.94	4.36 2.78
1	2.92 2.68	2.98 2.63	3.07 2.57	3.19 2.49	3.40 2.38
0.9	2.60 2.41	2.65 2.37	2.71 2.32	2.80 2.26	2.97 2.17
0.8	2.29 2.14	2.32 2.11	2.37 2.07	2.44 2.02	2.56 1.95
0.7	1.97 1.86	2.00 1.84	2.07 1.81	2.08 1.78	2.17 1.72



GUARANTEE CERTIFICATE

Your KOWAFLEX-E is fully guaranteed against material and mechanical defects. If your KOWAFLEX-E at any time during the first year beginning from the date of your purchase should prove defective, or does not function properly, due to defective materials or workmanship, return it in original condition and the Camera will be repaired, exchanged or replaced without charge.

We recommend you to utilize this privilege by registering your name with:

KINE Camera Company, Inc.
889 Broadway, New York 3, N. Y.

Model of Camera: E

Camera Number: 243897

Purchased from: SHOPPER MART, WESTMINSTER, Colo.

Register No.: 23633

Manufactured by **KOWA CO., LTD.**, Tokyo, Japan

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Your KOWAFLEX-E is fully guaranteed against material and mechanical defects. If your KOWAFLEX-E at any time during the first year beginning from the date of your purchase should prove defective, or does not function properly, due to defective materials or workmanship, return it in original condition and the Camera will be repaired, exchanged or replaced without charge.

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Register No.: 23633

Manufactured by **KOWA CO., LTD.,** Tokyo, Japan

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kowaflex E



FIRST single lens reflex to combine such advanced professional features as coupled exposure meter, instant return mirror, automatic diaphragm, pentaprism viewfinder, split-image rangefinder plus ultrasharp f2 Prominar lens for only 99.50

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Single Lens Reflex

AUTOMATED SIMPLICITY...
yours to enjoy – in the new KOWAFLEX E

Here is all you may ever want in an Automatic Single Lens Reflex... Here, combined in a compact body are all the most advanced techniques of through-the-lens-viewing and focusing... the unique exposure control system... the ease and speed of operation... that spell picture perfection for you. And best of all: the KOWAFLEX E with its unbelievable "Under $100" price tag shatters all previous price concepts for quality optics and professional features in an eye level reflex.

And no wonder! The KOWAFLEX E originates in the electrical-optical division of one of Japan's biggest industrial combines, the Kowa Co. Ltd., which manufactures – among many other products – the world-famous Prominar lenses and Kowa cameras that have won the coveted Grand Prix d'Honneur at the 1958 Bruxelles World's Fair.

Check the quality, check the features and you'll agree that the KOWAFLEX E is truly a superb single-lens reflex any photographer will be proud to own.

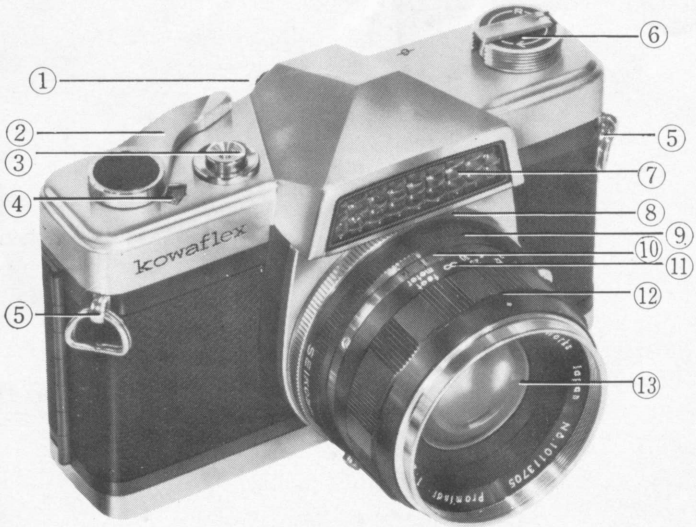
kowaflex E

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- Eye-level penta-prism through the lens viewing
- Built-in coupled exposure meter
- Instant return mirror reverts to viewing position INSTANTLY after exposure
- Ultra-sharp f2/50mm 6-element Prominar lens
- Split-image rangefinder for instant critical focusing
- Fully automatic diaphragm—stops down for split second to desired aperture, automatically returns to full opening after exposure
- Automatic Seikosha SLV shutter with speeds from 1-1/500 sec. plus B.
- MX synchronization and built-in selftimer
- ASA 12-1600 speed settings
- Single stroke, rapid film wind with automatic double exposure prevention
- Automatic film counter—Foldaway speed rewind—Flashgun shoe bracket
- Compact body with smart ripple leather trim

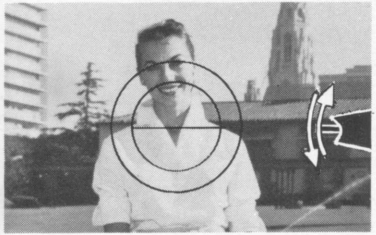
Eveready Leather Case $14.50





1. Viewfinder Eyepiece
2. Rapid Film Advance
3. Shutter release
4. Film Exposure counter
5. Strap ring
6. Rapid rewind
7. Exposure Meter
8. Shutter scale
9. Diaphragm ring
10. Depth of field scale
11. Distance scale
12. Helicoid ring
13. F2 Prominar lens
14. Accessory shoe hole
15. Synchro-contact
16. MXV switch lever
17. ASA scale lever
18. ASA scale hole

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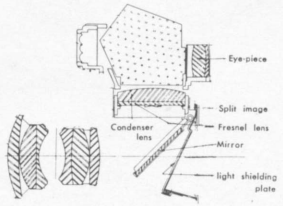


VIEW-FOCUS-SHOOT! So wonderfully simple! And all through ONE window: bright, clear ground glass viewing... with fresnel lens and split image rangefinder assuring most accurate, instant focusing, even under difficult light conditions. AND... simple line-up of built-in lightmeter needle (cross-coupled to lens and shutter) gives you perfect exposures.

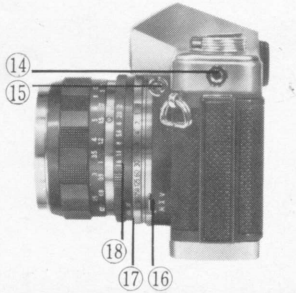


THE LENS IS TOPS... It's still the lens that counts most in your camera. And the f2 Prominar is truly superb. Improved from the famous Gauss lens design, it consists of 6 elements in 4 components. Even at the widest opening, the resolution and color rendition is excellent. It delivers a high speed image with unusual corner-to-corner sharpness. Focuses down to 21″, perfect for close-ups, micro photography.

Single Lens Reflex



PENTA PRISM reflex viewing allows faithful reproduction of the image you see in the finder. Picture is bright and sharp, right side up, not reversed from right to left, without any parallax distortion, exactly as it will appear on film.



FULLY AUTOMATIC DIAPHRAGM, wide open for viewing and focusing, stops down to desired aperture for a split second and automatically returns to full opening, after shutter is released. Instant return mirror flips back automatically right after exposure, assuring viewing continuity without any image blackout.

kowaflex E

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f2.5/71mm Telephoto Conversion lens with 34° field of view, built-in UV filter and leather case.....$24.50

f2/5/35mm Wide Angle Conversion lens with extra-wide 62° field of view, UV filter and leather case.....$24.50



LENS HOOD (protects lens, reduces glare when shooting against the light) for standard lens, with leather case.....$4.50

FILTER (enhances picture quality, creates special effects) UV or Y2 for standard lens, with plastic case.....each $5.50



CLOSE-UP ATTACHMENT, ideal for close ups of small objects, stamps, nature study.

#1 (for close-ups from 28″ to 16″).....$9.50

#2 (for close-ups from 16″ to 12″).....$9.50

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