

Kodak Vigilants

Vigiland SIX-20 and Vigilant SIX-16

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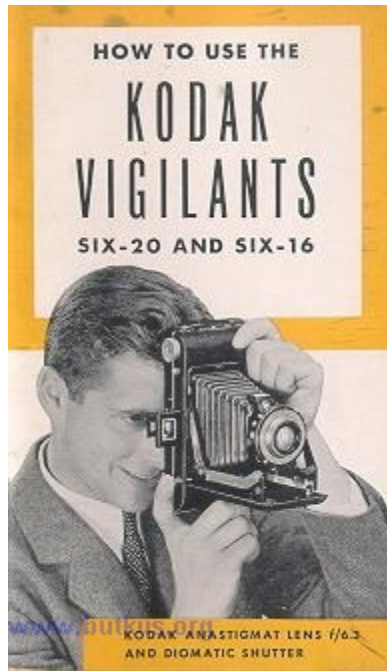
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THERE ARE 7 EASY STEPS TO GOOD PICTURES WITH YOUR KODAK VIGILANT



WITH the Kodak Vigilant, clear, sharp pictures can be made right from the start, outdoors or indoors, in the daytime or at night.

The seven easy steps to make good pictures with your Kodak are given on the following pages. They are simple, and very easily memorized.

You will find many illustrations which will give you suggestions for making similar pictures.

Left - Actual size of pictures made with Kodak Vigilant Six-20.

The Six-16 makes pictures 2 1/2 x 4 1/4 inches in size.

1. LOADING



Fig. 1



Fig. 2

THE KODAK may be loaded in daylight, but not in direct sunlight.

To open the back of the Kodak, push the button under the carrying handle in the direction of the arrow (Fig. 1).

Open the back (Fig. 2).

Place the roll of film in the recess adjoining the hinge of the back and push it down until it is caught (Fig. 3).

Load your Kodak with Kodak Film. See page 14 for the descriptions of the different kinds of Kodak Film. They meet every picture-taking need.



Fig. 3



Fig. 3

The spool should be inserted so that when the paper is drawn off, the colored side of the paper will be up and the black side will be towards the lens. Remove the paper band and pass the protective paper *over* the two rollers.

Thread the paper through the *longer* slit in the empty reel, *as far as it will go* (Fig 4).

Turn the winding knob once or twice to bind the paper on the reel (Fig. 5)

Be sure the paper is started straight. Close the back, pressing it so that the spring lock snaps into place.



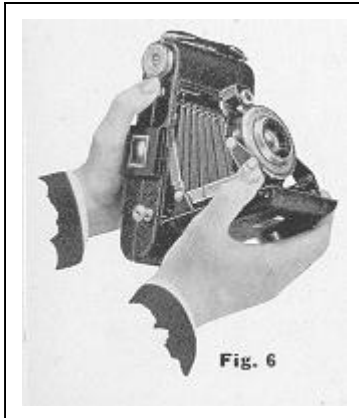
Fig. 5

Push the metal plate that covers the red window on the back of the Kodak in the direction of the arrow, and turn the winding knob until a small hand --> appears in the window. Then turn the knob slowly until the figure one (1) is centered in the window.

After each picture, turn the knob until a new number appears in the red window. This prevents making two pictures on the same section of film.

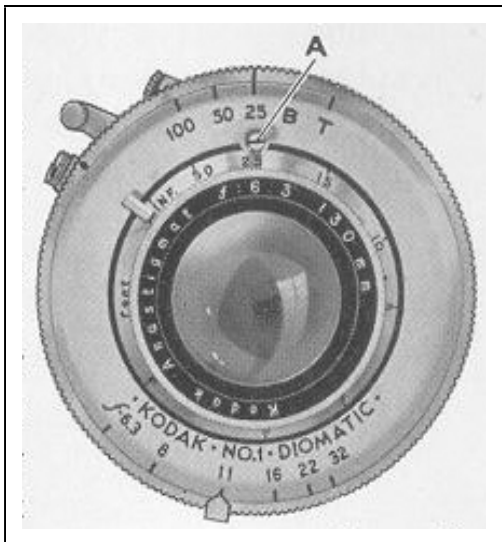
The red window should be uncovered only while winding the film.

2. OPENING FRONT



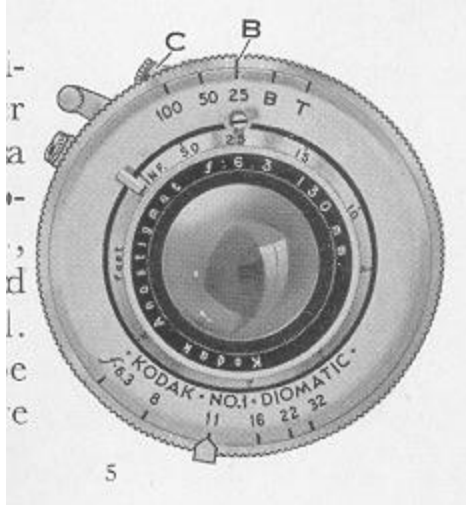
PRESS the button near the winding knob to open the front of the Kodak; then draw down the bed carefully until it locks (Fig. 6). This will bring the lens and the shutter into position.

3. FOCUSING



The lens mount to the right or left until the figure representing the distance from *the subject to lens* is under the pointer A. For ordinary street pictures, turn lens mount to 25 feet; if the *principal object* is nearer or farther, change the focus accordingly.

4. SHUTTER SPEEDS



THE KODAK Diomatic Shutter on your camera has three snapshot speeds. 1/25, 1/50, and 1/100 second For average subjects revolve the knurled collar of the shutter until the indicator B is **at 1/25 second**. For moving objects or when subjects are in very bright light, use **1 /50 or 1 / 100second**.

For time or "bulb" exposures the indicator B must be at "T" or "B" (see **page 22**).

After the indicator B is brought to the proper speed or to "T" or "B." it is necessary to set the shutter by pushing the setting lever C to the opposite end of the slot.



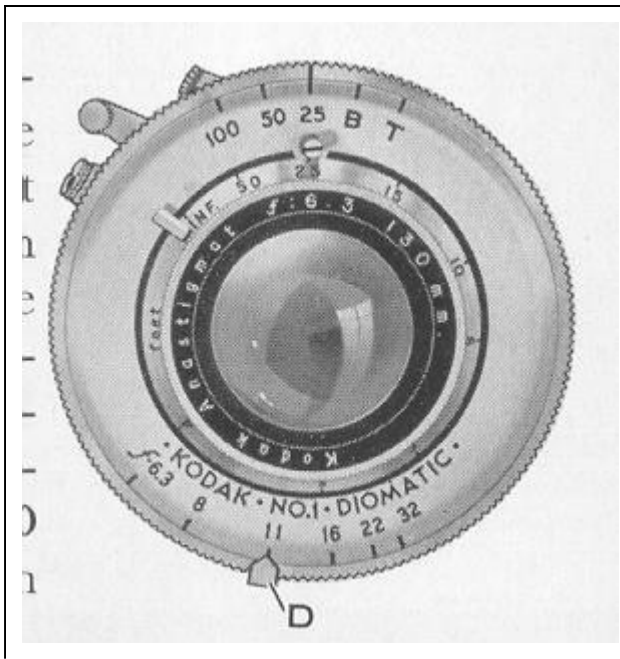
When it is difficult to estimate the distance between the subject and lens, like the moving subject on the left; then adjust your Kodak as a fixed focus camera.

How to Use Your Kodak As a Fixed Focus Camera

WHEN the subject is not close to the Kodak, such as when making ordinary street scenes, or when the subject is about 12 feet or beyond, the camera can be easily converted to a fixed focus type by making the following adjustments: Set the Focus at 25 feet. Use Stop Opening f/16. Make an exposure of 1/25 second.

The range of sharpness when your Kodak is adjusted as a fixed focus camera will be found on page 26 or 27.

5. STOP OPENINGS



THE stop openings regulate the amount of light passing through the lens. The openings are enlarged or reduced by I . moving the lever D at the bottom of the shutter.

For average subjects outdoors when the sun is shining, move lever D to **F/11**, and make an exposure of **1/25** second. See directions on pages 23 and 24 for the use of the different stop openings.

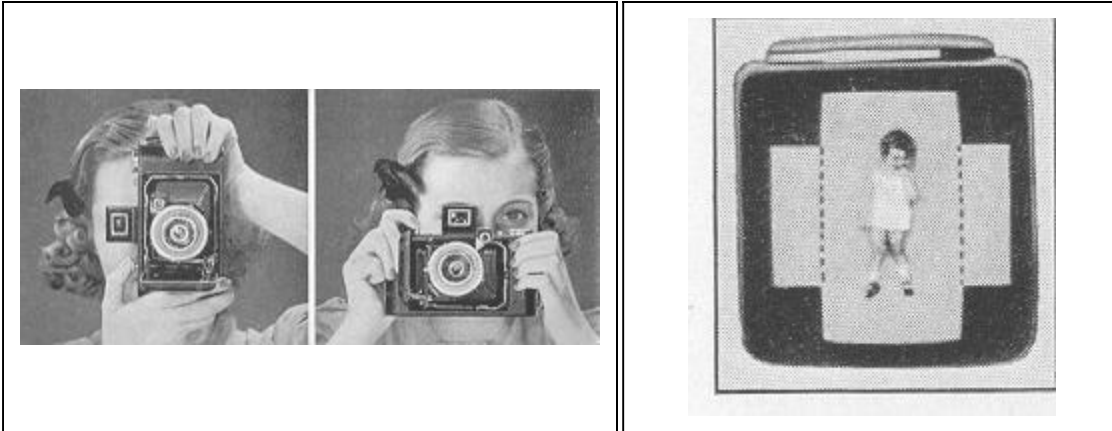
6. THE FINDERS

THE Kodak Vigilants have two finders: The direct view finder for action photography, and the reflecting finder, ideal for child pictures.

The DIRECT VIEW FINDER is brought into position by lifting the front frame. It shows what will appear in the picture, but on a much reduced scale. When viewing, hold the Kodak at a distance from the eye which will make the edges of the rear opening appear superimposed on the edges of the front opening. This will insure proper aiming of the Kodak. When making the exposure, hold the Kodak steady by pressing the hand supporting it against the face. All vertical lines in the subject should appear parallel with the vertical sides of the front frame of the finder, when the Kodak is held either in the vertical or horizontal position. The Kodak can be tilted for unusual effects.

After composing the picture in either the Direct View or the Reflecting Finder of a subject ten feet or nearer to the Kodak, it will be necessary to move the Kodak a *little* to the right if making vertical pictures, or tilt it up a trifle for horizontal pictures. This will bring the Kodak to the proper position to include in the picture what is seen in the finder.

HOLD THE KODAK STEADY



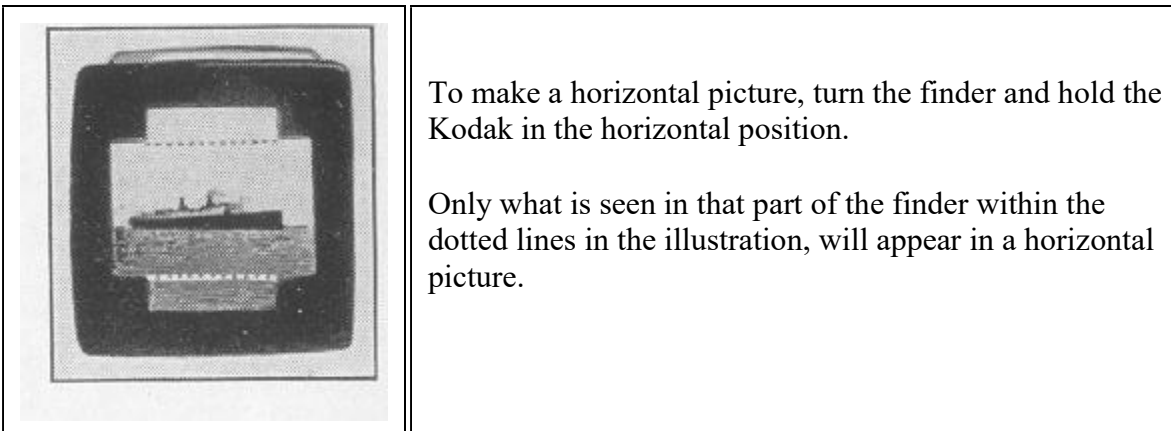
Holding the Kodak for a vertical picture, using the direct view finder.

Holding the Kodak for a horizontal picture, using the direct view finder.

The REFLECTING FINDER (page 13) shows what will appear in the picture. With this finder hold the Kodak firmly against the body at waist level.

Look into the finder from directly over the center of it and include what is wanted by turn to the right or left.

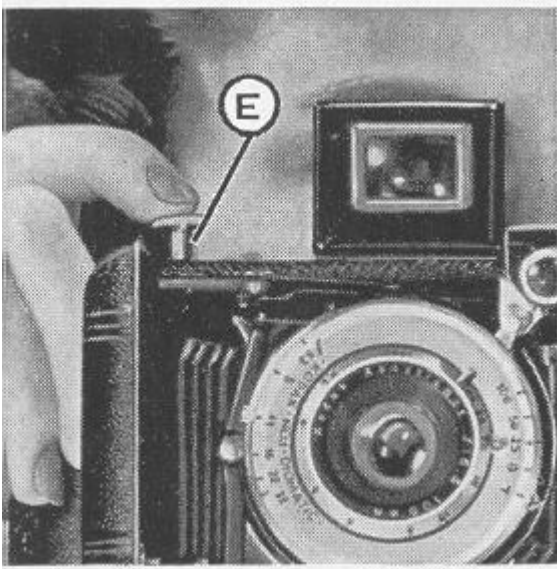
Only what is seen in that part of the finder within the dotted lines, will appear in a vertical picture.



To make a horizontal picture, turn the finder and hold the Kodak in the horizontal position.

Only what is seen in that part of the finder within the dotted lines in the illustration, will appear in a horizontal picture.

7. SNAP THE PICTURE



HOLD the KODAK in the vertical or horizontal position. After having pushed the setting lever (E) of the shutter to the opposite end of the slot, see page 5, press the exposure button E. When pressing the button, hold the breath for the instant. If the Kodak is moved during the exposure, the picture will be blurred. *Hold the Kodak steady.*

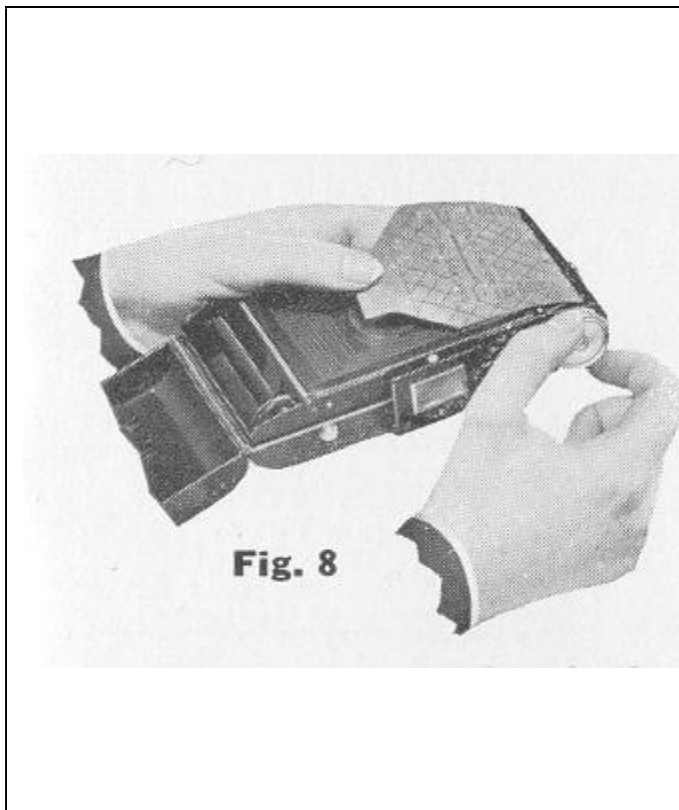
A cable release (No. 2) can be used with this Kodak if it is desired to use the Kodak Self Timer for self-portraiture, or the Kodak Flash Synchronizer. To attach the cable release, screw it into the center of the exposure button E.

CLOSING THE KODAK



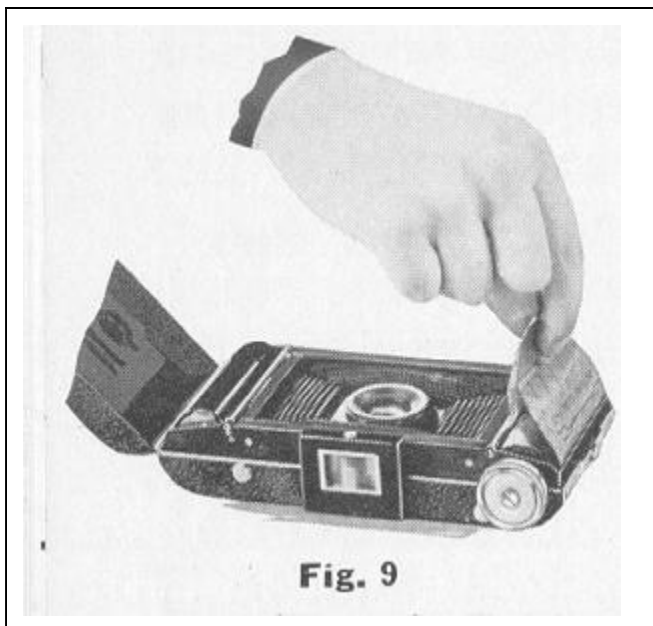
BEFORE closing the Kodak, adjust the focus for infinity. The reflecting finder must be in the upright position; then press the same button that is used to open the Kodak (Fig. 7), raise the bed and snap it shut.

REMOVING THE FILM



To UNLOAD the Kodak after the last picture has been made, turn the winding knob until the end of the paper on the roll passes the red window. In a subdued light, open the back of the Kodak. Hold the end of the paper taut and turn the knob until all of the paper is on the roll (Fig. 8) If the sticker folds under the roll, turn the knob to bring it up. Take hold of the end of the paper and sticker, draw out the winding knob and remove film (Fig. 9). Fold under the end of the paper, and fasten it with the sticker.

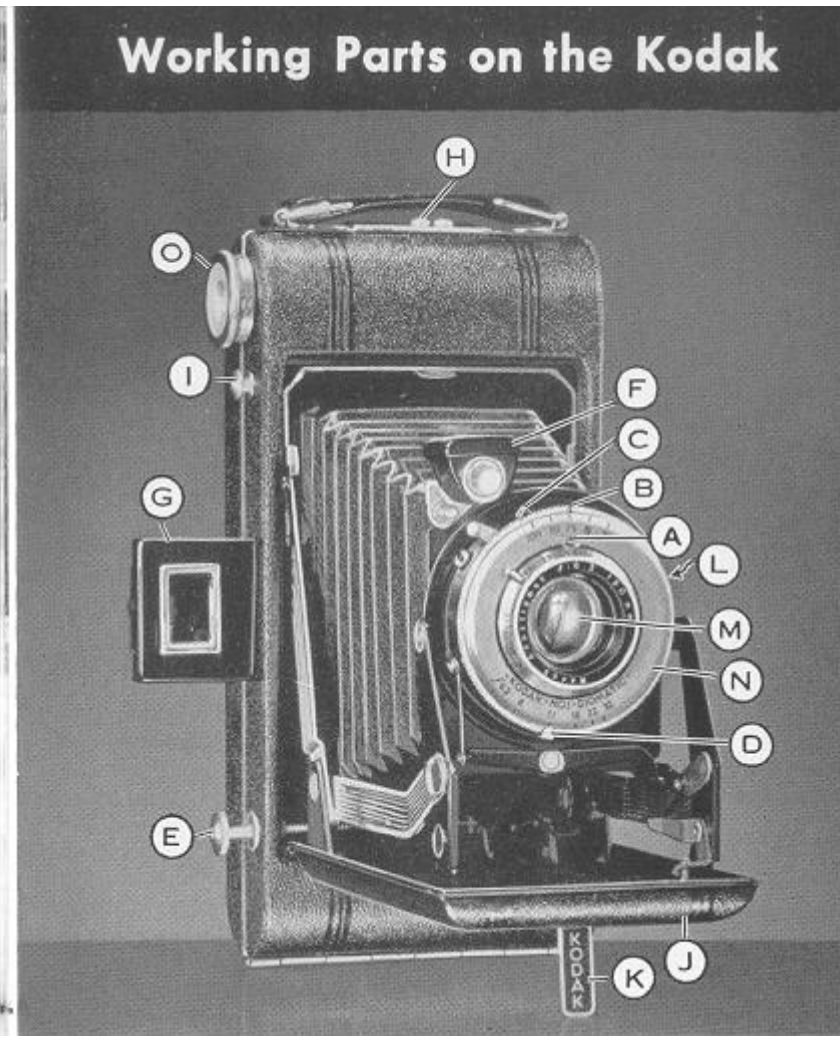
IMPORTANT: After removing the film, do not wind it. tightly with a twisting motion, or it may become scratched.



The film is now ready for development, which should be done as soon as possible. We will be glad to send you complete instructions for developing and printing.

Remove the empty spool and place it in the winding end of the Kodak. Push in the winding knob, fitting the flange on the knob into the slot in end of spool. The Kodak should now be reloaded with Kodak Film, see page 14.

Working Parts on the Kodak



- A. Focus Pointer
- B. Speed Indicator
- C. Setting Lever
- D. Stop Opening Lever
- E. Exposure Button
- F. Reflecting Finder
- G. Direct View Finder
- H. Lock for Back
- I. Button for Opening and Closing Front
- J. Bed
- K. Vertical Support
- L. Horizontal Support
- M. Lens
- N. Shutter
- O. Winder knob

[Click here for Kodak Films](#)

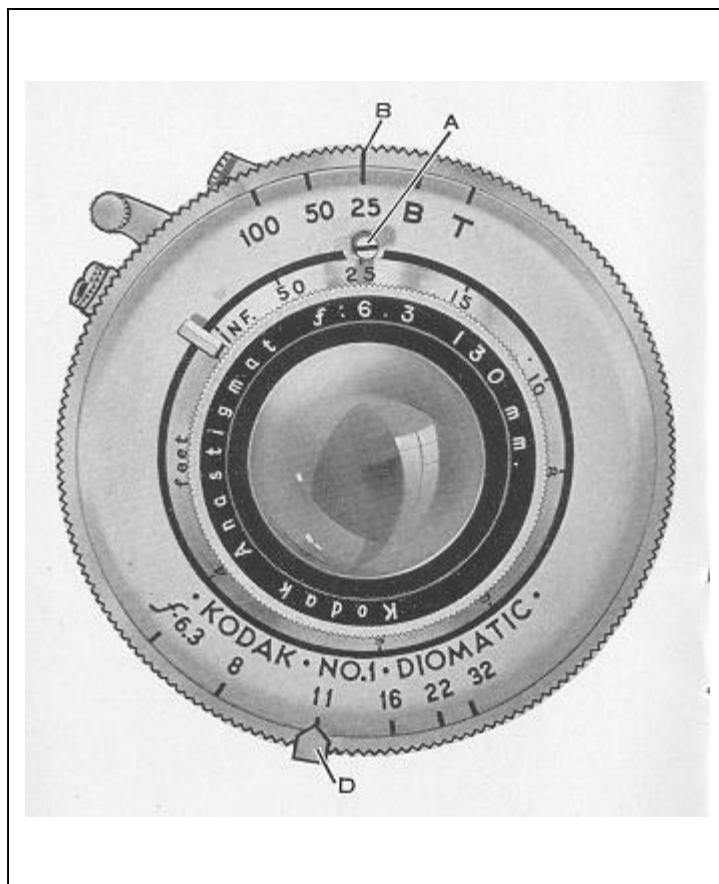
[Click here to see types of photos taken](#)

The All-Purpose Film . . .
KODAK VERICHROME FILM
 Has great speed and is well balanced for recording tone values in a black-and-white print. Its double coating guards against over- and underexposure. 8 exposures. V620 for the Six-20 and V616 for the Six-16.

For Pictures at Night and Difficult Daytime Shots . . .
KODAK SUPER-XX PAN FILM
 Gives correct color values in a black-and-white print. Its speed makes it ideal for taking pictures at night by artificial light, and outdoor snapshots in the shade. 8 exposures. XX620 for the Six-20 and XX616 for the Six-16.

The Film that Makes the Finest Enlargements . . .
KODAK PANATOMIC-X FILM
 It records color values correctly in a black-and-white print. It has an exceptionally fine grain enabling the making of enlargements of great size. 8 exposures. FX620 for the Six-20 and FX616 for the Six-16.

THE EYE OF KODAK



Good Pictures Depend on:

A. CORRECT FOCUSING

The lens must be focused properly so that the image of the subject will be sharp and distinct on the film.

B. PROPER SPEED

The shutter must open and close quickly enough to prevent a blurred image of a moving object.

D. RIGHT AMOUNT OF LIGHT

Just as the iris of the eye contracts and expands when there is more or less light the diaphragm of the shutter must be closed or opened to permit the right amount of light to enter the camera.

GOOD PICTURE REQUIRE ACCURATE FOCUSING

The various distances at which the Kodak may be focused are engraved on the edge of the lens mount. The scale on the Six-20 Kodak is marked for 3 1/2, 4, 5, 6, 8, 10, 15, 25, and 50 feet, and INF. (infinity); it is the same on the Six-16 Kodak, except that the 3 1/2 foot distance is not included.

To focus the Kodak, revolve the lens mount until the figure representing the distance *from the subject to lens is* under the pointer at the top of the lens.

The distance between the subject and Kodak can be estimated without measuring, when the subject is *beyond fifteen feet*; for instance, if the focus is set at] feet (the usual distance for ordinary street scenes) the sharpest part of the picture will be the objects at that distance from the camera, but everything from about 18 to about 45 feet will be in good focus with f/6.3, with smaller stop openings the range will be greater, see tables on pages 26 and 27.

For *distant* views turn the lens mount until INF. (infinity) is under the pointer.

MORE PHOTO EXAMPLES



SUGGESTIONS ON EXPOSURES

SNAPSHOTS -

SUNSHINE is not needed to make snapshots with your Kodak Vigilant. With one of the larger stop openings, snapshots can be made with the subject in open shade, on *slightly* cloudy days, and even during the rain in the middle of the day. See directions for using stop openings on pages 23 and 24.

When the sun is shining, it should be behind your back or over the shoulder; if it shines directly into the lens, it will blur and fog the picture. However, beautiful effects can be obtained by back- or side-lighting. When pointing the Kodak towards the sun, the lens must be shaded so that the direct sunlight will not strike the lens; for the best results, use the Lens Hood of the Kodak Combination Lens Attachments, see pages 40 to 43, or a Kodak Adjustable Lens Hood No. 2.

Snapshots should be made during the hours from one hour after sunrise until one hour before sunset. If earlier or later, the exposures must be longer.

TIME AND "BULB" EXPOSURES

FOR a subject in the deep shade, under the roof of a porch or under a tree on dark, cloudy days, a time exposure should be made. For all time or "bulb" exposures the Kodak must be placed on a tripod or some other steady, firm support - **do not hold it in the hands or the picture will be blurred.**

For short time exposures from one half second to ten seconds, "bulb" exposures are recommended.

To make a time exposure, revolve the knurled collar of the shutter until the indicator B is at the letter "T." see page 5, push the setting lever C to the opposite end of the slot, and press the exposure button E (page 13) once to open the shutter and again to close it. For a "bulb" exposure, the indicator B must be at the letter "B." the shutter set with lever C, and then press the exposure button E; the shutter will remain open as long as button E is held down.

CHOOSING THE CORRECT STOP OPENING

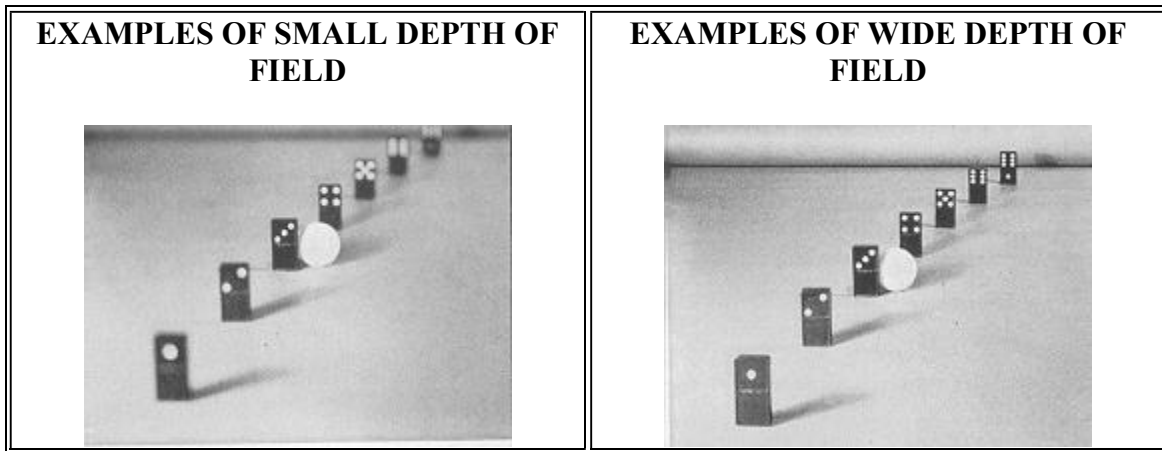
The stop openings regulate the amount of light passing through the lens. The openings are enlarged or reduced by moving the lever D, see page 16.

f/6.3 - For rapidly moving objects in bright sunlight, use 1/100 second. For exposures on cloudy days and during rain in the middle of the day, use 1/25 second. For portraits in the open shade with clear sky overhead, use 1/25 second.

Important: When using stop f/6.3 and the distance between the subject and Kodak is ten feet or less, the distance must be accurately measured, see range of sharpness tables on pages 26 and 27.

f/8 - For snapshots on slightly cloudy or hazy days, use 1/25 second. For scenes on narrow and slightly shaded streets, use 1/25 second. For moving objects in very bright sunlight, use 1/100 second.

F/11 - For all ordinary outdoor pictures, such as near-by landscapes showing little or no sky, groups and street scenes, when the subject is in bright sunlight, use 1/25 second.



f/16 - For open views, when the sunlight on the subject is *unusually strong* and there are no heavy shadows, such as views at the seashore and on the water, use 1/50 second. For ordinary *landscapes*, in bright sunlight, with clear sky overhead, use 1/25 second. For Interior Time Exposures, see guide on page 30.

f/22 - For snapshots of extremely distant landscapes, marines, snow scenes (without prominent dark objects in the foreground), and for clouds only, in bright sunlight, use 1/25 second. Also for time exposures, see guide on page 30.

f/32 - For time exposures outdoors on cloudy days, using one to eight seconds, depending upon the quality of the light. For interior time exposures, see guide on page 30. Not suitable for snapshots unless using Kodak Super-XX Panchromatic Film.

- All the exposures given in this table are for Kodak Verichrome or Panatomic-X Film. With Kodak Super-XX Pan Film give one-quarter the exposure recommended, that is, use a shutter **speed** four times as fast as the one given in the table, or use the second smaller stop opening with the same speed.

The smaller the stop opening the greater the range of sharpness, see pages 26 and 27.(next charts)

Depth of field for the SIX-20

The Depth of Field for Different Stop Openings					
By "depth of field" is meant the range of sharpness, in front of and behind the subject focused on, within which details in the picture will be sharp and distinct.					
TABLE FOR USE WITH THE KODAK VIGILANT SIX-20					
Distance Focused Upon	f/6.3	f/8	f/11	f/16	f/32
INF.	42 ft. to inf.	33 ft. to inf.	24 ft. to inf.	16½ ft. to inf.	8½ ft. to inf.
50 ft.	23 ft. to inf.	20 ft. to inf.	16 ft. to inf.	13 ft. to inf.	7 ft. to inf.
25 ft.	16 ft. to 55 ft.	15 ft. to 80 ft.	13 ft. to inf.	10½ ft. to inf.	6½ ft. to inf.
15 ft.	11½ ft. to 22 ft.	10½ ft. to 26 ft.	9½ ft. to 35 ft.	8 ft. to 85 ft.	5½ ft. to inf.
10 ft.	8 ft. to 12½ ft.	7½ ft. to 13½ ft.	7½ ft. to 16 ft.	6½ ft. to 22 ft.	4½ ft. to inf.
8 ft.	6½ ft. to 9½ ft.	6½ ft. to 10½ ft.	6½ ft. to 12 ft.	5½ ft. to 15 ft.	4½ ft. to 122 ft.
6 ft.	5½ ft. to 7 ft.	5½ ft. to 7½ ft.	5 ft. to 8 ft.	4½ ft. to 9 ft.	3½ ft. to 20 ft.
5 ft.	4½ ft. to 5½ ft.	4½ ft. to 6 ft.	4 ft. to 6½ ft.	3½ ft. to 7½ ft.	3 ft. to 14 ft.
4 ft.	3½ ft. to 4 ft. 5 in.	3 ft. 7 in. to 4 ft. 7 in.	3 ft. 5 in. to 4 ft. 10 in.	3 ft. 4 in. to 5 ft. 5 in.	2½ ft. to 8½ ft.
3½ ft.	3½ ft. to 3 ft. 10 in.	3 ft. 2 in. to 3 ft. 11 in.	3 ft. 1 in. to 4 ft. 2 in.	2 ft. 11 in. to 4 ft. 6 in.	2½ ft. to 6½ ft.

The depth or range of sharpness is not given for f/22. The range for this opening can be estimated by comparison.

"Inf." is the abbreviation for Infinity—meaning an unlimited distance from the lens.

Depth of field for the SIX-16

The Depth of Field for Different Stop Openings					
By "depth of field" is meant the range of sharpness, in front of and behind the subject focused on, within which details in the picture will be sharp and distinct.					
TABLE FOR USE WITH THE KODAK VIGILANT SIX-16					
Distance Focused Upon	f/6.3	f/8	f/11	f/16	f/32
INF.	66 ft. to inf.	52 ft. to inf.	38 ft. to inf.	26 ft. to inf.	13 ft. to inf.
50 ft.	28½ ft. to inf.	25½ ft. to inf.	21½ ft. to inf.	17 ft. to inf.	10½ ft. to inf.
25 ft.	18½ ft. to 40½ ft.	16½ ft. to 48½ ft.	15 ft. to 75½ ft.	12½ ft. to inf.	8½ ft. to inf.
15 ft.	12½ ft. to 19½ ft.	11½ ft. to 21½ ft.	10½ ft. to 25 ft.	9½ ft. to 36½ ft.	6½ ft. to inf.
10 ft.	8½ ft. to 11½ ft.	8½ ft. to 12½ ft.	7½ ft. to 13½ ft.	7½ ft. to 16½ ft.	5½ ft. to 45½ ft.
8 ft.	7½ ft. to 9½ ft.	7 ft. to 9½ ft.	6½ ft. to 10½ ft.	6 ft. to 13½ ft.	5 ft. to 21½ ft.
6 ft.	5½ ft. to 6½ ft.	5 ft. 5 in. to 6½ ft.	5½ ft. to 7½ ft.	5 ft. to 8 ft.	4½ ft. to 12 ft.
5 ft.	4½ ft. to 5 ft. 5 in.	4 ft. 7 in. to 5½ ft.	4 ft. 5 in. to 5 ft. 9 in.	4 ft. 2 in. to 6 ft. 2 in.	3 ft. 7 in. to 8 ft. 2 in.
4 ft.	3½ ft. to 4 ft. 3 in.	3 ft. 8 in. to 4½ ft.	3 ft. 7 in. to 4 ft. 6 in.	3 ft. 6 in. to 4 ft. 9 in.	3 ft. to 5 ft. 9 in.

The depth or range of sharpness is not given for f/22. The range for this opening can be estimated by comparison.

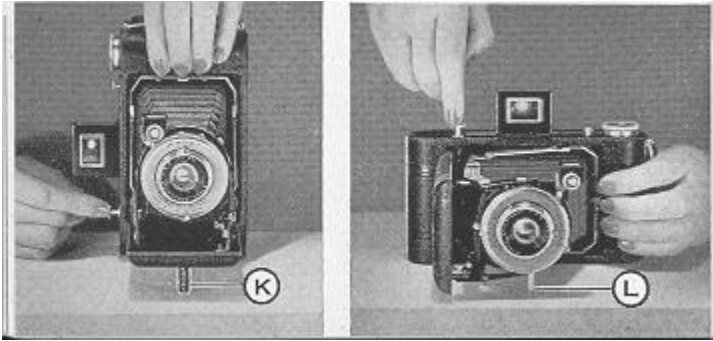
"Inf." is the abbreviation for Infinity—meaning an unlimited distance from the lens.

The picture above we made with the lens focused on the third domino, using a large atop opening.

In the illustration below the focus is on the third domino, but a much smaller atop opening was used. Note the increase in the range of sharpness by using a smaller atop opening.

ROOM INTERIORS BY DAYLIGHT

To make a picture of a room interior by daylight, adjust the shutter for a time exposure by revolving the knurled collar of the shutter until the indicator B is at the letter "T." Push the setting lever C to the opposite end of slot, and move the stop opening lever D to f/16 (this opening gives the best average results).



Place the camera on a tripod (it has two sockets for this purpose, for vertical or horizontal pictures), or place it on some other solid support. The illustrations below show the Kodak in the vertical and horizontal positions. With the Kodak on a table, use support K or L. Do not place the Kodak more than two or three inches from the table edge, or the table will show in the picture.



Compose your subject in the finder to include more of the floor of the room than of the ceiling.

Leave the furniture in the room in its usual place, as far as possible, but be sure there are no pieces close to the camera lens.

Focus the Kodak by revolving the lens until the figure corresponding with the average distance between the objects in the room and the lens is at the focus pointer A, at the top of the lens.

When ready to take the picture, steady the Kodak and press the exposure button once to open the shutter. When the proper time has elapsed (see Exposure Guide), press the button *again* to close the shutter.

After the last time exposure has been made, revolve the knurled collar of the shutter until the indicator B is at 1/25 second, to be ready for snapshots.

Exposure Guide for Interiors by Daylight

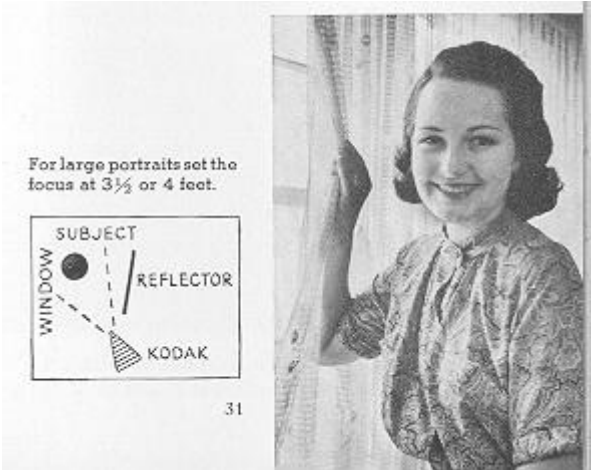
FOR an interior with medium-colored walls and furnishings and two windows, with the sun shining - make an exposure of about 8 *seconds*, with stop F/16. With one window, double the exposure, and if there are more than two windows, halve the exposure. If the day is cloudy, make an exposure of 16 seconds to 32 seconds.

No definite rule can be given for all interiors because of the great variety of light conditions. It is suggested that a series of exposures be made from about 2 seconds to 32 seconds, using stop F/16, doubling each successive exposure.

Interiors by daylight should be made from three hours after sunrise until three hours before sunset; if earlier or later the exposures must be longer. The exposures recommended above are for Kodak Verichrome, and Panatomic-X Films; with Kodak Super-XX Pan Film give one-fourth the exposure.

Stop F/16 gives the best average results. *Double* the exposures with each *smaller* stop, and halve the exposures with each *larger* stop opening.

DAYTIME PORTRAITS INDOORS

 <p>For large portraits set the focus at $3\frac{1}{2}$ or 4 feet.</p> <p>31</p>	<p>To make an indoor portrait by daylight, similar to that shown below, have the subject stand or be seated in front of an unshaded window, with the body preferably at a diagonal to the camera.</p> <p>Place a reflector (a sheet or tablecloth thrown over a screen or chair will do) a few feet from the subject and at the angle shown in the diagram. This reflects light to the shaded side of the face.</p> <p>Revolve the knurled collar of the shutter until the indicator B is at the letter "B." Push the setting lever C to the opposite end of the slot, and move lever D at the bottom of the shutter to F/11.</p>
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AN INDOOR PHOTO EXAMPLE



A suggestion for an interior story telling picture. For information on exposures, see pages 31 and 33.

Place the Kodak in either a vertical or horizontal position on a solid support (or on a tripod) a little higher than an ordinary table. The Kodak must not be more than two or three inches from the edge of the support. Locate the subject in the finder. If the subject is ten feet or nearer to the lens, move the Kodak a trifle after composing the picture in the finder, as described on page 9. Turn the lens so that the figure corresponding to the distance between the subject and the Kodak is at the pointer A at the top of the lens.

When ready to take the picture, steady the Kodak to keep it from moving, and press the exposure button E to open the shutter. Keep the pressure on the button for one or two seconds - depending upon the quality of the light-- then release the pressure and the shutter will close.

KODAK PORTRAIT ATTACHMENT

WHILE these Kodaks can be focused for close-up subjects, permitting the obtaining of head and shoulder portraits, they can be focused for even closer distances with a Kodak Portrait Attachment.

By using the Kodak Portrait Attachment, large images of flowers and similar "still life" subjects can be obtained.

Place the Attachment over the lens and compose the picture in the finder. When making vertical pictures turn the Kodak just a little to the right, and for horizontal pictures tilt it up a trifle, as the short distances at which the subject must be from the lens make it necessary to center the subject by eye.

The subject must be at one of the distances from the lens, given in the table below. Measure the distance carefully from the lens to the subject, and revolve the lens mount until the correct figure is at the focus pointer, see table.

The same exposure is required as without the Attachment.

Use KODAK PORTRAIT ATTACHMENT No. 5A with the Kodak Vigilants Six-20 and Six-16 with the Kodak Anastigmat Lens f/6.3, and the Kodak Diomatic Shutter.

To produce a true, soft focus effect, use the KODAK PORTRAIT DIFFUSION DISK SERIES VI with the Kodak Combination Lens Attachments, see pages 40 to 43.

INDOOR PICTURES AT NIGHT



To take snapshots or other indoor pictures at night, you need only a roll of Kodak Film, a few Kodak Handy Reflectors, and a few Photoflood or Photoflash bulbs. The bulbs can be screwed into all regular lamp sockets.

PhotoFlood gives a steady light of great brilliance. Comes in two sizes for the amateur: No. 1 and No. 2. The No. 2 bulb gives twice the light, lasts about twice as long.

FLASH PHOTO EXAMPLES



TABLE FOR FLASH PHOTOGRAPHS

Exposure Table for Photoflood Lamps

For pictures of people, using Kodak Super-XX Panchromatic Film and two Photoflood Lamps in Kodak Handy Reflectors. For interiors without people, double the exposures.

Distance Lamps to Subject	Stop Opening	*Exposure in Seconds	
		Two No. 1 Photofloods	Two No. 2 Photofloods
6 feet	<i>f</i> /6.3	1/50	1/100
6 "	<i>f</i> /8	1/25	1/50
6 "	<i>f</i> /11	1/10	1/25
6 "	<i>f</i> /16	1/5	1/10
8 feet	<i>f</i> /6.3	1/25	1/50
8 "	<i>f</i> /8	1/10	1/25
8 "	<i>f</i> /11	1/5	1/10
8 "	<i>f</i> /16	1/2	1/5

*For Kodak Verichrome or Kodak Panatomic-X Film use two stop openings larger, or give four times the exposure.

Rooms should have light-colored walls; with dark walls, more Photoflood Lamps in reflectors will usually be required. Do not use more than three No. 2 lamps or six No. 1 lamps on a single fused circuit.



SNAPSHOTS with PHOTOFLOODS

To TAKE snapshots at night with the Kodak Vigilant, load the camera with Kodak Super-XX Panchromatic, Panatomic-X, or Verichrome Film. Place two bridge lamps fitted with the Kodak Handy Reflectors, and two No. 2 Mazda Photoflood Lamps, one four feet from the subject and the other eight feet, as shown in the illustration on page 36.

Measure the distance between the camera and the subject; then adjust the focus accordingly.

Move the stop opening lever D (page 16) to f/6.3. With Kodak Super-XX Panchromatic Film make an exposure of 1/100 second; with Panatomic-X or Verichrome Film use 1/25 second.

Other combinations for making snapshots and quick time exposures are given in the table on page 37.

CAUTION: Photoflood Lamps, especially the No. 0 size, become quite hot and should not be kept burning any longer than necessary. Do not permit the bulbs to come into contact with the Kodak Handy Reflectors or the fabric of shades on home lamps.

SNAPSHOTS - PHOTO EXAMPLE 1

It is easy to make snapshots at night with your Kodak, using No. 1 or No. 2 Photofloods and Kodak Handy Reflectors, see pages 35 to 38.

TIME EXPOSURES - PHOTO EXAMPLE 2

Quick time exposures should be made when the distance between subjects and lamps requires it, see table on page 37.

PHOTOFLASH - PHOTO EXAMPLE 3

When the subject is likely to move, make the exposure with a Photoflash Lamp, see pages 38 to 40.

PHOTOFLASH PICTURES



Photoflash gives an instantaneous flash, it is good for one picture. No smoke, no noise. Comes in two sizes for the amateur, No. 1 11 A and No. 2. The No. 11A size is suitable for most indoor shots.

WHEN making a Photoflash picture, adjust the shutter for a time exposure, with indicator B at "T." see page 16, and set the shutter with lever C. Measure the distance between subject and lens; then focus the lens. Use the proper stop opening, depending upon distance between lamp and subject, size of lamp, kind of film, and reflector, see exposure table on page 39.

Use a Photoflash bulb in any home lamp or a portable reflector unit having flashlight batteries.

To make the exposure, turn out all lights (except a small light behind the camera), direct the Photoflash at the subject, open the shutter, flash the bulb, and close the shutter.

PHOTOFLASH SETTINGS

Exposure Table for No. 11A Photoflash Lamp and for Kodak Verichrome or Kodak Panatomic-X Film			
With the No. 21 Photoflash Lamp, use next smaller opening. For Kodak Super-XX Panchromatic Film, use two stop openings smaller.			
<i>Distance Lamp to Subject</i>	<i>Stop Opening</i>		
	One Photoflash in Kodak Handy Reflector	One Photoflash in Ordinary Reflector	One Photoflash without Reflector
20 feet	<i>f</i> /6.3	—	—
14 "	<i>f</i> /8	<i>f</i> /6.3	—
10 "	<i>f</i> /11	<i>f</i> /8	<i>f</i> /6.3
7 "	<i>f</i> /16	<i>f</i> /11	<i>f</i> /8
A white card held directly behind a bare Photoflash Lamp will enable you to use the stop opening recommended for ordinary reflector.			

KODAK COMBINATION LENS ATTACHMENTS

THE Kodak Combination Lens Attachments permit using in combination an unmounted Wratten Filter, one of the Kodak Supplementary Lenses such as the Kodak Portrait Diffusion Disk for close-ups, the Kodak Pola-Screen and the Kodak Lens Hood. The basis of the combination is the Kodak Adapter Ring with its Adapter Ring Insert. The Adapter Ring must be of the proper Series and size to fit your lens. These Combination Lens Attachments are available in four Series, to fit lens diameters from Chinch to 2 inches, and are designated as follows:

Series V for lenses from 3/4 to 1 3/16 inches

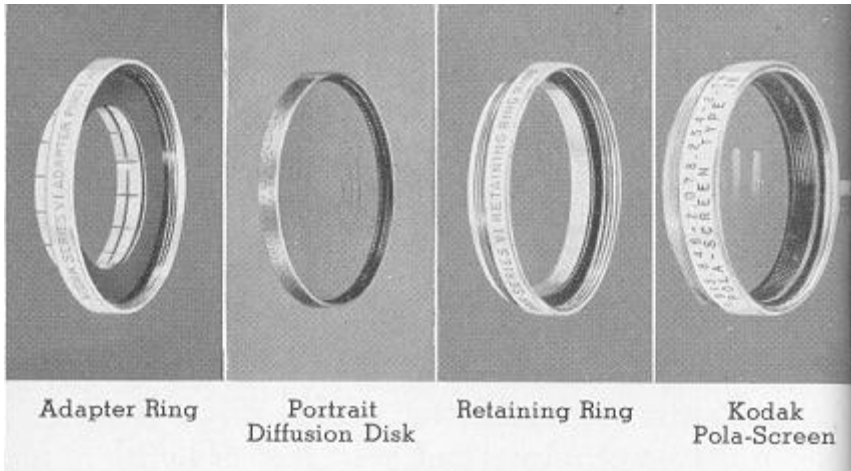
Series VI for lenses from 1 1/4 to 1 21/33 inches

Series VII for lenses from 1 11/16 to 2 inches

Series VIII for lenses from 2 1/16 to 2 1/2 inches

After determining the proper Series to be used with your camera lens, an Adapter Ring of the proper diameter must be obtained to fit the lens. The filters, supplementary lenses, Pola-Screen, and Lens Hood must be of the same series.

The Series VI Lens Attachments are used with the Kodak Vigilants Six- ∞ and Six-16 with Kodak Anastigmat Lens f/6.3. The Kodak Adapter Ring must be 1 1/4 inches (31.5mm) in diameter. All Wratten Filters, supplementary lenses, Pola-Screen and Lens Hood must be Series VI.



The Adapter Ring Insert, which is a retaining collar, is first unscrewed from the Adapter Ring. The Adapter Ring is then slipped over the lens mount, and an unmounted Wratten Filter Series VI or supplementary lens Series VI inserted in the Adapter Ring and held in place by screwing in the Adapter Ring Insert.

If it is desired to use a Kodak Pola-Screen with a supplementary lens *or* a filter, the Pola-Screen is first screwed into the Adapter Ring and the filter *or* supplementary lens is placed in front of the Pola-Screen, which then is held in place by the Adapter Ring Insert. If you wish to use a Kodak Lens Hood in this combination, the Adapter Ring Insert is omitted and the Lens Hood is used to hold the filter or supplementary lens in front of the Pola-Screen.

To use a Portrait Diffusion Disk with a filter it will be necessary to obtain a double threaded Kodak Retaining Ring, Series VI. The Portrait Diffusion Disk is placed in the Adapter Ring and then the double threaded Retaining Ring is screwed into the Adapter Ring. The filter is inserted into the Retaining Ring and held in place either with the Adapter Ring Insert or Kodak Lens Hood. If a Kodak Pola-Screen is used in this combination, the Portrait Diffusion Disk is put into the Adapter Ring. Then the double threaded Retaining Ring is screwed into the Adapter Ring, which in turn takes the Pola-Screen. The Wratten Filter is placed in front of the Pola-Screen and held there with Adapter Ring Insert or Kodak Lens Hood.

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OUTDOOR EXPOSURE GUIDE

SUBJECT	STOP OPENING	SHUTTER SPEED
Average Subjects: Near-by People, Gardens, Houses, Scenes <i>not in shade.</i>	<i>f/11</i>	<i>1/25</i>
Bright Subjects: Near-by People in Marine, Beach, and Snow Scenes. Scenics with foreground objects.	<i>f/16</i>	<i>1/25</i>
Brilliant Subjects: Beach, Marine, and Snow Scenes, Distant Landscapes and Mountains without prominent dark objects in the foreground.	<i>f/22</i>	<i>1/25</i>
Shaded Subjects: People, Gardens, and other subjects in Open Shade (lighted by open sky, not under trees, porch roof, etc.)	<i>f/6.3</i>	<i>1/25</i>
Moving Objects: When photographing a moving object such as a runner, train or an automobile, the subject should be moving towards or away from the camera at an angle of about 45 degrees.	<i>f/6.3</i>	<i>1/100</i>

Exposures are for the hours from one hour after sunrise until one hour before sunset on days when the sun is shining. If pictures are made earlier or later, or if it is a *slightly* cloudy or hazy day, use a larger stop opening. This table is for Kodak Verichrome and Panatomic-X Films.

With Kodak Super-XX Panchromatic Film use the second smaller stop opening, or use a shutter speed four times as fast as that given in the table.

The largest stop opening is *f/6.3*. The *higher* the number the *smaller* the opening.

For details and prices see your Kodak dealer.

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