

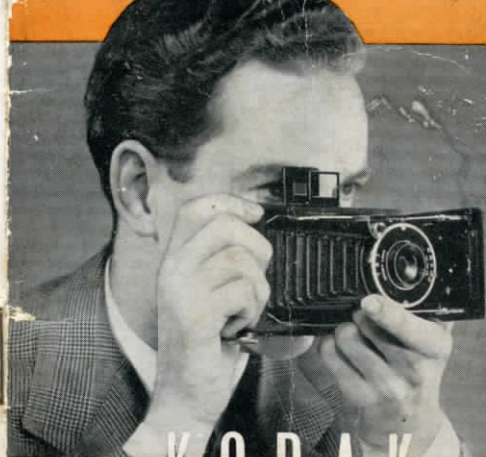
Outdoor Exposure Guide

SUBJECT	LENS OPENING	SHUTTER SPEED
Average Subjects: Near - by People, Gardens, Houses, Scenes <i>not in shade.</i>	f/12.5	"1"
Bright Subjects: Near - by People in Marine, Beach, and Snow Scenes. Scenics with foreground objects.	f/16	"1"
Brilliant Subjects: Beach, Marine, and Snow Scenes, Distant Landscapes and Mountains without prominent dark objects in the foreground.	f/22	"1"
Shaded Subjects: People, Gardens, and other subjects in Open Shade (lighted by open sky, not under trees, porch roof, etc.).	f/12.5	"1"
	f/32	T 1 sec.
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.	f/12.5	"1"

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 lens opening. This table is for Kodak Verichrome and Plus-X Films.

With Kodak Super-XX Panchromatic Film use the next smaller lens opening.

For Kodacolor Film, follow the exposure guide packed with the film.



KODAK
VIGILANT
JUNIORS

SIX-20 AND SIX-16

WITH KODAK LENS AND KODAK SHUTTER



THERE ARE

6 Easy Steps

TO GOOD
PICTURES WITH
YOUR KODAK VIGILANT JUNIOR

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

The six 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 Junior Six-20. The Six-16 makes pictures $2\frac{1}{2} \times 4\frac{1}{4}$ inches in size.

1 LOADING



Fig. 1

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).



Fig. 2



Fig. 3

Open the back (Fig. 2).

Place the roll of film in the recess adjoining the hinge of the back, Fig. 3.

2

Load your Kodak with Kodak Film. See pages 14 and 15 for the descriptions of the different kinds of Kodak Film. They meet every picture-taking need.

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.

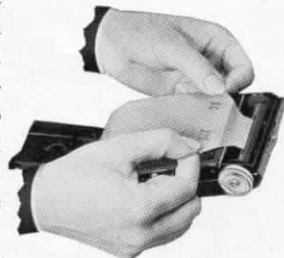


Fig. 4

Remove the paper band and pass the protective paper over the opening. Thread the paper through the longer slit in the empty reel, as far as it will go (Fig. 4).




Fig. 5

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.

3

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 when winding the film.

2

OPENING FRONT



Fig. 6

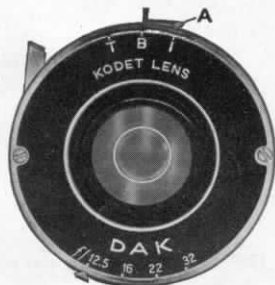
PRESS the button near the winding knob to open the front of the Kodak; then draw down the bed carefully until it locks (Fig. 6). This will bring the lens and the shutter into position.

The Kodak Vigilant Juniors, Six-20 and Six-16, with the Kodet Lens, are fixed-focus models, and therefore no further adjustments for focusing are necessary. To get the subject sharp and distinct in the picture, the Kodak must not be nearer than a certain number of feet to the subject, see table on page 18.

3 SETTING THE SHUTTER

THE Dak Shutter has three settings. For snapshots or instantaneous exposures, move exposure indicator A to "I." For time or "bulb" exposures, move exposure indicator A to "T" or "B," see page 19.

It is recommended that immediately after making a time or "bulb" exposure the indicator A be moved to letter "I," to make the Kodak ready for snapshots.



4 LENS OPENINGS

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



For average subjects outdoors when the sun is shining, move lever B to *f/12.5*, and exposure indicator A to "I." The Outdoor Exposure Guide on the back cover tells which openings to use for other types of subjects.

5 THE FINDERS

THE Kodak Vigilant Juniors have two finders: The direct view finder and the reflecting finder.

THE DIRECT VIEW FINDER (page 11) is brought into position by lifting the rear

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. Unusual effects can be obtained by tilting the Kodak.

After composing the picture in either the direct view or the reflecting finder of a subject 10 feet or nearer to the Kodak (see table on page 18), it will be necessary to move the Kodak a *little* to the left 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 you wish to photograph.

THE REFLECTING FINDER (page 11) shows what will appear in the picture, but on a much reduced scale.

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 turning to the right or left.

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



HOLD THE KODAK STEADY

ABOVE: Holding the Kodak for a vertical picture, using the reflecting finder.



BELOW: Holding the Kodak for a horizontal picture, using the reflecting finder.

6

SNAP THE PICTURE

Hold the Kodak in either the vertical or horizontal position; then press the exposure lever C.



When pressing the lever, 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 (an accessory) for self-portraiture. To attach the cable release to the shutter, screw it into the opening directly behind the exposure lever C. Remove the cable release before closing the Kodak.



Fig. 7

CLOSING THE KODAK

To close the Kodak, 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. Front and bellows fold automatically.

REMOVING THE FILM

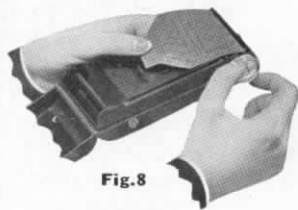
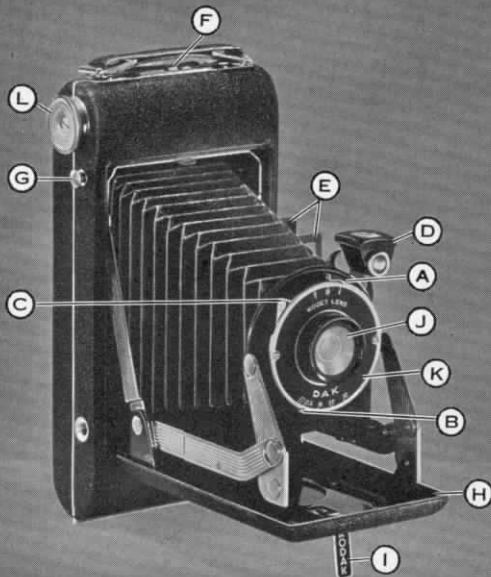


Fig. 8

TO UNLOAD the Kodak after the last picture has been made, turn the winding knob until the end of the protective paper on

the roll of film 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.



- A. Exposure Indicator
- B. Lens Opening Lever
- C. Exposure Lever
- D. Reflecting Finder
- E. Direct View Finder
- F. Lock for Back

- G. Button for Opening and Closing Front
- H. Bed
- I. Vertical Support
- J. Lens
- K. Shutter
- L. Winding Knob

Take hold of the end of the protective paper and sticker, draw out the winding knob and remove the film. 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 the end of the spool. The Kodak should now be reloaded with Kodak Film, see pages 14 and 15. Keep a roll in the Kodak and it will be ready at all times to take pictures.



A suggestion for an interior story telling picture. Such a picture can be made easily with Photoflood Lamps, see page 25.

The All-Purpose Film

Fine Grain—Greater Speed

For Pictures at Night

Pictures in Full Color

KODAK
VERICHROME FILMKODAK PLUS-X
PANCHROMATIC
FILMKODAK SUPER-XX
PAN FILMKODACOLOR
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 Kodak; V616 for the Six-16 Kodak. 14

The high speed and fine grain of Kodak Plus-X Panchromatic Film make it the ideal film for general outdoor work when panchromatic results are desired. 8 exposures. PX620 for the Six-20 Kodak; PX616 for the Six-16 Kodak.

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 Kodak; XX616 for the Six-16 Kodak.

Exposed outdoors in bright sunlight only, it yields color negatives from which Kodacolor Prints can be ordered through Kodak dealers. 6 exposures. C620 for the Six-20 Kodak; C616 for the Six-16 Kodak. 15



SUGGESTIONS ON EXPOSURE

SNAPSHOTS

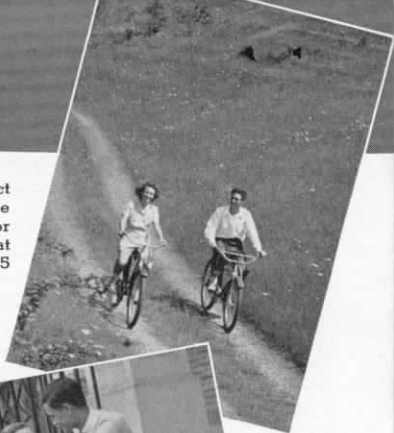
WHEN the sun is shining, it should be behind your back or over the shoulder; if it shines directly into the lens, it will blur and fog the picture. However, beautiful effects can be obtained by back or side lighting. When the Kodak is pointed towards the sun, the lens must be shaded so that the direct sunlight will not strike the lens; for the best results, use the Lens Hood of the Kodak Combination Lens Attachments, see page 27.

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.

Sunshine is not needed to make snapshots with your Kodak Vigilant Junior. With the largest lens opening ($f/12.5$), satisfactory snapshots can often be made with the subject in open shade, and on *slightly* cloudy or hazy days.

See the Outdoor Exposure Guide on the back cover of this manual.

For a moving object the subject should be moving towards or away from camera at an angle of about 45 degrees.



When subject is in the open shade make a snapshot using $f/12.5$.



For near-by subjects on the beach in sunshine, make a snapshot with stop $f/16$.



NEARNESS OF SUBJECT

To get the subject sharp and distinct in the picture, the Kodak must not be nearer than a certain number of feet to the subject. This distance varies with the size of the lens opening used; the smaller the opening the shorter the distance. The nearest distance the subject should be to the lens of the Kodak, with the different lens openings, is given in the table below:

For Kodak Vigilant Junior Six-20	
Lens Opening	Nearest Distance from Lens to Subject
<i>f/12.5</i>	8 feet
<i>f/16</i>	6½ feet
<i>f/22</i>	5 feet
<i>f/32</i>	4 feet
For Kodak Vigilant Junior Six-16	
Lens Opening	Nearest Distance from Lens to Subject
<i>f/12.5</i>	10 feet
<i>f/16</i>	8¾ feet
<i>f/22</i>	7 feet
<i>f/32</i>	5½ feet

TIME AND "BULB" EXPOSURES

For a subject in the deep shade, under the roof of a porch or under a tree, and on dark, cloudy days, a time exposure should be made. Time or "bulb" exposures must also be used for portraits indoors by daylight and for pictures of interiors. 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, move the exposure indicator A to the letter "T," see page 11, press the exposure lever C once to open the shutter and again to close it. For a "bulb" exposure, move the exposure indicator A to the letter "B," then press the exposure lever C; the shutter will remain open as long as lever C is held down.

ROOM INTERIORS BY DAYLIGHT

TO MAKE a picture of a room interior by daylight, adjust the shutter for a time

exposure by moving the exposure indicator A at the top of the shutter to "T." Set the lens opening lever B at $f/16$ (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 I for a vertical picture. For a horizontal picture place some small object under the side and front of the camera to avoid tilting. 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. Be sure there is no furniture close to the camera lens.

Steady the Kodak and press the exposure lever once to open the shutter. When the proper time has elapsed (see Exposure Guide below), press the lever again to close the shutter.

After the last time exposure has been made, move the exposure indicator A at the top of the shutter to "I."

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 $\frac{1}{4}$ seconds, with $f/16$. 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 8 to 16 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 16 seconds, using $f/16$, 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 Plus-X Panchromatic Films; with Kodak Super-XX Pan Film give one-half the exposure.

Best average results are obtained with $f/16$. Double the exposures with each smaller lens opening, and halve the exposures with $f/12.5$.

DAYTIME PORTRAITS INDOORS

TO MAKE an indoor portrait by ordinary daylight, similar to that shown on page 23, have the subject stand or be seated in front of an unshaded window, with the body preferably at a diagonal to the camera.

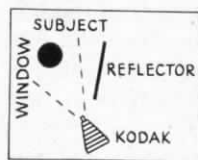
Place a reflector (a sheet or tablecloth thrown over a screen or chair will do) a few feet from the subject and at the angle shown in the diagram. This reflects light to the shaded side of the face.

Move the exposure indicator A at the top of the shutter to the letter "B." The lever B at the bottom of the shutter should be at $f/12.5$.

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. The

For large portraits use a Kodak Close-Up Attachment, pages 24 and 25.



subject must not be closer to the lens than the distance given in the table on page 18. 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 7.

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

KODAK CLOSE-UP ATTACHMENT

THE Kodak Close-up Attachment makes head and shoulder portraits. It can also be used for photographing flowers and similar subjects.

Place the Attachment over the lens and compose the picture in the finder. Turn the Kodak just a *little* to the left, as the short distance at which the subject must be from the lens makes it necessary to center the subject by eye instead of by the finder.

The subject must be about $3\frac{1}{2}$ feet

from the lens. Measure the distance carefully from the lens to the face.

The same exposure is required as without the Attachment.

Use the *Kodak Close-up Attachment No. 6A*, with the Kodak Vigilant Juniors Six-20 and Six-16, with Kodet Lens.

PHOTOFLOOD PICTURES

INDOOR snapshots can be made using Photoflood Lamps which give a steady light of great brilliance.

LAMPS—Obtain one No. 1 and one No. 2 Photoflood Lamp and suitable reflectors from your photographic dealer. Photoflood Lamps fit all regular lamp sockets and the No. 2 lamp gives twice the light of the No. 1 lamp.

FILM—For snapshots with Photofloods, use only Kodak Super-XX Film. **CAUTION:** Do not touch the lamps or allow them to be in contact with anything while they are in use because they become quite hot.

SNAPSHOTS WITH PHOTOFLOODS

PLACE the subject near a light-colored background with a lamp at each side as shown in the diagram. Both lamps must

be $3\frac{1}{2}$ feet from the subject and the No. 2 lamp should be from 2 to 4 feet higher than the No. 1 lamp.

Set the Time Lever at the letter "I."

Hold the camera steady and compose the picture in the finder—be sure the lamps are not included in the picture.

Press the Exposure Lever just as you would to take a snapshot outdoors.

PHOTOFLASH PICTURES

To make flash pictures, obtain a battery case with reflector and the desired num-

ber of SM or No. 5 Photoflash Lamps from your dealer.

Place the camera on a tripod or on some other firm support. The distance between subject and lens should not be nearer than 8 feet with the Kodak Vigilant Junior Six-20 or 10 feet with the Six-16, unless a Kodak Close-Up Attachment is used. Adjust the shutter to make a time exposure; see page 19. Set the lens opening lever at $f/12.5$.

Turn out the room lights. Press down on the exposure lever to open the shutter, flash the lamp, then press the exposure lever again to close the shutter.

KODAK COMBINATION LENS ATTACHMENTS

THE Series V Lens Attachments are used with the Kodak Vigilant Juniors Six-20 and Six-16 with the Kodet Lens. The Kodak Adapter Ring must be $1\frac{1}{8}$ inches in diameter. All Wratten Filters, supplementary lenses, Pola-Screen and Lens Hood must be Series V.

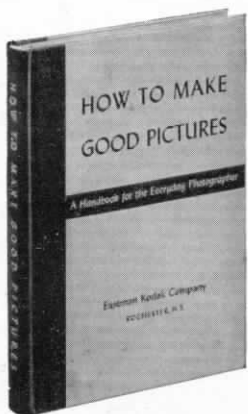
EASTMAN KODAK COMPANY
ROCHESTER 4, N. Y.

Exposures with No. 5 or SM Flashlamps

Film	Lamp-to-Subject Distance in Feet	
	SM Flashlamp	No. 5 Flashlamp
Verichrome	From 5 ft to 12 ft	From 6 ft to 15 ft
Plus-X	From 6 ft to 15 ft	From 7 ft to 18 ft
Super-XX	From 8 ft to 20 ft	From 9 ft to 25 ft

NOTE: Distances are from lamp to subject for interiors with light-colored walls and furnishings and for use with lens opening $f/12.5$.

CAUTION: It is recommended that a protective transparent screen be used in front of the reflector as the flashlamps may shatter. Do not flash lamps in an explosive atmosphere.



“HOW TO MAKE GOOD PICTURES”

Explains every phase of photography in which the amateur is likely to be interested, including methods of making pictures, developing, printing, enlarging, coloring, interior photography, home portraiture, etc. Profusely illustrated. Sold at your dealer's.

EASTMAN KODAK CO., ROCHESTER 4, N. Y.

This Instruction Manual

Was prepared to help you make good pictures right from the start, and consequently get more enjoyment from photography. There are many Kodak Publications on various phases of photography available at your Kodak dealer's—some free and some at a nominal price. Ask for them. Any comments or questions concerning your results with this camera or your interests in picture making will be welcome.

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