

Picture taking with the
No. 3A Kodak
Series II

Kodak Anastigmat Lens *f*.4.5

SERVICE DEPARTMENT

ADDITIONAL ASSISTANCE FOR MAKING
BETTER PICTURES

ALTHOUGH we give in this manual the essential directions for using the camera it accompanies, there are amateurs who wish for further knowledge of photography

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SERVICE DEPARTMENT
EASTMAN KODAK COMPANY
ROCHESTER, N. Y., U. S. A.

Picture taking with the

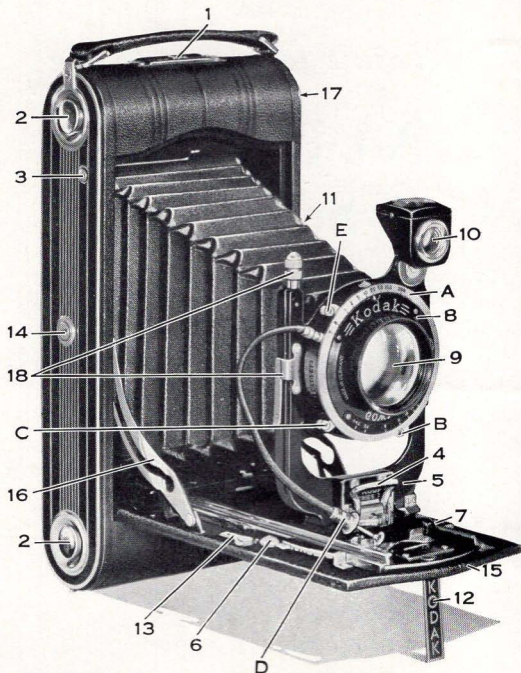
**No. 3^A Kodak
Series II**

Kodak Anastigmat Lens *f*.4.5

Published by

**EASTMAN KODAK COMPANY,
ROCHESTER, N Y**

THE CAMERA



- | | |
|--|---|
| 1—Lock for Back | 11—Metal Frame Finder |
| 2—Spool Pins | 12—Support for Vertical Time Exposures |
| 3—Button for Opening the Front | 13—Support for Horizontal Time Exposures |
| 4—Handle for Drawing out Lens Standard | 14—Tripod Socket |
| 5—Lens Standard | 15—Bed |
| 6—Focusing Lever | 16—Bed Brace |
| 7—Focusing Scale | 17—Winding Key |
| 8—Shutter | 18—Spring Catch and Milled Screw for Adjusting the Rising Front |
| 9—Lens | |
| 10—View Finder | |
| | A—Collar for Regulating Speed |
| | B—Stop Opening Pointer |
| | C—Exposure Lever |
| | D—Cable Release |
| | E—Setting Lever |

IMPORTANT

BEFORE loading your Kodak with film, and before taking any pictures with it, read these instructions carefully. Take especial care to learn how to operate the shutter.

While loading and unloading, be very careful to keep the protective paper wound tightly around the film to prevent light striking it. The Kodak can be loaded or unloaded in daylight. This should be done in a subdued light, *not* in direct sunlight.

TO LOAD

Use film number **V 122, SS 122, F 122** or **122** for the No. 3A Kodak Series II.

Push the button of the lock under the carrying handle in the direction of the arrow and open the back.



Draw out the spool pins, in the end opposite the carrying handle and insert the roll of film into the recess. Make sure that the word "TOP" on the paper is on the same side as the winding key, see illustrations on page 4.

Push back the spool pins, so that they enter the holes in the ends of the spool.



Remove the paper band and pass the protective paper *over* the two rollers. Thread the paper into the *longer* slit in the empty reel *as far as it will go*, see illustration below



Turn the key once or twice to bind the paper on the reel. The paper must draw straight, see the illustration at top of page 5.

Close the back, pressing it so that the spring lock snaps into place, securely fastening the back.

Push the round slide that covers the red window on the back of the Kodak in the direction of the arrow

Press in and turn the winding key, watching the red window

After a few turns, a warning hand will appear, then turn slowly until the figure 1 is in the center of the window



Push back the slide over the red window. This slide prevents fogging Super Sensitive Panchromatic and Panatomic Film, and makes it unnecessary to use the adhesive fabric included with each roll of these films.



The film is now in position for the first exposure. After each exposure be sure to wind the film, bringing the next number into position. This prevents making two pictures on the same section of film.



OPENING THE FRONT

Press the button and pull down the bed of the camera.

Draw out the lens standard as far as it will come, by the handle at the bottom of the standard, see illustration below. Lock the standard in position by pushing up the handle. The Kodak is now in focus for distant objects, anything about 100 feet or beyond, see table on page 12.



TO FOCUS THE KODAK

The No. 3A Kodak Series II has a focusing scale and simple acting lever device for quick and accurate focusing.

The focusing scale on the camera bed is marked for 6, 8, 10, 12, 15, 25, 50 feet, and ∞ (Infinity)



When the lens standard is drawn out as far as it will come, the indicator will be at the ∞ (Infinity) mark on the focusing scale.

To adjust the focus for subjects at distances nearer than infinity, press down and move forward the focusing lever, until the indicator over the focusing scale is exactly at the line marked with the figure corresponding nearest to the distance in feet, between the camera and the *principal object* to be photographed.

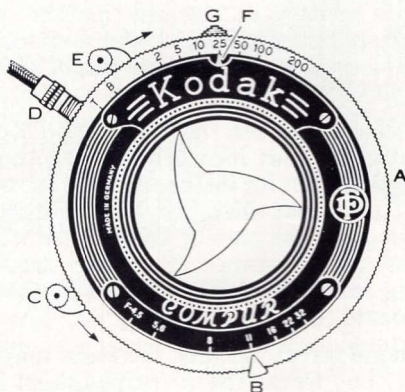
The distance between the subject and Kodak can be estimated without measuring, when the subject is *beyond fifteen feet*, for instance, if the focus is set at 25 feet (the usual distance for ordinary street scenes) the sharpest part of the picture will be the objects at that distance from the camera, but everything from about 20 to about 35 feet will be in good focus.

For general street pictures the focus may be kept at 25 feet, but where the *principal object* is nearer or farther away, the focus should be changed accordingly

For distant views set the focus at ∞ (Infinity) Everything 149 feet and beyond is in focus when the Kodak is set at ∞ , and stop *f.4.5* is used, with smaller stop openings the subject can be much closer to the lens, see page 12. Nothing nearer than six feet can be focused without using a Kodak Portrait Attachment, see pages 26 and 27, or a small stop opening, see table on page 12.

THE SHUTTER

The Compur Shutter is marked for making exposures of 1 second and 1/2, 1/5, 1/10, 1/25, 1/50, 1/100 and 1/200 second, as well as Time and "Bulb" Exposures.



Revolve the knurled collar A on the front of the shutter until the figure representing the time of exposure desired is at the white pointer F

Exposures of intermediate speeds can be made from 1 second to 1/100 (except between 1/10 and 1/25) by setting the shutter between the exposure numbers on the shutter, thus an exposure of 1/75 second is made by turning the knurled collar so that the white pointer F is midway between 1/50 and 1/100. Intermediate exposures cannot be made between 1/100 and 1/200 second.

For all exposures from 1 second to 1/200 second the shutter *must be set* by pressing the lever E towards the top of the shutter. The exposure is

made by pressing the exposure lever C or the cable release D. Time and "Bulb" Exposures do not require *setting* the shutter

THE SELF-TIMER

There is a self-acting release built into the shutter, for the convenience of those who wish to be included in the picture.

To use the "Self-Timer," push the setting lever E, as far as it will go, then push the knob G, towards the back of the camera, now push the setting lever E, to the end of the slot. Push the exposure lever C or the push-pin of the cable release. Get into the picture. After about fifteen seconds the exposure will be made.

This self-acting release cannot be used with 1/200 second, nor with Time or "Bulb" Exposures.

TIME AND "BULB" EXPOSURES

To make a Time Exposure the letter "T" engraved on the shutter must be at the white pointer F, and the exposure lever C, or push-pin of cable release D, pressed twice, once to open the shutter, and again to close it.

For "Bulb" Exposures the letter "B" engraved on the shutter must be at the white pointer F, and the exposure lever C, or push-pin of cable release D, pressed down, the shutter remains open as long as the lever C or the push-pin is held down.

Automatic exposures of 1 second, 1/2, 1/5, or 1/10 second must not be made with the camera held in the hands. The Kodak has two tripod sockets for use with a tripod, an Optipod or a Kodapod.

Important: *Never oil the shutter* In case of accident, return the camera to your dealer or to us for repairs.

STOP OPENINGS

The stop openings regulate the amount of light passing through the lens. The openings are enlarged or reduced by moving the pointer B, see illustration, page 8.

f.4.5—For exposures of moving objects on gray days, use 1/100 second, for portraits indoors, see page 24, use 1/10 second, when the light is very bright. For outdoor subjects on cloudy days and during rain in the middle of the day, use 1/50 second. For exposures early or late on clear days use 1/50 second, if on a cloudy day, use 1/25 second.

Important: When using *f.4.5* or *f.5.6*, and the distance between subject and camera is ten feet or less, the distance must be accurately measured as the depth of focus is limited, see table on page 12.

f.5.6—For portraiture, see pages 24 and 26. For exposures of rapidly moving objects in sunlight use 1/200 second. For cloudy days and during rain in the middle of the day, use 1/25 second. For portraits and groups in the open shade, use 1/25 second, see page 26.

f.8—For instantaneous exposures 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 nearby 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, also for Interior Time Exposures, the time for which is given in the table on page 25.

f.22—For instantaneous exposures of extremely distant landscapes, marines, snow scenes without prominent dark objects in the foreground, and clouds only, in bright sunlight, use 1/25 second, also for Time Exposures.

f.32—For Time Exposures Outdoors on cloudy days, see table on page 28. For Interior Time Exposures, see page 25. *Never for instantaneous exposures.*

Failure will result, if stop f.32 is used for *instantaneous exposures*.

The smaller the stop opening the greater the depth of focus, see pages 12 and 13.

All exposures given for outdoor subjects are for the hours from one hour after sunrise until one hour before sunset, when using Kodak Verichrome, Super Sensitive Panchromatic or Panatomic Film. If Kodak N C. Film is used, exposures can be made from 2½ hours after sunrise until 2½ hours before sunset. If earlier or later, the exposures must be longer

For a subject in the shade, under the roof of a porch, or under a tree, a time exposure must be made, see page 28. When making pictures under these conditions, the camera must be placed on some steady, firm support.

DEPTH OF FOCUS

Depth of focus is the distance from the nearest to the farthest objects that will appear sharp in the

Depth of Focus for Different Stop Openings

By "depth of focus" is meant the distance in front of and behind the subject focused on, within which details in the picture will be sharp and distinct.

| STOPS | <i>f</i> .4.5 | <i>f</i> .5.6 | <i>f</i> .8 | <i>f</i> .11 | <i>f</i> .16 | <i>f</i> .22 | <i>f</i> .32 | | | | | | | |
|-----------------------|--------------------------------------|------------------------------------|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|
| Distance Focused Upon | RANGE OF SHARPNESS | | | | | | | | | | | | | |
| | ft. | ft. | ft. | ft. | ft. | ft. | ft. | ft. | ft. | ft. | ft. | ft. | ft. | ft. |
| ∞ (Inf.) | 149 to inf. | 120 to inf. | 84 to inf. | 61 to inf. | 42 to inf. | 30 to inf. | 21 to inf. | | | | | | | |
| 50 ft. | 37 to 75 | 35 $\frac{1}{4}$ to 85 | 31 $\frac{1}{3}$ to 123 | 27 $\frac{1}{2}$ to inf. | 22 $\frac{3}{4}$ to inf. | 18 $\frac{3}{4}$ to inf. | 14 $\frac{3}{4}$ to inf. | | | | | | | |
| 25 " | 21 $\frac{1}{2}$ to 30 | 20 to 31 $\frac{1}{2}$ | 19 $\frac{1}{4}$ to 35 $\frac{1}{2}$ | 17 $\frac{3}{4}$ to 42 $\frac{1}{3}$ | 15 $\frac{2}{3}$ to 62 | 13 $\frac{2}{3}$ to 150 | 11 $\frac{1}{2}$ to inf. | | | | | | | |
| 15 " | 13 $\frac{3}{4}$ to 16 $\frac{2}{3}$ | 13 to 17 | 12 $\frac{3}{4}$ to 18 $\frac{1}{4}$ | 12 to 20 | 11 to 23 $\frac{1}{3}$ | 10 to 30 | 8 $\frac{3}{4}$ to 52 $\frac{1}{2}$ | | | | | | | |
| 12 " | 11 to 13 | 10 to 13 $\frac{1}{4}$ | 10 $\frac{1}{2}$ to 14 | 10 to 15 | 9 $\frac{1}{3}$ to 16 $\frac{3}{4}$ | 8 $\frac{1}{2}$ to 20 | 7 $\frac{2}{3}$ to 28 | | | | | | | |
| 10 " | 9 $\frac{1}{2}$ to 10 $\frac{3}{4}$ | 9 $\frac{1}{4}$ to 10 | 9 to 11 $\frac{1}{3}$ | 8 $\frac{2}{3}$ to 12 | 8 to 13 | 7 $\frac{1}{2}$ to 15 | 6 $\frac{2}{3}$ to 19 | | | | | | | |
| 8 " | 7 $\frac{2}{3}$ to 8 $\frac{1}{2}$ | 7 $\frac{1}{2}$ to 8 | 7 $\frac{1}{3}$ to 8 $\frac{5}{6}$ | 7 to 9 $\frac{1}{4}$ | 6 $\frac{3}{4}$ to 10 | 6 $\frac{1}{3}$ to 11 | 5 $\frac{3}{4}$ to 13 | | | | | | | |
| 6 " | 5 $\frac{3}{4}$ to 6 $\frac{1}{4}$ | 5 $\frac{2}{3}$ to 6 $\frac{1}{3}$ | 5 $\frac{1}{2}$ to 6 $\frac{1}{2}$ | 5 $\frac{1}{2}$ to 6 $\frac{2}{3}$ | 5 $\frac{1}{4}$ to 7 | 5 to 7 $\frac{1}{2}$ | 4 $\frac{2}{3}$ to 8 $\frac{1}{3}$ | | | | | | | |

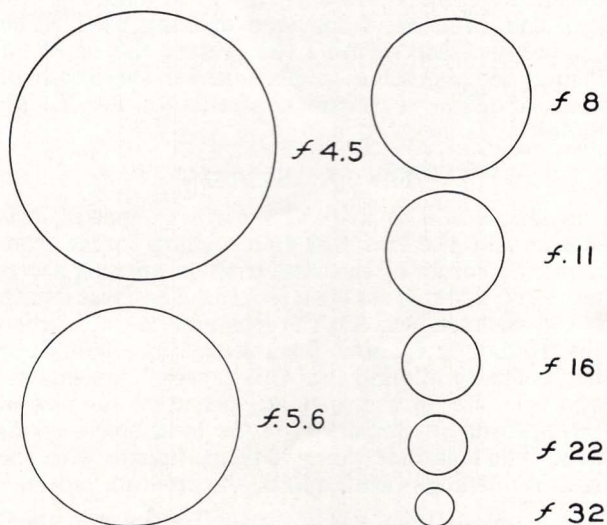
"Inf." is the abbreviation for Infinity—meaning an unlimited distance from the lens.

negative or print. It depends upon the distance between the subject and lens, the focal length of the lens and the size of the stop opening used. The smaller the stop opening the greater the depth of focus. See the table on page 12 for the depth of focus or range of sharpness of the No. 3A Kodak Series II.

THE "f." SYSTEM

A lens is said to work at a certain "speed;" this means that the lens will give a sharp image from corner to corner of the film, with an opening a certain proportion of its focal length. The focal length is the *distance* between the lens and the film when the Kodak is focused for infinity. It should be borne clearly in mind that this "speed" depends *not* upon the size of the opening, but upon the size of the opening *in proportion to the focal length of the lens*. The lens that will give sharp images with the largest opening is said to have the greatest "speed."

The proportional size or "value" of the stop opening is designated by the "f" number and is the quotient obtained by dividing the focal length of the lens by the diameter of the opening.



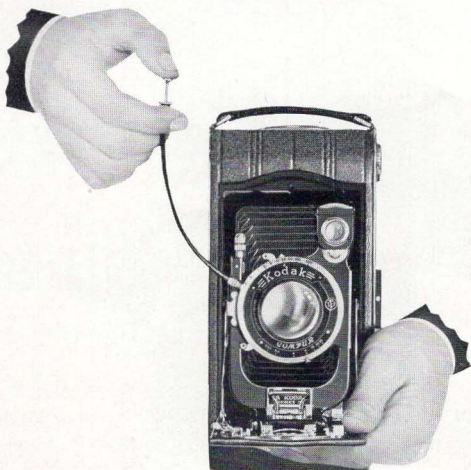
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These circles are the same size as the stop openings of the shutter used on the No. 3A Kodak Series II. They clearly show the relative sizes of the stop openings and how their areas differ

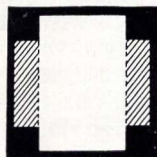
THE VIEW FINDER

The view finder above the shutter shows what will appear in the picture, but on a much reduced scale. See diagrams of the top of finder shown below and on page 17

Look into the finder from directly over the center of it and include what is wanted by turning to the right or left, see illustration on page 16.

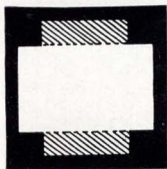
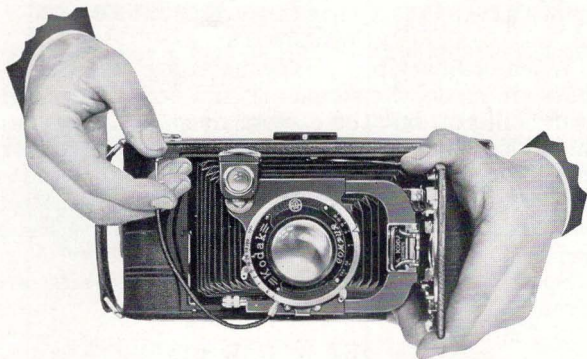


To make a vertical picture, hold the Kodak as shown above. Only what is seen in that part of the finder shown as white in the diagram, will appear in the picture.





When making instantaneous exposures or snapshots with any Kodak, hold it firmly against the body as shown, or against the face if using the metal frame finder. When pressing the push-pin or the exposure lever, hold the breath for the instant. If the Kodak is moved during the exposure, the picture will be blurred.



To make a horizontal picture, turn the finder and hold the Kodak as shown above. Only what is seen in that part of the finder shown as white in the diagram, at the left, will appear in the picture.

THE METAL FRAME FINDER

In addition to the brilliant view finder the camera is equipped with a metal frame finder 11, page 2, attached to the side of the Kodak. To use this finder raise the rear frame by the button and both parts of the finder will spring into position. Hold the camera with the sight or rear frame as close to the eye as possible with the camera held firmly against the face, and frame the picture within the front frame of the finder. All vertical lines in the subject should be kept parallel with the vertical sides of this frame, when holding the camera either in the vertical or horizontal position.

MAKING INSTANTANEOUS EXPOSURES OR SNAPSHOTS

When ordinary instantaneous exposures or snapshots are made, the subject should be in the broad, open sunlight, but the camera must not. The sun should be behind your back or over the shoulder. If it shines directly into the lens it will blur and fog the picture. For obtaining back- or side-lighted pictures use a Kodak Adjustable Lens Hood No. 2 (price 75 cents)

Special instructions for making portraits are given on pages 24 to 27

HOLD THE KODAK LEVEL



Effect produced by tilting the Kodak.

The Kodak must be held level. If all the subject cannot be included in the finder without tilting the lens upwards, move backwards until it is all included *with the camera held level*. See illustration, above.

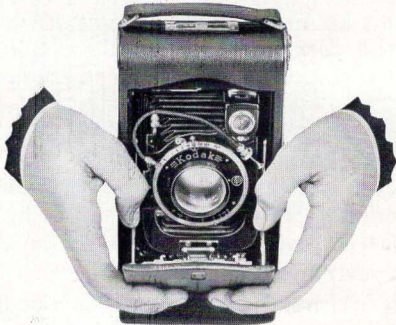
If the subject is below the normal height, like a small child or a dog, the Kodak should be held down level with the center of the subject.



After an exposure has been made, press in and turn the winding key slowly, a few times, until No. 2 (or the next number) is in the *center* of the red window

CLOSING THE KODAK

To close the Kodak, first move the focusing lever back as far as it will go. Unlock the lens standard by pushing down on the handle at the bottom of the standard and slide it back as far as it will go. Place the cable release around the shutter, press down the bed braces on each side of the standard, and raise the bed as shown below



The finder must be in the position for making a vertical picture, the lens properly centered if the rising front has been used and the lens standard

pushed back as far as it will go. Do not make too sharp a bend in the cable release, or it may kink.

REMOVING THE FILM

After the last section of film has been exposed, turn the winding key until the end of the paper passes the red window



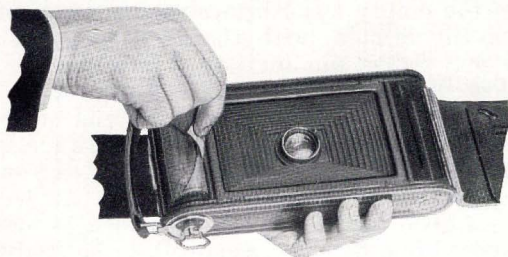
In a subdued light open the back as shown on page 3, and holding the paper taut, turn the key until all the paper is on the roll, see illustration above. If the sticker folds under the roll, turn the winding key to bring it up.

Draw out the spool pin and winding key and remove the roll of film, by taking hold of the protective paper and the sticker, preventing the paper from loosening. See illustration at top of page 21.

Fold under about half-an-inch of the protective paper and fasten it with the sticker

“Cinch” Marks: After removing the film from the Kodak, do not wind it tightly with a twisting motion, or the film might be scratched.

Wrap up the exposed film. It is now ready for development. This may be done by a photo fin-



isher, or by yourself. Our Service Department will be glad to send you, upon request, complete instructions for developing and printing.

Important: Film should be developed as soon as possible after exposure. The quality of the image on all sensitized products is retained by prompt development after exposure.



Take out the empty spool, first drawing out the spool pins which hold it in place.

Slip the empty spool into place at the winding end of the camera, with the slotted end of the spool next to the winding key. Draw out the key to allow the spool to drop into place, and fit the web on the key into the slot in the end of spool, see the lower illustration on page 21. Push the spool pin into the hole in the opposite end of the spool. The camera is now ready for reloading.

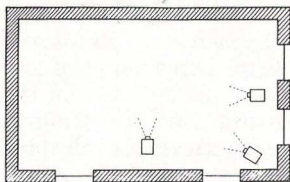
It is a good plan to reload the Kodak as soon as an exposed film has been removed, to be ready for the next pictures. For the best results, load with Kodak Film.

TIME EXPOSURES—INDOORS

For Time Exposures and for all exposures longer than $1/25$ second, always place the Kodak on some firm support, like a tripod, Optipod, table or chair, *never* hold it in the hands. The Kodak has two tripod sockets for use with a tripod, an Optipod, or a Kodapod. The screws in the tripod sockets can be removed and replaced with a thin coin.

Place the Kodak so that the finder will include the view desired then focus the camera.

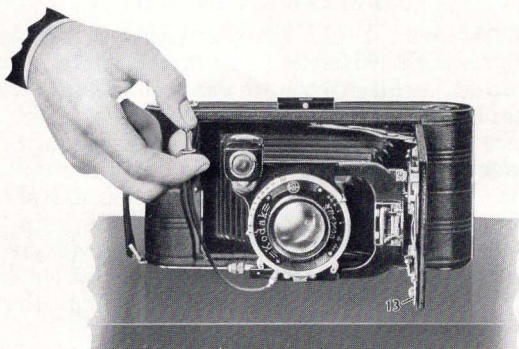




*Diagram showing positions
for Kodak.*

This diagram shows three positions for the Kodak. It should not be pointed directly at a window, as the glare of light may blur the picture.

For a vertical picture, raise the name-plate 12, page 2, on the bed, and place the Kodak on a table or chair. See illustration on page 22. Do not place the Kodak more than two or three inches from the edge of the table or chair.



To make a horizontal picture with the Kodak on a table, turn the support 13, page 2, on the edge of the bed of the camera, turn the finder, and place the Kodak as shown above.

Adjust the shutter for a Time Exposure, as described on page 9.

All being ready, press the push-pin of the cable

release, or press the exposure lever carefully, once to open, time the exposure by a watch, and again press the push-pin or exposure lever to close the shutter

After making a time exposure, turn the winding key until the next number appears in the red window. If no more time exposures are to be made, adjust the shutter for an instantaneous exposure, see page 8.

The exposures given on page 25 are for rooms where windows get the direct light from the sky, and for the hours from three hours after sunrise, until three hours before sunset. If earlier or later, the exposures must be longer

TO MAKE A PORTRAIT

The subject should be seated in a chair partly facing the light with the body turned slightly away from, and the face turned towards the Kodak which should be a little higher than an ordinary table. The subject should look at an object level with the lens or directly at the lens. Compose the picture in the finder. For a three-quarter figure the Kodak should be about eight feet from the subject, and for a full-length figure, about ten feet. The background should form a contrast with the subject, a light background usually gives a better effect than a dark one.

More pleasing results are obtained if the background and surrounding objects are not quite so sharp and clear as the face. This effect is obtained by using a large stop opening, *f.4.5* or *f.5.6*. With these stops make an exposure of about 1/10 second. When using stop *f.4.5* or *f.5.6*, the distance between the subject and the lens must be carefully measured, see Depth of Focus Table on page 12.

Exposure Table for Interiors

The following table gives suitable exposures under varying conditions of light when using stop *f* 16, which gives the best average results for interiors

| | BRIGHT SUN | HAZY SUN | CLOUDY BRIGHT | CLOUDY DULL |
|---|---------------|--------------------|---------------------|---------------------|
| White walls and more than one window | 4 secs. | 10 secs. | 20 secs. | 40 secs. |
| White walls and only one window | 6 secs. | 15 secs. | 30 secs. | 1 min. |
| Medium colored walls and furnishings and more than one window | 8 secs. | 20 secs. | 40 secs. | 1 min. 20 secs. |
| Medium colored walls and furnishings and only one window | 12 secs. | 30 secs. | 1 min. | 2 mins. |
| Dark colored walls and furnishings and more than one window | 20 secs. | 40 secs. | 1 min. 20 secs. | 2 mins. 40 secs. |
| Dark colored walls and furnishings and only one window | 40 secs. | 1 min. 20 secs. | 2 mins. 40 secs. | 5 mins. 20 secs. |

With stop *f*.4.5 give one-twelfth,

“ “ *f*.5.6 “ one-eighth,

“ “ *f*.8 “ one-quarter,

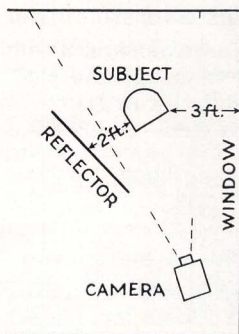
“ “ *f* 11 “ one-half,

“ “ *f*.22 “ twice,

“ “ *f*.32 “ four times

the exposures given in the table.

The smaller the stop opening the greater the depth of focus, see pages 11, 12 and 13.



To get a good light on the face, follow the arrangement shown in the diagram. A reflector helps to get detail in the shaded part of the face. A white towel or table-cloth held by an assistant or thrown over a screen or other high piece of furniture will make a suitable reflector, it should be at an angle and in the position indicated in the diagram.

Making Portraits Outdoors

When making portraits outdoors, with the sun shining brightly, the subject should be in the shadow of a building or a large tree, but with clear and unobstructed sky overhead, use stop $f.5.6$ and $1/25$ second or stop $f.4.5$ and $1/50$ second. By following this rule unpleasant and distorting shadows on the face will be avoided. The best results are obtained with the subject fairly close to the camera and the camera focused accordingly. When the distance between the subject and Kodak is ten feet or less, measure the distance carefully, see table on page 12.

Kodak Portrait Attachment

The Kodak Portrait Attachment is used for making 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 distances at which the subject must be from the lens make it necessary to

center the subject by eye instead of by the finder

The subject must be at one of the distances from the Kodak, given in the table below. Measure the distance carefully from the lens to the face, and place the focusing indicator on the scale according to the table.

| DISTANCE BETWEEN SUBJECT AND LENS MUST BE | THE FOCUSING INDICA- TOR MUST BE SET AT |
|--|--|
| 2 feet 6 inches | 6 feet |
| 2 " 9 " | 8 " |
| 3 " | 10 " |
| 3 " 2 " | 12 " |
| 3 " 4 " | 15 " |
| 3 " 8 " | 25 " |
| 4 " | 50 " |
| 4 " 6 " | ∞ (Inf.) |

When making portraits, the most pleasing results are obtained with the subject three feet or three feet eight inches from the lens, and the focusing indicator set at 10 or 25 feet respectively. For flowers and similar subjects, the shorter distances will be more satisfactory.

The exposure when using the Attachment is the same as without it.

Use *Kodak Portrait Attachment No. 16* with the No. 3A Kodak Series II with *f.4.5* lens.

Kodak Diffusion Portrait Attachment

The Kodak Diffusion Portrait Attachment is a supplementary lens used in the same manner as the regular Kodak Portrait Attachment. It produces a true, soft-focus effect.

Use *Kodak Diffusion Portrait Attachment No. 16* with the No. 3A Kodak Series II with *f.4.5* lens.

"AT HOME WITH YOUR KODAK" is a booklet containing many diagrams and illustrations showing

various lighting effects. It gives suggestions for making pictures in and around the home.

“PICTURE TAKING AT NIGHT” is a booklet that describes in detail the methods of making pictures by electric light, flashlight exposures, campfire scenes, fireworks, lightning, moonlight effects, silhouettes and other novel and unusual pictures.

These two booklets are free, and copies of them will be sent upon request to our Service Department.

TIME EXPOSURES—OUTDOORS

When the smallest stop opening ($f.32$) is used, the light passing through the lens is so much reduced that very short time exposures may be made outdoors.

For short time exposures as described below, use the “Bulb” Exposure, see page 9.

With Light Clouds—From one to three seconds will be sufficient.

With Heavy Clouds—Four seconds to eight seconds will be required.

With Sunshine—Time exposures should not be made.

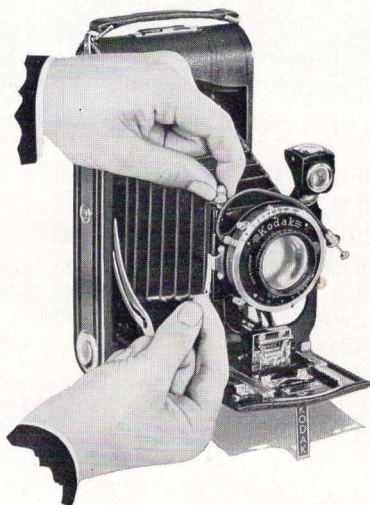
When making time exposures the Kodak must be placed on some steady, firm support, do not hold it in the hands or the picture will be blurred.

RISING FRONT

The rising front is used to cut out undesirable foreground or to include the top of a high building.

To raise or lower the front, release and lift up the catch from the pin on the side of the standard, and at the same time turn the milled head of the post to the right or left. The rising front can be used to

advantage only when making vertical pictures. When through using, center the lens by moving the front up or down, as the case may be, until the pin in the standard fits into the notch in the catch.

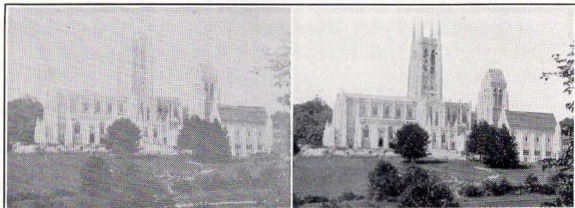


To make the entire picture sharp, when using the rising front, use a small stop opening ($f.22$ or $f.32$) and as this necessitates a comparatively slow exposure, a tripod or some other firm support must be used.

When using the rising front, the finder does not show exactly the same view that is registered on the film by the lens of the camera.

Important: After using the rising front, the lens must be centered before closing the Kodak.

CLEAN LENSES



Made with Dirty Lens.

Made with Clean Lens.

These pictures illustrate the difference between results with a dirty and a clean lens.

Lenses should be cleaned as follows

Open the back of the Kodak, see page 3, then open the front as described on page 6. Wipe the front and back of the lens with Lens Cleaning Paper or a clean handkerchief. Never unscrew the lens.

Keep Dust Out of the Camera

Wipe the inside of the camera and bellows occasionally, with a slightly damp cloth, especially if the camera has not been used for some time.

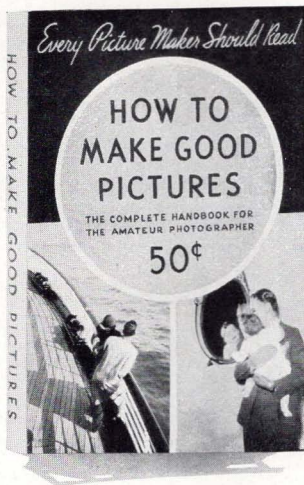
PRICE LIST

| | |
|---|--------|
| KODAK VERICHROME FILM, V 122, for the No. 3A Kodak, Series II, size $3\frac{1}{4} \times 5\frac{1}{2}$, six exposures | \$.55 |
| Ten exposures | .90 |
| KODAK SUPER SENSITIVE PANCHROMATIC FILM, SS 122, six exposures | .65 |
| KODAK PANATOMIC FILM, F122, six exposures | .65 |
| KODAK N. C. FILM, 122, six exposures | .50 |
| KODAK PORTRAIT ATTACHMENT, No. 16, for use with the No. 3A Kodak, Series II with <i>f</i> .4.5 lens. | 2.00 |
| KODAK SKY FILTER, No. 16 | 3.30 |
| KODAK COLOR FILTER, No. 16 | 3.30 |
| KODAK PICTORIAL DIFFUSION DISK, No. 16 | 5.00 |
| KODAK ADJUSTABLE LENS HOOD, No. 2 | 75 |
| KODAK METAL TRIPOD, No. 0 | 2.75 |
| No. 1 | 4.50 |
| No. 2 | 5.00 |
| OPTIPOD, for attaching camera to the edge of a table, chair, fence, etc. | 1.25 |
| KODAPOD, for attaching camera to a tree, fence or similar rough surface | 1.75 |
| KODAK NEGATIVE ALBUM, for 100 3A negatives | 1.50 |
| KODAK TRIMMING BOARD No. 2, capacity 7 x 7 inches | 1.25 |
| KODAK ALBUM, flexible leather cover size 7 x 11, loose-leaf, 50 black leaves | 3.00 |
| "HOW TO MAKE GOOD PICTURES," an illustrated book of helpful suggestions; it includes various methods of making exposures, developing, print- ing, enlarging, coloring, and other interesting subjects | .50 |

All prices subject to change without notice.

EASTMAN KODAK COMPANY,

ROCHESTER, N Y



A PRACTICAL book for amateurs. It describes in a simple, understandable way every phase of photography that they are likely to be interested in, such as various methods of making exposures, developing, printing, enlarging, coloring, and other interesting subjects. Profusely illustrated.

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IMPORTANT

This manual should be read thoroughly, before you make any pictures.

While loading and unloading the camera, be very careful to keep the protective paper wound tightly around the film to prevent light striking it.

Before making an exposure be sure that the shutter is adjusted properly, using the correct stop opening and speed. The camera must be focused and an unexposed section of film in position.

The sun must be behind your back or over the shoulder. If the sun shines directly into the lens it will blur and fog the picture.

Hold the camera *level*.

Hold the camera *steady* when making instantaneous exposures or snapshots. The camera should be held firmly against the body (or against the face if using the metal frame finder) and when pressing the push-pin or the exposure lever, hold the breath for the instant. If the camera is moved during the exposure, the picture will be blurred.

Turn a new section of film into position immediately after making the exposure. This prevents making two pictures on the same section of film.

Keep the lens and inside of the camera clean.

Never oil the shutter

Instructions for making time exposures, indoors and outdoors, are included in this manual.

EASTMAN KODAK COMPANY,
ROCHESTER, N Y

Outdoor Exposure Guide

for cameras fitted with the
Kodak Anastigmat Lens *f.4.5*

| SUBJECT | STOP OPENING | SHUTTER SPEED |
|--|-----------------|------------------|
| Nearby landscapes showing little or no sky. Nearby subjects in open field, park or garden. Street scenes. | <i>f.11</i> | 1/25 |
| Ordinary landscapes showing sky with a principal object in the foreground. | <i>f.16</i> | 1/25 |
| Marine and beach scenes. Distant landscapes. Mountains. Snow scenes without prominent dark objects in the foreground. | <i>f.22</i> | 1/25 |
| Portraits in the open shade, not under trees or the roof of a porch. Shaded nearby scenes. | <i>f.5.6</i> | 1/25 |
| | <i>f.4.5</i> | 1/50 |
| Narrow and slightly shaded streets. | <i>f.8</i> | 1/25 |
| Moving objects. When photographing a moving object such as a runner, train or an automobile, the subject should be traveling towards or away from the camera at an angle of about 45 degrees. | <i>f.5.6</i> | 1/200 |

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 in the day, or if it is a *slightly* cloudy or hazy day use a larger stop opening. This table is for Kodak Verichrome, Super Sensitive Panchromatic and Panatomic Films; if using Kodak N. C. Film, exposures can be made from 2½ hours after sunrise until 2½ hours before sunset.

Kodak Super Sensitive Panchromatic Film is about fifty per cent faster with morning or afternoon light, than Kodak Verichrome Film.

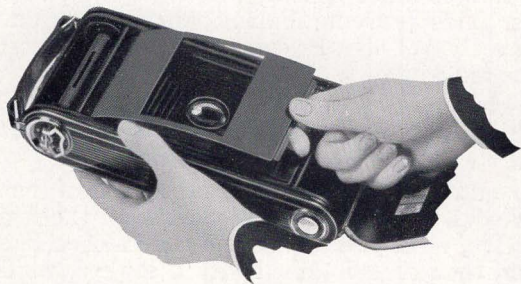
The largest stop opening is *f.4.5*. The *higher* the number the *smaller* the opening.

*How to Use the
Twin Exposure Back of the*

No. 3A Kodak, Series II

WITH the Twin Exposure Back, eleven $2\frac{1}{2}$ x $3\frac{1}{4}$ -inch negatives can be made on Kodak 122 Film.

The Twin Exposure Back must be fitted to your camera by a competent camera repair shop.



Insert the two flanges of the metal mask under the bellows frame as shown in the illustration. Load your Kodak with the Kodak 122 Film in the usual way. Close the back of the camera.

Slip the metal cap over the view finder. The small metal mask must be slipped over the front frame of the metal frame direct view finder. Do not attempt to make pictures with the Twin Exposure Back in place, unless the finders have been provided with the finder masks supplied.

Push back the slides over the red windows. The windows should be uncovered only when winding the film, this should be done in a subdued light, never in direct sunlight.

Turn the winding key until the figure 1 is centered in the window nearest the hinge of the back. Make the first exposure, then turn the winding key until the figure 1 is in the other window. The second exposure should now be made. Each number appears twice, first in the window nearest the hinge of the back, then in the other. *Make only one exposure on figure 6*, as this will be the eleventh exposure. After every exposure, turn the winding key until the same or a new number appears in one of the two windows. This prevents making two pictures on the same section of film. Be careful to *center* the numbers in the red windows.

With the mask in place, a *horizontal picture* is made with the camera held *vertically*, and a *vertical picture* with the camera held *horizontally*.

The use of the longer focal length lens of the No. 3A Kodak for a picture half the size of the regular negative, gives you an image which is considerably larger, than that obtained with a camera, which is usually used for obtaining a picture $2\frac{1}{2} \times 3\frac{1}{4}$ inches. The use of a long focal length lens also minimizes any chance of distortion.

When you wish to use your camera for obtaining the regular 3A size negatives ($3\frac{1}{4} \times 5\frac{1}{2}$ inches), remove the mask from the back of the camera, the cap from the view finder, and the small metal mask from the front frame of the metal frame direct view finder. The window nearest the hinge of the back must be used to check the number of exposures.

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