

HOW TO USE YOUR

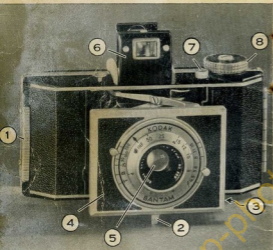
# KODAK BANTAM

Kodak Anastigmat Bantam f.4.5



Eastman Kodak Company, Rochester, N. Y.

## THE CAMERA



- |   |                                   |
|---|-----------------------------------|
| 1. Lock for Back                                | 4. Front Plate                    |
| 2. Standard for<br>Horizontal<br>Time Exposures | 5. Lens                           |
| 3. Standard for<br>Vertical Time<br>Exposures   | 6. Finder                         |
|   | 7. Button for<br>Opening<br>Front |
|   | 8. Winding Knob                   |

## THE KODAK BANTAM

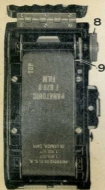
### TO LOAD THE KODAK BANTAM

**K**EEP the protective paper wound tightly around the film to prevent light striking it. The camera should be loaded or unloaded in subdued light. Use one of the following Kodak Films in your Kodak Bantam:

**Kodak Panatomic Film F 828.** This film records color *values* correctly in a black-and-white print. Its very fine grain permits making enlargements of great size.

**Kodak Super X Panchromatic Film X 828.** For indoor pictures with artificial light, and when the lighting conditions are poor. This film also gives correct color *values* in a black-and-white print, and on account of its great speed lengthens the snapshot day.

**Kodachrome Film K 828 or K 828 A.** For color film positives, use the K 828 for daylight, and the K 828 A for Photoflood or Photoflash light. The Kodachrome Film must be returned to an Eastman Kodak Laboratory for processing.



Push the knurled slide on the end of the camera to OPEN (in the direction of the arrow) and lift the back.

Place the film in the end opposite the winding knob 8. The film must be placed in the camera so that when the paper is unwound, the

green side of the paper is up and the black side is towards the lens.

Thread the paper through the longer slit in the reel, as far as it will go (see illustration above).

Turn the winding knob 8 once or twice to bind the paper on the reel, and be sure that the paper is started straight. Should it be impossible to turn the winding knob, press the lever 9 to release it.

Close the back and push the knurled slide on the end of the Kodak to LOCK (in the direction of the arrow).

Turn the winding knob 8 until it locks. The first frame of film is now in position. After making the exposure, press the button 10 while turn-



ing the winding knob about a half turn; then *release the button 10 and continue winding until the knob locks.* The

winding knob is locked every time a new frame of film is wound into position for exposure. The successive frames of film will be brought to position automatically by the perforations on the edge of the film. The green window in the back of the camera can be watched for checking the number of exposures that have been made.

#### **OPENING THE FRONT**

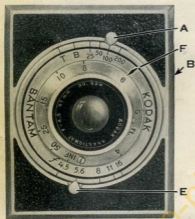
Press the button 7, page 2. The front plate 4, page 2, will automatically spring into position. As the spring is very strong it is advisable to check it by holding the thumb lightly against the front.

#### **MAKING THE EXPOSURES INSTANTANEOUS EXPOSURES**

When making ordinary instantaneous exposures or snapshots, the sun should be behind your back or over the shoulder. If it shines directly into the lens, it will fog the picture. For back- or side-lighted pictures, use a Kodak Adjustable Lens Hood No. 1.

## FOCUSING THE KODAK

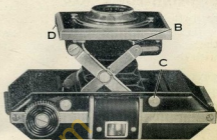
To focus the Kodak, revolve the lens mount until the figure representing the distance between the subject and camera is at the focusing pointer F.



The lens mount is engraved for the following distances: 4, 5, 6, 8, 10, 15, 25, 50 feet and INF. (infinity).

## THE SHUTTER

The shutter is marked for exposures of  $1/25$ ,  $1/50$ ,  $1/100$ ,  $1/200$  second and Time and "Bulb" exposures.



Move the lever A to 25, 50, 100, or 200.

Before the exposure can be made, the shutter must be *set*, by pressing the lever B, behind the front plate, *as far as it will go*. The exposure is then made with the exposure button C.

The shutter must also be *set* for Time and "Bulb" exposures by pushing the setting lever B, after moving the lever A to the letter "T" or "B," indicating Time or "Bulb." For Time Exposures the exposure button C must be pushed *twice*, once to open the shutter and again to close it. For "Bulb" exposures the shutter remains open as long as the exposure button C is held down.

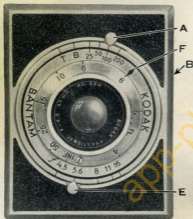
**Cable Release:** A cable release (No. 30) can be used with this Kodak. The

camera can not be closed without first removing the cable release.

To attach the cable release, remove the screw D, page 7, and replace it with the cable release.

### STOP OPENINGS

The stop openings regulate the amount of light passing through the lens. These openings are enlarged or reduced by moving the lever E.



A knowledge of the comparative values of the stop openings is necessary for correctly timing exposures.

The stop openings are marked  $f.4.5$ ,  $5.6$ ,  $8$ ,  $11$ , and  $16$ .

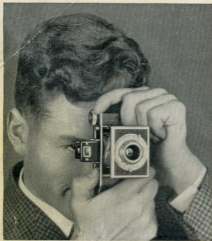
The opening  $f.4.5$  permits fifty per cent more light to enter the lens than  $f.5.6$ , and from  $f.5.6$  to  $f.16$  each smaller opening (larger number) admits half the light of the preceding larger stop opening. Thus, if the correct exposure is  $1/100$  second at  $f.5.6$ ; then the exposure for  $f.8$  should be  $1/50$ ; and for  $f.11$ ,  $1/25$ .

The exposure for the average outdoor subject, when the sun is shining, is  $f.5.6$  and  $1/100$  second. If the day is hazy or slightly cloudy, use  $f.4.5$  and  $1/100$  second. If the day is exceptionally brilliant use the next smaller stop to  $f.5.6$ , that is,  $f.8$  and  $1/100$  second. *The important thing to remember is the average exposure of  $f.5.6$  and  $1/100$  second.* When the light conditions differ from the average, change the aperture, keeping in mind the basic exposure  $f.5.6$  and  $1/100$  second. See the exposure guide on the back cover. (For Kodachrome Film follow the guide included with the film.)

The smaller the stop opening, the greater is the depth of focus or range of sharpness, see the table on page 14.

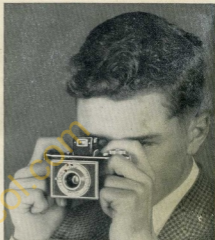
### THE FINDER

The finder 6, page 2, is brought into position by lifting the front frame. It shows what will appear in the picture, but on a much reduced scale.



*Position for vertical picture.*

When viewing, hold the camera 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 camera. When making the exposure, hold the camera 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 holding the camera either in the vertical or horizontal position.



*Position for horizontal picture.*

### **HOLD THE CAMERA STEADY**

The correct method for releasing the shutter of the Kodak Bantam with the camera held in the vertical and horizontal positions is shown in these illustrations.

It has been observed that there is a greater tendency for moving a camera with an eye-level finder, when releasing the shutter, than when using a camera at waist level. Therefore, this



*The exceptionally fine grain of Kodak Panatomic Film insures satisfactory enlargements of almost any size.*

*Prints of the standard size shown above are being offered at reasonable prices, and it is recommended that only prints of this size or larger be ordered from Kodak Bantam negatives.*

## The Depth of Focus for Different Stop Openings

Distance Focused Upon	f-4.5		f-5.6		f-8		f-11		f-16	
	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.
4 feet	3 $\frac{3}{8}$ to 4 $\frac{1}{2}$	3 $\frac{1}{2}$ to 4 $\frac{3}{8}$	3 $\frac{1}{4}$ to 5	3 $\frac{1}{4}$ to 5 $\frac{1}{2}$	2 $\frac{3}{4}$ to 6 $\frac{1}{2}$	2 $\frac{3}{4}$ to 6 $\frac{1}{2}$	2 $\frac{3}{4}$ to 5 $\frac{1}{2}$	2 $\frac{3}{4}$ to 5 $\frac{1}{2}$	2 $\frac{3}{4}$ to 6 $\frac{1}{2}$	2 $\frac{3}{4}$ to 6 $\frac{1}{2}$
5 feet	4 $\frac{1}{4}$ to 5 $\frac{3}{4}$	4 $\frac{1}{4}$ to 6	4 to 6 $\frac{1}{2}$	4 to 6 $\frac{1}{2}$	3 $\frac{3}{4}$ to 7 $\frac{1}{2}$	3 $\frac{3}{4}$ to 7 $\frac{1}{2}$	3 $\frac{3}{4}$ to 7 $\frac{1}{2}$	3 $\frac{3}{4}$ to 7 $\frac{1}{2}$	3 $\frac{3}{4}$ to 9 $\frac{3}{8}$	3 $\frac{3}{4}$ to 9 $\frac{3}{8}$
6 feet	5 $\frac{1}{4}$ to 7 $\frac{1}{4}$	5 to 7 $\frac{1}{2}$	4 $\frac{3}{4}$ to 8 $\frac{1}{2}$	4 $\frac{3}{4}$ to 8 $\frac{1}{2}$	4 $\frac{1}{2}$ to 10	4 $\frac{1}{2}$ to 10	4 $\frac{1}{2}$ to 10	4 $\frac{1}{2}$ to 10	4 $\frac{1}{2}$ to 14 $\frac{1}{4}$	4 $\frac{1}{2}$ to 14 $\frac{1}{4}$
8 feet	6 $\frac{1}{2}$ to 10 $\frac{1}{4}$	6 $\frac{1}{4}$ to 11 $\frac{1}{2}$	5 $\frac{3}{4}$ to 13	5 $\frac{3}{4}$ to 13	5 $\frac{1}{4}$ to 17 $\frac{1}{2}$	5 $\frac{1}{4}$ to 17 $\frac{1}{2}$	5 $\frac{1}{4}$ to 17 $\frac{1}{2}$	5 $\frac{1}{4}$ to 17 $\frac{1}{2}$	4 $\frac{1}{2}$ to 35 $\frac{3}{4}$	4 $\frac{1}{2}$ to 35 $\frac{3}{4}$
10 feet	7 $\frac{3}{4}$ to 13 $\frac{3}{4}$	7 $\frac{1}{2}$ to 15	6 $\frac{3}{4}$ to 19 $\frac{1}{4}$	6 $\frac{3}{4}$ to 19 $\frac{1}{4}$	6 to 31	6 to 31	6 to 31	6 to 31	5 to 39	5 to 39
15 feet	10 $\frac{1}{2}$ to 25 $\frac{1}{2}$	10 to 31	8 $\frac{3}{4}$ to 57	8 $\frac{3}{4}$ to 57	7 $\frac{1}{4}$ to inf.	7 $\frac{1}{4}$ to inf.	7 $\frac{1}{4}$ to inf.	7 $\frac{1}{4}$ to inf.	6 to inf.	6 to inf.
25 feet	14 $\frac{3}{4}$ to 81	13 $\frac{1}{2}$ to 180	11 to inf.	11 to inf.	9 $\frac{1}{4}$ to inf.	9 $\frac{1}{4}$ to inf.	9 $\frac{1}{4}$ to inf.	9 $\frac{1}{4}$ to inf.	7 $\frac{1}{4}$ to inf.	7 $\frac{1}{4}$ to inf.
50 feet	21 to inf.	18 to inf.	14 to inf.	14 to inf.	11 $\frac{1}{4}$ to inf.	11 $\frac{1}{4}$ to inf.	11 $\frac{1}{4}$ to inf.	11 $\frac{1}{4}$ to inf.	8 $\frac{1}{4}$ to inf.	8 $\frac{1}{4}$ to inf.
INF.	35 to inf.	29 to inf.	20 to inf.	20 to inf.	14 to inf.	14 to inf.	14 to inf.	14 to inf.	10 to inf.	10 to inf.

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

Kodak Bantam has been so designed that the shutter is released by pressing a button on the body of the camera. This method of releasing the shutter helps to steady the camera, when making the exposure. *Do not let fingers get in front of the lens.*

The Kodak should be held level if it is desired to have the vertical lines of the subject parallel with the sides of the picture. Unusual effects can be obtained by tilting the Kodak.

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.

### REMOVING THE FILM

After the eighth frame of film has been exposed, the button 10, page 5, must be pressed while the winding knob 8 is being turned.

Give the winding knob two complete turns after the end of the paper has passed the green window; then open the back of the Kodak in a subdued light. Unless the film and protective paper are completely wound on the spool before the back of camera is opened, the self-sealing flanges of the spool will not be automatic.

Remove the spool of film by grasping the flange opposite the winding



knob and drawing the spool away from the post of the winding knob.

**Important:** If the above procedure is followed, the spool of film, when removed from the camera, will be fully wound, and sealed by the special spring flanges of the spool. The protective paper should not be pulled tight or sealed with a sticker or rubber band.

**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.

Remove the empty spool and place it in the winding end of the camera, fitting the hole in the end of the spool over the post of winding knob. The Kodak is now ready for reloading.

### TIME EXPOSURES—INDOORS

For time exposures the camera must always be placed on a firm support like a table or chair; *never* hold it in the hands.

Place the Kodak in such a position that the finder will include the view desired. The diagram on page 17 shows three positions for the camera. It should not be pointed at a window as the glare of light may blur the picture.

When making a horizontal picture, use the standard 2, page 2, for a support; for a vertical picture swing out the standard 3, page 2, and place the camera on its end. The camera must not be more than two or three inches from the edge of the table.



Adjust the shutter for a time exposure by moving the lever A, page 6, to the letter "T."

To make the exposure, the shutter must be *set* by pressing the lever B, page 7, *as far as it will go*; then steady the Kodak with one hand and press the exposure button C, page 7, or the pin of the special cable release, carefully, to open the shutter. Give the proper time (using a watch if more than five seconds). Again press button C (or cable release). This *closes* the shutter. The Kodak *must be steady* or the picture will be blurred; *do not hold it in the hands*.

After making an exposure, press the button 10, page 5, and turn the wind-

ing knob about a half turn; then release the button and turn the winding knob until it locks.

## EXPOSURES FOR INTERIORS BY DAYLIGHT

It is easy to make pictures of interiors by daylight where the windows get direct light from the sky.

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 stop  $f.11$ . 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 1 second to 16 seconds, using stop  $f.11$ ; making each exposure double the previous one.

Interiors by daylight should be made from 3 hours after sunrise until 3 hours before sunset; if earlier or later the exposures must be longer.

If no more time exposures are to be made, adjust the shutter for an instantaneous exposure, pushing lever A to 100, see page 6.

## 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 six 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. To get a good light on the face, follow the arrangement shown in the diagram above. A reflector helps to get detail in the shaded part of the face. A white towel or tablecloth 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 as in the diagram above.

If the above suggestion for lighting is followed, an exposure of about one

second with  $f.11$  will be sufficient on a bright day.

### 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 the stop  $f.5.6$  and make a snapshot exposure of  $1/50$  second. By following this rule unpleasant and distorting shadows on the face will be avoided.

For the best results it is advisable to have the subject fairly close to the camera.

### KODAK PORTRAIT ATTACHMENT

While this Kodak can be focused for subjects as close as 4 feet, permitting the obtaining of head and shoulder portraits, it can be focused for much closer distances when the Kodak Portrait Attachment is used.

By using the Kodak Portrait Attachment, large images of flowers and similar "still life" subjects can be obtained. For the best results when making pictures of subjects at short distances, it is advisable to use  $f.8$  or a smaller stop opening.

Place the Attachment over the lens and compose the picture in the finder.

When making vertical time exposures, turn the Kodak just a *little* to the left, and for horizontal pictures tilt the Kodak 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 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 subject, and revolve the lens mount until the correct figure is at the focus pointer, according to the table.

DISTANCE BETWEEN SUBJECT AND LENS		WHEN THE FOCUS POINTER	
MUST BE		IS AT	
2 feet 1 inch	.....	4 feet	
2 " 4 inches	.....	5 "	
2 " 6 "	.....	6 "	
2 " 9 "	.....	8 "	
3 "	.....	10 "	
3 " 4 "	.....	15 "	
3 " 8 "	.....	25 "	

The same exposure is required as without the Attachment.

Use *Kodak Portrait Attachment No. 3* with the Kodak Bantam with Kodak Anastigmat Lens  $f.4.5$ .

To produce a true, soft-focus effect, use the *Kodak Diffusion Portrait Attachment No. 3*.

## KODAK SKY AND COLOR FILTERS

The Kodak Sky Filter should be used for obtaining more detail in clouds, when photographing landscapes. The same exposure should be made when using a Sky Filter as would be required without it.

The Kodak Color Filter is valuable when recording the color *values* in a black-and-white print of clothing, flowers and other colored objects. When using the Color Filter with either Kodak Panatomic or Super X Pan. Film, the exposure should be increased about 50%.

Use Kodak Sky Filter, Color Filter, and Pictorial Diffusion Disk No. 3.

"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, methods of making pictures by electric light, flash-light 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.

Our Service Department will also be glad to send you, gratis, information on any photographic subject.

## CLEAN LENSES



*Made with Dirty Lens. Made with Clean Lens.*

Lenses should be cleaned as follows:

Open the back of the Kodak, see page 4. 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.

EASTMAN KODAK COMPANY,  
ROCHESTER, N. Y.

## OUTDOOR EXPOSURE GUIDE

Subject	Stop Opening	Shutter Speed
Near-by landscapes with little or no sky. Near-by subjects in open field, park or garden. Street scenes.	<i>f</i> .5.6	1/100
Ordinary landscapes with sky, and a principal object in the foreground.	<i>f</i> .8	1/100
Marine and beach scenes. Extremely distant landscapes. Mountains. Snow scenes without prominent dark objects in the foreground.	<i>f</i> .11	1/100
Portraits in the open shade, not under trees or the roof of a porch. Shaded near-by scenes.	<i>f</i> .5.6	1/50
Narrow and slightly shaded streets.	<i>f</i> .4.5	1/100
Moving objects: When photographing a moving object such as a runner, boat or an automobile, the subject should be traveling towards or away from the camera at an angle of about 45 degrees.	<i>f</i> .4.5	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, or if it is a *slightly* cloudy or hazy day, use a larger stop opening. The above exposure table is for use with Kodak Panatomic Film.

Kodak Super X Panchromatic Film is twice as fast as Kodak Panatomic Film by daylight, if the films are developed in Developer D-76 (see instruction sheet supplied with the film). For Kodachrome Film follow the exposure guide supplied with the film; do not use the above guide.