

Kodak

C A M E R A

RETINETTE

IA

KODAK RETINETTE IA CAMERA

Your KODAK RETINETTE IA Camera is a distinguished member of the long line of traditionally excellent RETINA cameras. There is a certain pride of ownership that comes with this knowledge. Following are a few of the many features of this easy-to-use camera.


- **Quality f/2.8 45 mm lens with convenient "zone" focus settings.**
- **Versatile four-speed flash shutter with long-exposure and self-timer settings.**
- **Clear, easy-to-use projected frame finder.**
- **Compactness, combined with superb craftsmanship and attractive styling.**

Before taking any important pictures — on a trip or at a special event — it is well to shoot a magazine of film outdoors, and indoors with flash. This will give you practice in operating the camera and will provide a check on your equipment.

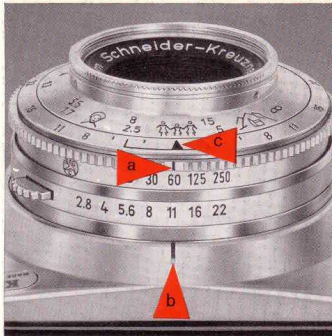
Picturetaking

... It's as easy as this!

After loading the camera as described on page 6, you...

1. Set the shutter-speed (a);
for example "60" ($\frac{1}{60}$ second).
2. Set the lens opening (b);
for example, "11".
3. Set the distance (c);
for example  ("Groups").

...You are now ready to take the picture. Read on for the important details of camera operation.



Kodachrome II Film — For color transparencies for projection or from which prints or enlargements can be made. Use Kodachrome II Film for Daylight for daylight pictures and for flash pictures with blue bulbs. 20 or 36 exposures.

Kodachrome-X Film — For color transparencies for projection or from which color prints and enlargements can be made. The speed of this film is more than $2\frac{1}{2}$ times faster and has higher contrast than the Kodachrome II Film above. Use Kodachrome-X Film for Daylight for daylight pictures and for flash pictures with blue bulbs. 20 or 36 exposures.

Kodak Ektachrome Film — For color transparencies for projection or from which color prints and enlargements can be made. Available in Daylight Type for daylight pictures, and for flash pictures with blue bulbs. 20 exposures.

Use Film Size No. 135 Magazine

Kodak High Speed Ektachrome Film — With this new, extremely fast color film you can stop action in low illumination and, at the same time, get faithful color rendition with excellent definition. Available in Daylight Type and Type B. 20 exposures.

Kodacolor Film — The color film for color prints and transparencies. Expose the same roll of film by daylight outdoors or clear flash indoors. 20 exposures.

How to get your color film processed by a Kodak or other laboratory offering such service is described in the instructions packed with the film.

KODAK PANATOMIC-X Film — The film to use for big enlargements when high film speed is not a factor. It combines exceptionally fine grain and the ability to record extremely fine detail. 20 or 36 exposures.

KODAK PLUS-X Pan Film — An excellent high-speed panchromatic film for general outdoor and interior use. The low graininess and high resolving power permit high-quality enlargements. 20 or 36 exposures.

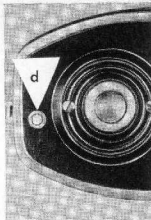
KODAK TRI-X Pan Film — An extremely fast panchromatic film of moderate contrast, wide exposure and development latitude, and color sensitivity suitable for all types of illumination. 20 or 36 exposures.

Loading – always in subdued light

1. Press the opening button (d) in the camera base. The camera back will spring open.
2. Pull the rewind knob (e) out as far as it will go.
3. Place the film magazine in the recess next to the rewind knob. Push the rewind knob (e) all the way in, turning it slightly if necessary.
4. Turn the built-in TAKE-UP SPOOL (f) by one of its toothed flanges until a light-colored slot points upward. With the lower edge of the film against the lower take-up spool flange, push the film end protruding from the magazine far enough into this slot to anchor a perforation over the small pin.
5. Turn the built-in take-up spool until the teeth of the sprocket (g) engage the perforations **ON BOTH SIDES**. Close the camera back by pressing the back against the body until you hear it lock.

Turn the rewind knob (e) in the direction of the arrow until a slight resistance is felt. This takes up the slack film inside the magazine.

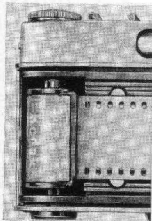
1



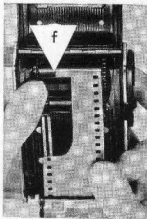
2



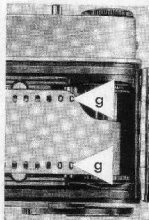
3

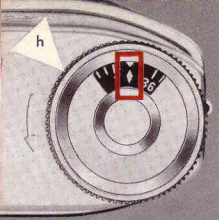


4



5

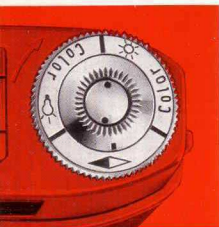




Setting the film counter and film indicator

The film counter (left) tells you how many exposures remain. Turn the black knurled ring (h) counterclockwise until one of the diamond marks is opposite the triangular mark (for 36-exposure magazines set mark between 1 and 36; for 20-exposure magazines set mark to 23). Actuate the rapid wind lever on the bottom of the camera, then press the shutter release—for details see page 14. Do this two more times to bring the counter to 20 or 36 depending on the number of exposures in your magazine. The rewind knob's turning counterclockwise indicates proper film advance.

To set the film indicator (left) hold the rewind knob and turn the inner serrated disk until the black dot points to the type of film loaded in the camera:



◀ = Black-and-white Film

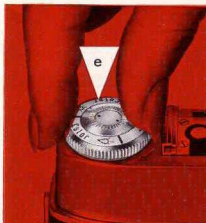
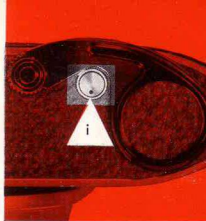
COLOR ☀ = Daylight Color Film

COLOR ⚡ = Artificial-Light Color Film

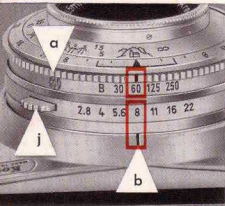
Unloading - always in subdued light

After the last exposure and before the back of the camera is opened, the film must be rewound into its magazine. To do this, press the clutch button (i) in the camera base and turn the rewind knob (e) in the direction of the arrow until the clutch button ceases to rotate. (Watch the black dot on the clutch button.) Give a few more turns to draw the film into the magazine; open the camera back, pull out the rewind knob, and remove the magazine.

Note: If the film counter was not set, or was set incorrectly, the rapid wind lever may encounter resistance before the exposure counter shows "1". This indicates that the end of the film has been reached. **Do not force the wind lever.** Rewind the film and unload as described above.



Setting the shutter and lens opening



To set the SHUTTER SPEED, turn the knurled ring (a) until the red mark is opposite the required shutter speed. The figure 30 stands for $\frac{1}{30}$ second; 60 for $\frac{1}{60}$ second; 125 for $\frac{1}{125}$ second and 250 for $\frac{1}{250}$ second. "B" is the setting for time exposures of any length. (See page 16.)

With average daylight pictures, use $\frac{1}{60}$ or $\frac{1}{125}$ second. For fast moving subjects, use $\frac{1}{250}$ second.

Set the LENS OPENING by moving the lens opening lever (j) until the required lens opening (f/number) is opposite the index (b). In the illustration, the shutter is set at $\frac{1}{60}$ second, and the lens opening at f/8.

NOTE: Do not make intermediate shutter speed settings. Intermediate lens opening settings, however, can be made.

DAYLIGHT EXPOSURE GUIDE FOR KODAK COLOR AND BLACK-AND-WHITE FILMS

**For Average, Front-Lighted Subjects in Daylight from
2 Hours after Sunrise to 2 Hours before Sunset**

LIGHT CONDITIONS	KODA- CHROME-X	KODACHROME II KODACOLOR EKTACHROME	PLUS-X PAN
	Lens Opening with Shutter Set at "60" (1/60 Sec.)		
Bright or Hazy Sun (Distinct Shadows)	f/16	f/11	f/22
Cloudy Bright (No Shadows)	f/8	f/5.6	f/11
Heavy Overcast or Open Shade (Lighted by a large area of sky)	f/5.6	f/4	f/8
Use lower f/number for the following: <ul style="list-style-type: none">● One f/number lower at shutter speed 1/125 second for action shots.● Two f/numbers lower at shutter speed 1/250 second for fast action.● One f/number lower for side-lighted subjects.● Two f/numbers lower for back-lighted close-up subjects.		Use higher f/number for the following: <ul style="list-style-type: none">● One f/number higher at shutter speed 1/30 second. Use only at low light levels and for flash pictures.● One f/number higher for bright sun on sand or snow.	
NOTE: For other films and for additional exposure information consult the instructions supplied with the film used.			



Focusing

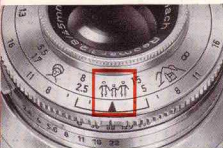
Zone Focusing: You have a choice of three zone focus or snapshot settings indicated by symbols on the focusing scale.



Close-Ups (Close Range)

Groups (Medium Range)

Scenes (Far Range)



Turn the knurled lens ring (k) until the symbol corresponding to the type of subject is opposite of the triangular mark.

Scale focusing: You can also focus the camera for the correct distance by setting the black or red figures opposite the ▲ triangular mark.

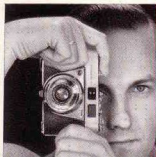
NOTE: The red figures on the focusing scale indicate "feet" and the black figures "meters" (m).



Using the viewfinder

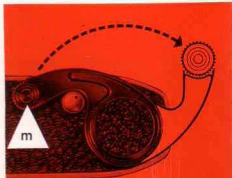
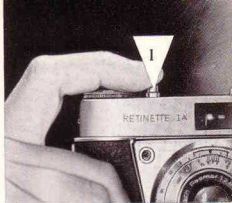
Hold the camera in the picturetaking position and look through the eyepiece of the viewfinder. With your eye close to the finder opening, you will then see the subject outlined by the luminous view-frame. See illustration below. Depending on the subject, you may view the picture with the camera held in either the horizontal or the vertical position. The two illustrations on this page are shown as examples.

Hold the camera steady while taking the picture, and make sure that no part of your field case or other obstruction is in front of the lens.



Setting and releasing shutter

If the shutter is not set, pressing the EXPOSURE RELEASE (1) will not trip the shutter. To set the shutter, with the right thumb swing out the RAPID WIND LEVER (m) in one movement **as far as it will go**; then let it return to its original position. Swinging out this lever sets the shutter and advances the film by one frame at the same time. Press down the exposure release (1) all the way with a **slow, squeezing action**. If the rapid wind lever (m) becomes locked, this means either that the exposure has not been made or that the end of the film has been reached.



Flash pictures

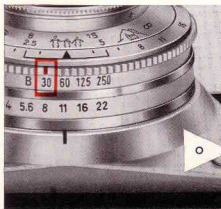
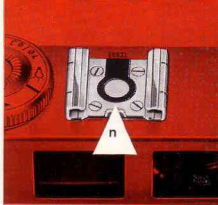
Attaching Flashholder: Cordless flashholders with center contact in the base — slide into accessory "shoe" (n) on top of the camera. The other contact is part of the shoe.

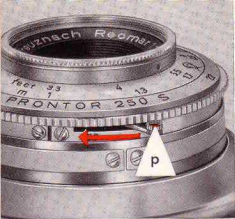
Flashholders with connecting cords, such as the Kodak Ektamite Flashholder, slide into the accessory shoe (n). Insert the cord tip into flash socket (o) on the camera.

Setting Exposure: Use **only a shutter speed of $\frac{1}{30}$ second**, by turning red mark on ring to "30". (With electronic flash, any shutter speed up to $\frac{1}{250}$ second can be used.) The lens opening is determined by means of a flash guide number which is specified in the instructions packed with the film. To determine the proper lens opening divide the guide number by the flash-to-subject distance.

Example:

$$\frac{\text{Guide Number 110}}{\text{Flash-to-subject distance 10 feet}} = \text{Lens opening f/11}$$





Self-timer

First set the shutter by the rapid wind lever, and then slide the lever marked in red (p) clockwise as far as it will go. If you then depress the release button, the shutter will not be released until after about 10 seconds. Once the self-timer has been set, the following picture **must be taken with the self-timer**. The self-timer action can be used for flash.

Time exposures

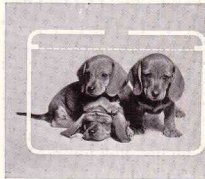
Turn the shutter speed ring (a) until the red mark is opposite the letter "B". The shutter remains open as long as the exposure release is depressed. The exposure time varies according to the lens opening used, and the light available.

Time exposures should be made with a tripod or other firm support. Attach the camera to the tripod by the tripod socket on the base of the camera. The use of a cable release which screws into the exposure release button is also suggested.



Close-ups between 3.3 and 8 feet

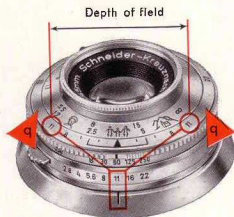
When taking pictures of a subject between 3.3 and 8 feet, the field of view outlined by the luminous frame in the viewfinder does not show what will actually appear in the final picture because the finder and lens do not see the same view at close distances. This is called parallax. To compensate for such parallax at a distance of 3.3 feet, the subject must be seen below an imaginary line, drawn between the two opposite pointers near the top of the viewframe (dotted in the illustration). With subjects farther away than 3.3 feet, this imaginary line gradually moves up until, at 8 feet, it coincides with the viewframe. An equivalent area eliminated at the top of the frame is added to the bottom of the frame.



How to determine depth of field

A depth-of field scale (q), composed of indicator lines and numbers corresponding to lens openings, is arranged on either side of the focus index. The end lines of the bracket indicate the depth of field at $f/4$. The depth of field increases beyond these limits with each smaller lens opening down to $f/22$.

On the scale (q) the lens opening numbers 5.6 and 2.8 are indicated by the small lines on either side of the bracket limit marks.



Suppose you have set the lens opening at $f/11$ and the distance at ∞ (Groups); you can now read off about 6 ft. at the left and about infinity (∞) at the right, opposite the two figures "11" on the depth-of-field scale (q). Everything will be in focus within the range.

Care of the Camera

Your KODAK RETINETTE 1A Camera is ruggedly built, but it is a fine precision instrument; so protect it from dust and dirt and avoid rough handling. Use a rubber syringe to blow out any dust that may be inside the camera. If the lens needs cleaning, first brush or blow away any grit or dust. Wipe the surface gently with KODAK Lens Cleaning Paper. If moisture is needed, use KODAK Lens Cleaner.

Do not attempt to make any repairs or remove any parts from the shutter, lens, or camera. Never oil the shutter or any parts of the camera. If you find that service is necessary, return the camera to your KODAK dealer, who will have repairs made locally, or send it to KODAK.

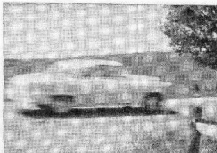
Avoid these:

- 1. Camera Movement:** The whole picture is blurred. It happens when you "punch" the shutter release. Stand steady; and release the shutter with a slow, squeezing action.
- 2. Subject Movement:** Produces a different effect from camera movement—everything but your subject is sharp. Use $1/125$ or $1/250$ second shutter speed setting for fast-moving subjects.
- 3. Dirty Lens:** Your camera can't see through a dirty lens. Keep it clean; it pays. Use KODAK Lens Cleaning Paper and KODAK Lens Cleaner.
- 4. Cluttered Backgrounds:** Trees, wires, poles—steal interest from the subject. Look beyond the subject before you shoot; if background is distracting, change camera position, or move the subject.
- 5. Subject Out of Focus:** You get fuzzy pictures when the camera is too close to the subject or if you have the wrong distance setting.
- 6. Lens Obscured:** You'll get a picture like this if your case strap is in front of the lens. Learn to handle your camera so that your fingers or other objects don't get in front of the lens.

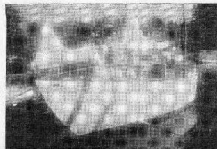
1



2



3



4



5



6



Photo aids

Kodak Retinette Field Case — Leather with chrome-finished reinforcement. Adjustable neck strap. Protects your camera.

Kodak Ektamite Flashholder (with connecting cord) — Small, light and handy. Accepts AG-1-type bulbs. Slides easily into accessory shoe on top of camera.

Lens Attachments — Kodak Retina Filters (screw-in type) 32 mm diameter. Kodak Retina 45 F Lens Hood. Kodak Adapter Ring 629 A for use of Series 6 Lens Attachments such as Filters, Lens Hoods, Close-Up Lenses.

Kodak Supermatic 500 Projector — New remote focusing — remote slide changing and instant editing — in this handsome, rugged, compact self-cased, 500-watt projector. Holds up to 36 cardboard slides at one loading. See your dealer for this or a choice of other Kodak slide projectors.

KODAK RETINETTE I A facts

Film: Film Load — Kodak 135, 20- or 36-exposure magazines.

Negative Size — 24 x 36 mm.

Lens: 45 mm f/2.8 Schneider Reomar. Lens Openings — f/2.8, f/4, f/5.6, f/8, f/11, f/16, f/22.

Shutter: Prontor 250 S — Automatically cocked when film is advanced.

Speeds — $\frac{1}{30}$, $\frac{1}{60}$, $\frac{1}{125}$, $\frac{1}{250}$ second and "B".

Release — Plunger type on top of camera or Kodak Metal Cable Release No. 5.

Flash — Built-in synchronization for class F and M bulbs at $\frac{1}{30}$ sec., and electronic flash at all speeds. Two flash outlets: Flash socket for continental cord tip; center contact in accessory shoe.

Focusing and Viewing: Focusing — Zone focusing (Close-Ups, Groups, and Scenes) and scale focusing (3.3 feet to infinity).

Viewfinder — Projected viewframe type.

Rapid Wind Lever: Advances film and sets shutter with one stroke.

Double-exposure prevention.

Construction: Body — Die cast aluminum alloy; black covering; chrome top and trim; tripod socket in camera base.