

## DETAILS

### Film

- Film Size—KODAK No. 126 film cartridge; 12- or 20-exposure.
- Negative Size—28 x 28mm.

### Lens—38mm, f/2.8 KODAK EKTAR

- Lens Openings—f/2.8 through f/64.
- Lens Attachments—Accepts screw-in type, 34 x .5mm, Series 5 filters directly. Also, Series 6 by adapter.

### Shutter—Automatically Set

- Speeds—1/60, 1/125, 1/250; also 1/30, set by exposure control and 1/40 for flash. Also "B" for brief time exposures.

### Focusing and Viewing

- Rangefinder—Superimposed-image type, combined with viewfinder.
- Viewfinder—Optical, projected viewframe-type with parallax marks for 5 feet.
- Focusing Range—3 ft to infinity.
- Illuminated signals for insufficient light and flash readiness.

EASTMAN KODAK COMPANY • Rochester, New York 14650

Pt. No. 633090  
6-67-CH—DI

### Automatic Film Advance

- Spring motor advances film—20 exposures, plus leader and trailer.

### Automatic Daylight Exposure Control

- Film speed is set automatically by film cartridge (ASA 64 to 800).
- Lens openings set automatically by electric eye.
- Automatic shutter control reduces speed after maximum lens opening is reached.

### Automatic Flash Control

- Guide number is set automatically by film cartridge (50 to 228).
- Built-in socket for 4-bulb flashcube.
- Correct lens opening is set by focusing.
- Flash shutter speed (1/40 sec.) is set automatically by inserting flashcube.
- Uses 2 PX-825 batteries.

### Other Features

- Instant Loading and Unloading.
- Tripod Socket.
- Eyelets for neckstrap (supplied).
- Die-cast metal body; black and satin chrome finish.

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**KODAK**  
**INSTAMATIC®**  
**814 CAMERA**



Printed in the United States of America



# KODAK INSTAMATIC 814 CAMERA

Your KODAK INSTAMATIC 814 Camera is the most distinguished member of the KODAK INSTAMATIC family. In addition to its instant-loading feature, fine *f/2.8 EKTAR Lens*, daylight exposure control (battery-powered cadmium sulphide cell), and automatic flash exposure control, it provides *rangefinder focusing*, *automatic film advance*, *illuminated finder signals*, and *automatic flashbulb advance with the flashcube*.

After inserting batteries, simply do this . . .

- Drop in 126 film cartridge—camera is loaded
- Wind Spring-Power Motor—first exposure is ready
- Look through Viewfinder and adjust Rangefinder—camera is focused
- Compose picture and press Shutter Release—you've taken the picture

... read on for the details

NOTICE: Equipment subject to minor appearance changes.

1 2 3

**Kodachrome**  
TRANSPARENCY

PROCESSED BY  
**Kodak**

◀ Your camera takes all three—

- 1 Black-and-white snapshots
- 2 Color snapshots
- 3 Color slides

Before you take any important pictures, try a test cartridge of film to check the camera and your operation of it. Expose pictures outdoors and also indoors with flash. If time is pressing, a cartridge of black-and-white film can be processed very quickly.



## FILM

Your camera accepts all KODAK films in the 126 cartridge for instant camera loading and unloading.

You can make black-and-white snapshots, color snapshots, or color slides. Snapshots are handy to carry, mail, and make enlargements of—slides are brilliant, compact, and good for showing to large groups. Select the film that provides the type of picture you want.

**NOTE:** Storing the camera with the motor fully wound does not weaken the spring. If, after a cartridge has been removed from the camera, the shutter release is pressed, the spring tension is released. For the spring motor to again retain power, a cartridge must be loaded in the camera.

KODAK VERICHROME Pan Film, VP 126 ▶

KODACOLOR-X Film, CX 126 ▶

KODACHROME-X Film, KX 126 ▶

KODAK EKTACHROME-X Film, EX 126 ▶

KODAK High Speed EKTACHROME Film, EH 126 ▶

For 12 black-and-white snapshots. Standard enlarged black-and-white prints from your negatives are 3½ x 3½ inches in size. Bigger enlargements are available.

For 12 or 20 color snapshots. Standard enlarged color prints are 3½ x 3½ inches in size. Color slides, as well as bigger color enlargements, are also available.

For 20 color slides. These color pictures on film are framed in 2 x 2-inch mounts, for slide projection.

For 20 color slides. Can be processed by the user or by a laboratory. These color pictures on film are framed in 2 x 2-inch mounts, for showing in slide projectors.

For 20 color slides. This extremely fast film is ideal for taking pictures of dimly lighted subjects or fast action. These color pictures on film are framed in 2 x 2-inch mounts, for slide projection. Can be processed by user or a laboratory.

Films, processing, printing, and mounting service, can be obtained from your photo dealer.

### NOTE:

You obtain color negatives from KODACOLOR-X Film. These negatives are primarily for enlarged color prints, but you can also obtain color slides from the negatives. From KODACHROME-X, KODAK EKTACHROME-X, or High Speed EKTACHROME Film, you obtain color slides, ready for projection. You can also have duplicate slides or enlarged color prints made from the original slides.



## LOADING



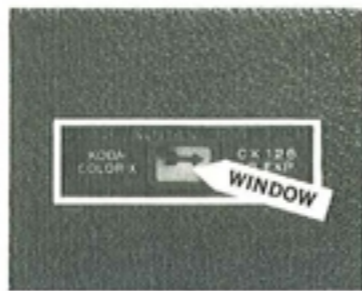
1

Open the back of the camera by sliding the lock button down to pop open the hinged cover; then swing out the cover, as far as it will go, approximately perpendicular to the camera.



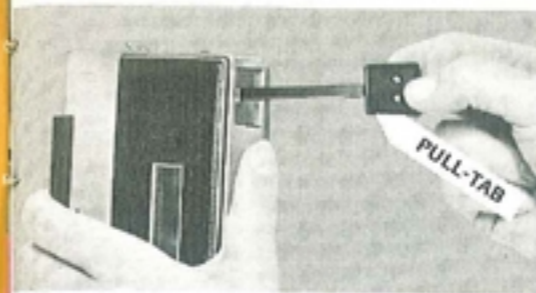
2

With the cover in its perpendicular loading position, place a film cartridge in the camera, as illustrated, with the larger cylindrical end down and toward the lock button.



3

Close the back of the camera by pressing the back against the body until it locks. The film name and number of exposures per cartridge appear in the window on the back of the camera. The film speed and flash guide number are now automatically set. (If the motor is wound, the first exposure positions itself immediately.)

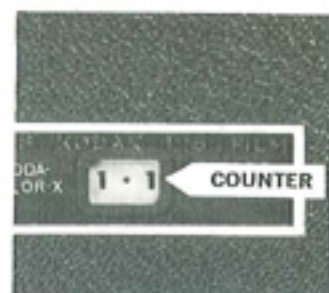


4

Raise the black PULL-TAB, draw the winding tape straight out (as above); then, while still grasping the tab, allow the tape to return—repeat until the motor is fully wound (about 7 full strokes or until locked.)<sup>o</sup> This windup positions film for the first exposure and provides power to advance the film automatically for subsequent exposures. If an arrow shows in the window, the first exposure hasn't been reached, thus indicating insufficient windup. To get the maximum number of advances, wind the motor fully after exposure "1" is in place.

The number that appears in the center of the window on the back of the camera (shown above, right) serves as your exposure COUNTER. The same number may appear in duplicate.

<sup>o</sup>After winding, make sure the pull-tab is fully seated in its recess; otherwise, film will not advance.



## UNLOADING

1. After the last picture, the yellow paper will automatically move past the window, provided the spring motor has been wound sufficiently. If not and an "X" shows in the window, before opening the back of the camera, draw out the winding tape a few strokes to advance the yellow paper beyond the window.

2. Slide down the lock button; open the back.

3. Turn the camera over to allow the cartridge to fall into your hand. Close the back. **Do not open the cartridge**—your pictures may be ruined.

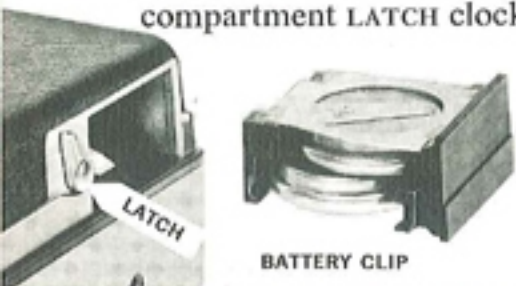
**NOTE:** Do not remove the cartridge from the camera until all the yellow paper, with the "Xs," has been moved past the window; otherwise several exposures will be "light-fogged." Removing and replacing partially-exposed cartridges, even under darkroom conditions, may result in loss of one or more exposures.



## INSTALL BATTERIES

Batteries must be installed before taking any pictures. Install two fresh 1.5-volt, alkaline, button-type PX825 batteries (such as supplied with camera) to power the daylight exposure-control, warning signals and flash. Do this as follows: First, clean battery contact surfaces with a rough cloth. Rotate the battery compartment LATCH clockwise; the BATTERY CLIP will spring out so that it can

be withdrawn for loading. As shown in the illustration, insert both batteries, positive (+) side up, into the clip as far as they will go. Replace the loaded clip in its compartment, plus (+) side up, as shown; then hold the clip all the way in while rotating the LATCH counterclockwise to its horizontal, lock position. Test batteries, as below.



**Battery Testing**—A built-in battery tester permits you to periodically check the present condition of your batteries for exposure-control purposes. Merely press the TEST BUTTON on the front of the camera; if battery condition is satisfactory, a green light appears in the TEST WINDOW. If not, clean battery contact surfaces with a rough cloth, re-install, check, and, if necessary, replace with fresh batteries.

**IMPORTANT**—Because bright light actuating the electric eye causes a slow battery drain, battery life can be greatly extended by storing the camera in a dark place or in the field case, described on page 17.

## SHUTTER SETTING

Your camera has four manually adjustable shutter settings — 60 (1/60 sec.), 125, 250, and “B” — plus 1/40, which is automatically selected for flash by inserting the flashcube in the socket. A shutter speed of 1/125 (125) is recommended for general daylight picture-taking; the faster speed (250) is useful to minimize the effect of subject or camera movement, while the slower speed (60) can be used for less favorable light conditions.

If there is not sufficient available light for proper exposure at the slowest shutter speed (selected automatically; page 10), a red warning SIGNAL, USE FLASH, will appear in the viewfinder, as the shutter release is slightly depressed. If flash is not appropriate, use the “B” (Brief time) setting — the shutter opens when the shutter release is fully depressed and closes when pressure is removed. After each “B” exposure the shutter setting moves automatically to 250 (1/250) and can easily be reset for another “B” exposure. The camera must be on a solid support, such as a tripod, for these longer exposures.

To select a shutter setting, rotate the knurled shutter speed DIAL so that the desired speed number or “B” clicks into place opposite the speed INDEX.



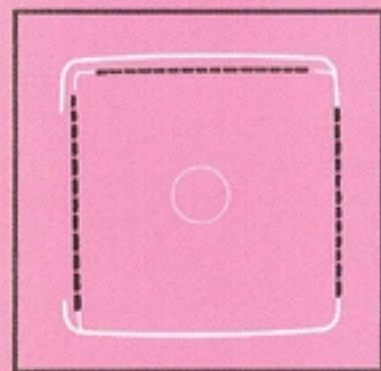
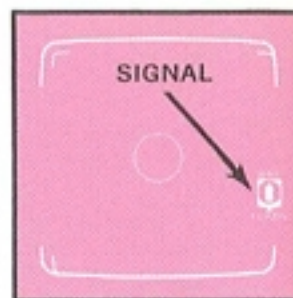


## AUTOMATIC DAYLIGHT EXPOSURE CONTROL

The size of the lens opening is automatically controlled by the amount of light reflected to the ELECTRIC EYE by the scene. *Make sure that the electric eye is not obstructed during picture-taking by the fingers or any other object.*

In weak light, when the lens opening has reached its largest opening ( $f/2.8$ ) the shutter, regardless of the dial setting, automatically begins to reduce speed (except at "B") to give the correct exposure, as far as  $1/30$ , if necessary. A red warning SIGNAL, USE FLASH, will appear, as the shutter release is slightly depressed, in the right side of the luminous frame of the viewfinder, *if there is insufficient light for a properly exposed picture* — this indicates use of either flash or a "B" exposure. Under these low-light conditions, judge "B" exposure times on the basis of  $f/2.8$ .

**Unusual Situations:** In daylight pictures, when severe brightness differences occur between the subject and the background *and it is possible to get close to the subject*, you can exclude the background by moving up to a place where only the subject fills the finder. Then press down the shutter release, shown, page 13, about  $1/4$  of the way (not far enough to release the shutter), continue to hold the release in this position to maintain the close-up exposure setting; then step back, aim, and press the release down fully to take the picture.



## VIEWING AND FOCUSING

Hold the camera close to your eye with the eye centered on the rear eyepiece so that the complete luminous viewframe is visible. The image seen within this viewframe will be included in the picture, except at short camera-to-subject distances.\* The two indicators (one on each side) near the top of the frame, and the one at the lower left, provide parallax correction at a subject distance of about 5 feet. Therefore, when the subject is at about this distance, aim the camera so that the subject image is within this smaller area, as outlined by the dotted lines in the illustration at left.

**NOTE:** Since the picture area is square, there will be no format advantage in holding the camera vertically.

\*Rangefinder and scale-focus distances are figured to the film plane marker (-O-) on the top of the camera. Use this point if measuring for close distances.



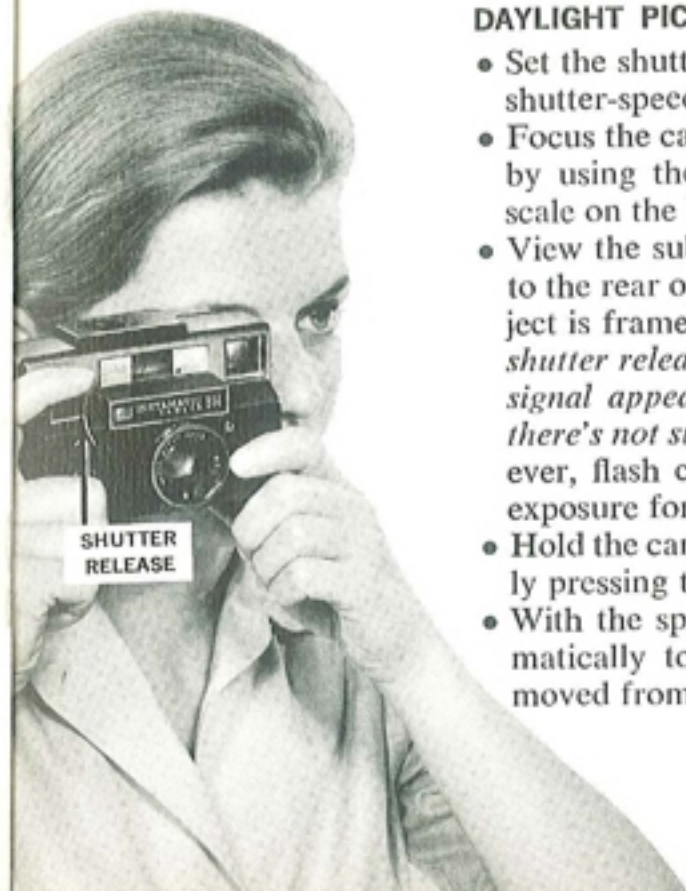
**Top Illustration:** Double image in rangefinder indicates out-of-focus subject.

**Lower Illustration:** Single rangefinder image means camera is properly focused.



**Rangefinder Focusing**—As you look through the viewfinder, you will also notice a circular area in the center of the field of view—this is the rangefinder field. Until the camera is focused for the correct camera-to-subject distance, this field shows a double image of the subject. To set the distance correctly, rotate the **LENS MOUNT**, by its convenient knob, until the outlines of the double image move together and coincide, so that only one image is visible. The lens is now properly focused.

**Scale Focusing**—You can also focus by turning the lens mount until the figure representing the camera-to-subject distance in feet (or symbol for **CLOSE-UP**, **GROUP**, or **SCENE**) is opposite the focusing **MARK**.



#### DAYLIGHT PICTURES

- Set the shutter speed. For general picturetaking, the shutter-speed setting may be left at 125.
- Focus the camera for the camera-to-subject distance by using the rangefinder, symbols, or the footage scale on the lens mount.
- View the subject, as illustrated, with your eye close to the rear opening of the viewfinder so that the subject is framed by the luminous viewfinder. *If, as the shutter release is slightly depressed, the red warning signal appears in the right side of the viewframe, there's not sufficient light for proper exposure.* However, flash can be used for close subjects or a "B" exposure for a still subject.
- Hold the camera steady and take the picture by slowly pressing the **SHUTTER RELEASE** all the way down.
- With the spring motor wound, film advances automatically to the next frame when pressure is removed from the shutter release.



Color prints, like the one above (shown half-size), can be produced from KODACOLOR-X and other color films.

## FLASH PICTURES

Your camera features easy, rapid flash picturetaking with the rotating flashcube, and automatic flash control—the correct lens opening is automatically set as you focus for the camera-to-subject distance. The rotating flashcube incorporates 4 blue bulbs (for all films), reflectors and flashguards.

- For color prints, use KODACOLOR-X Film.
- For color slides, use KODACHROME-X, KODAK EKTACHROME-X, or High Speed EKTACHROME Film.
- For black-and-white prints, use KODAK VERICHROME Pan Film.



## TAKING FLASH PICTURES

● **Insert Flashcube**—Insert the base of the FLASHCUBE into the socket on the top of the camera; then press down the flashcube until it snap-locks in place with one of its four sides facing forward in its detent (click-stop) position. If a fresh bulb is in the frontal firing position, a FLASH READY SIGNAL appears in the left side of the viewframe *as the shutter release is slightly depressed*. Absence of this signal indicates that the cube is not detented in its frontal firing position or that a used bulb is in the forward position. Also, a dim signal or no signal can indicate that batteries should be checked and possibly replaced. The USE FLASH signal may or may not appear, depending on the amount of illumination present.

The cube revolves\* one quarter turn (clockwise) each time the film advances to the next exposure, thus providing flash for 4 exposures *if a fresh cube is in place*. If a partially used cube is in place, a fresh bulb must face forward; if a second fresh bulb is facing toward the Kodak nameplate on top of the camera, it will rotate into position as film is advanced. The cube can also be rotated by

\*IMPORTANT: Do not obstruct rotation of the flashcube.



hand to bring any fresh bulb to its frontal firing position.

Remove a flashcube by lifting it out of the socket.

● **Set Distance**—Rotate the lens mount until the two rangefinder images coincide, or until the figure representing the camera-to-subject distance in feet is opposite the focusing mark. Distance limit, 25 feet for flash.

● **View Subject**—Look through the eyepiece and compose the picture within the luminous viewframe of the viewfinder.

● **Take Picture**—Hold the camera steady and slowly press the shutter release to flash the bulb\* and take the picture.

#### **AUTOMATIC FILL-IN FLASH**

When flash is used in combination with available light (fill-in flash) the electric eye determines the lens opening on the basis of available light at 1/40 second, and the flash exposure control determines the lens opening on the basis of the distance setting in the 3 to 25 foot range. The smaller of the two openings is automatically set when taking the picture. At short subject distances or relatively low available light levels, fill-in flash will produce better lighted pictures, especially of side- or back-lighted subjects.

\*Flash failure usually results from tarnish (often invisible) on battery and camera contacts. Clean battery and battery clip contacts with a rough cloth. Clean recessed contacts in battery compartment by rotating a pencil eraser several times against the contacts. If flash failure persists after cleaning, install fresh batteries.

#### **PHOTO AIDS**

You can extend your picturetaking scope and enjoyment with the photo aids described below. See your Kodak dealer for these and others.

**KODAK INSTAMATIC Field Case, Model F**—This attractively lined, molded case will provide maximum camera protection. Use of the case is recommended to shield the electric eye from light, thus conserving the battery during carrying and storage. The special design permits instant picturetaking, loading and unloading without removing the camera from its case.

**Lens Attachments**—The front of the lens mount is threaded to accept 34 x .5mm, Series 5 screw-in filters and other lens attachments, directly. By means of a 34 x .5mm, Series 6 adapter ring, Series 6 attachments can be used.

**KODAK Flashcube Extender**—Increases the distance between the lens and the flashcube to produce more pleasing modeling and shadow effects in close-ups.

**KODAK Projectors**—A KODAK Projector will show your color slides big, bright, and sharp on the screen. Ask your dealer to see one of the revolutionary KODAK CAROUSEL Projectors. Features round, 80-slide trays that change as quickly and easily as a hi-fi record. Other features include remote or automatic focus, remote forward slide change, remote reverse, instant editing and 500-watt power. Choice of models.

**KODAK Publications**—The keys to snapshot fun and success are to be found in "How to Make Good Pictures"—perhaps the most popular picturetaking book of all time. Your Kodak dealer will be glad to show you this and other inexpensive books on photography.



## CARE OF THE CAMERA

Your KODAK INSTAMATIC is a fine, ruggedly built camera, but yet a precision instrument. Protect it from dust and dirt and avoid rough handling. Use a rubber syringe to blow out any dust that may accumulate inside the camera. If the lens needs cleaning, first brush or blow away any grit or dust, then wipe the surface gently with KODAK Lens Cleaning Paper. If necessary, 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 other parts of the camera.

## GUARANTEE

Within a year after purchase, any repairs necessary to this KODAK INSTAMATIC Camera due to a defect in materials or workmanship will be made or, at our option, the camera will be replaced without charge. No other warranty or guarantee, express or implied, shall be applicable to this equipment. Nor are we responsible for loss of film, for other expenses or inconveniences, or for any consequential damages occasioned by the equipment.

In case of a defect, the camera can be sent directly or through a Kodak dealer to Eastman Kodak Company or a repair firm authorized by us to make such repairs.\* It should be accompanied by a description of the trouble encountered and other available information regarding the camera, including the date and place of purchase.

\*Kodak service facilities, with addresses, are described on the following page.

**EASTMAN KODAK COMPANY**  
Rochester, New York 14650

## SERVICE FACILITIES

If your Kodak camera should require attention, complete service facilities are provided at Rochester and in Kodak Regional Sales Divisions at the addresses opposite. Also, service covered under the guarantee is available through independent service shops in many cities. For such local, guarantee-covered service, please see your Kodak dealer or refer to the yellow pages of your telephone directory under Photographic Equipment and Supplies—Factory Approved Warranty Service.

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