Kodak
Instamatic
804 CAMERA

Automatic Exposure Control
• Film speed is set automatically by film cartridge (ASA 25 to 800).
• Lens openings set automatically.
• Automatic shutter control reduces speed after maximum lens opening is reached.

Automatic Flash Control
• Guide number is set automatically by film cartridge (40 to 228).
• Built-in socket for 4-bulb Flashcube.
• Correct lens opening is set by focusing.
• Flash shutter speed is 1/30 sec.
• Uses 2-N size manganese alkaline batteries.

Other Features
• Instant Loading and Unloading.
• Exposure Compensation.
• Tripod Socket.
• Eyepiece for attachment (supplied).
• Die-cast metal body; black and satin chrome finish.

Eastman Kodak Company • Rochester, New York 14650

Printed in the United States of America
Your Kodak Instamatic 804 Camera is the most distinguished member of the Kodak Instamatic family. In addition to its instant-loading feature, fine f/2.8 lens, electric-eye exposure and automatic flash exposure controls, it provides rangefinder focusing, automatic film advance, illuminated finder signals, and automatic flash bulb advance with the new Flashcube.

Simply do this...

- Drop in Kodak 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

Before making any important pictures—of a trip or some special event—it is well to shoot a cartridge of film outdoors, and indoors with flash. This will give you practice in camera operation and provide a check on your equipment.
FILM

Your camera accepts all Kodak No. 126 Films in the Kodakak Cartridge for instant camera loading and unloading.

You can make black-and-white snapshots, color snapshots, or color slides, depending on which film type is loaded in the camera.

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.

For 12 black-and-white snapshots. Standard enlarged black-and-white prints from your negatives are 3 1/2 x 3 1/2 inches in size. Bigger enlargements are also available.

For 12 color snapshots. Standard enlarged color prints are 3 1/2 x 3 1/2 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 showing in slide projectors.

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

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

NOTE:
You always obtain color negatives from Kodacolor Film. These negatives are primarily for enlarged color prints, but you can also obtain color slides from the negatives. From Kodachrome X or Kodak Ektachrome X, 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, until it "click-stops" approximately perpendicular to the camera.

2. Place a KODAPAK 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). 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.*

   *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. For processing, send entire cartridge.

NOTE: Do not remove the cartridge from the camera until all the yellow paper, with the "X", 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 due to possible loss of tension on the cartridge take-up spool.
SHUTTER SETTING

Your camera has four manually adjustable shutter settings - 60 (1/60 sec.), 125, 250, and “B” - plus 1/30, 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 picturaking; 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 9), 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.

*Batteries must be installed, as on page 14, to power the warning signal.

(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, and that the camera is not pointed directly toward the sun or other unusually bright light source.

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.

SIGNAL
Unusual Situations: Because the electric eye reads the over-all brightness of a scene, better results sometimes can be obtained by altering the exposure when there is considerable brightness difference between the subject and the background. If you wish to give one stop more exposure for a dark subject against a larger light background, rotate and hold the knurled compensator as far as it will go toward the plus (+) sign while taking the picture; for a light subject against a larger dark background, you can give one stop less exposure by rotating and holding the compensator as far as it will go toward the minus (−) sign, during exposure. The compensator resets to normal when released. This exposure compensator can also be used with flash to give one stop more exposure for a dark subject, or one stop less for a light subject.

Also, 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 (−0−) on the top of the camera. Use this point if measuring for close distances.
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 picturaking, 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, at 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.
FLASH PICTURES

Your camera features easy, rapid flash picture taking with the new 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 slides, use KODAK EKTACHROME-X or KODACHROME-X Film.
- For color prints, use KODACOLOR-X Film.
- For black-and-white prints, use KODAK VERICHROME Pan Film.

Batteries: Two fresh photoflash or flashlight, N-size, batteries (manganese alkaline recommended) are required to power flashbulbs and finder signals.* Weak batteries may cause flash failures. To install batteries, first open the battery compartment on the bottom of the camera, as shown, by inserting the thumbnail in the notch, pressing in the direction of the arrow, and swinging open the hinged cover. Insert the batteries — one base down; the other base up — as illustrated. Close the cover securely.

*To insure dependable battery and camera service, clean battery contacts periodically with a rough cloth. For maximum protection of camera contacts, batteries may be removed if camera is stored.

TAKEING FLASH PICTURES

- Insert Flashcube — Fit the hollow stem on the base of the Flashcube over the center hub of the socket on the top of the camera, so that the 4 wings of the Flashcube stem enter the cross around the socket hub; then press down the Flashcube until it snaps in place with one of its four sides facing forward in its detent (clikstop) position. If a fresh bulb is in the frontal firing position, a FLASH READY SIGNAL appears in the left side of the viewfinder 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

*IMPORTANT: Do not obstruct rotation of the Flashcube.
second fresh bulb is facing toward the EJECTOR button, it will rotate into position as film is advanced. The cube can also be rotated by hand to bring any fresh bulb to its frontal firing position.

Press down the EJECTOR button (shown, page 15) to remove a Flashcube.

- 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 1/30 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.

**PHOTO AIDS**

You can extend your picture-taking 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. The special design permits instant picture-taking, loading and unloading without removing the camera from its case. A KODAK INSTAMATIC Compartment Case is available for carrying camera, film, bulbs, filters, etc.

**KODAK Lens Attachments**—A removable ring is provided on the front of the lens mount of your camera to retain a Series 5 KODAK Filter or other useful lens attachment. For example, A KODAK Skylight Filter (No. 1A) adds warmth to color pictures taken in the shade or on overcast days, and reduces bluish haze in landscape shots; KODAK PORTRA Lenses can extend the camera’s picture-taking range down to 10 inches, portra lens-to-subject distance, with an approximate field size of 6¾ x 6¾ inches. Merely unscrew the ring on the front of the lens mount, insert a filter or other lens attachment; then screw the ring in place to hold the accessory.

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

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 Photo- graphic Equipment and Supplies—Factory Approved Warranty Service.

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