Welcome to the family of Kodak camera owners!

Your new Kodak Pocket Instamatic 20 Camera will bring you years of picture-taking enjoyment. As you know, your new camera has many convenient features, such as drop-in loading with the new 110 cartridge, batteryless flash, and no settings to make; yet it is so compact you can slip it into your pocket or purse to carry with you. Its fine triplet lens helps you make big, sharp, rectangular pictures quickly and easily.

At Kodak, we feel that our responsibility for your picture-taking enjoyment has just begun—we look forward to a long and happy relationship. We know how important your pictures are to you. To help make them the best possible pictures, we hope that you'll read this manual thoroughly. If you feel that you need help or advice on using your camera, please write to our staff of photographic experts at: Eastman Kodak Company, Photo Information, Dept. 841, 343 State Street, Rochester, New York 14650. (If your camera should ever require service, the warranty and instructions for obtaining service are printed at the back of this manual.)
to use your camera, simply do this...

1. Insert film cartridge to load camera (page 4). Close back cover.
2. Press SHUTTER RELEASE once before advancing film. Then push FILM ADVANCE repeatedly until first exposure locks in place (page 5).
3. With built-in lens cover opened (page 6), aim through eye-level viewfinder for bright, clear image of your subject (page 8). Hold camera steady and smoothly press shutter release to take picture (page 8).

NEVER FORCE ANY CAMERA OPERATION; CHECK INSTRUCTIONS FOR OPERATION.
Your camera takes all three—
1. Black-and-white prints
2. Color prints
3. Color slides

Before you take any especially important pictures, try a 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.

**Kodak Films**

Your camera uses film in the 110 cartridge for instant loading and unloading. Select a film for the type of picture you want.

<table>
<thead>
<tr>
<th>Type of Picture</th>
<th>Kodak Film</th>
<th>Produces</th>
<th>No. of Exposures</th>
<th>Processing</th>
<th>Kodak Mailer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black-and-White Prints</td>
<td>VERICHROME Pan</td>
<td>3½ x 4½-inch black-and-white prints or enlargements</td>
<td>12</td>
<td>Order from dealer</td>
<td>None</td>
</tr>
<tr>
<td>Color Prints</td>
<td>KODACOLOR II</td>
<td>3½ x 4½-inch color prints or 5 x 7-inch color enlargements</td>
<td>20</td>
<td>Order from dealer or purchase Kodak Prepaid Processing Mailer (number shown at right) from dealer</td>
<td>DP-12, DP20-3R</td>
</tr>
<tr>
<td>Color Slides</td>
<td>KODACHROME-X</td>
<td>Color slides mounted in 30mm x 30mm plastic mounts (by Kodak) for projection*</td>
<td>20</td>
<td>Order from dealer</td>
<td>PK20</td>
</tr>
<tr>
<td></td>
<td>EKTACHROME-X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Duplicate slides or color prints available from original slides.
†Color films processed and mailed to address you specify.
loading camera

1 Open hinged back cover by depressing the LATCH and lowering the cover.

2 After removing the 110 cartridge from its box and protective wrapping, insert the cartridge into the camera as shown. Close the cover by pressing it against the camera body until it locks. (The film name and number of exposures appear in the WINDOW in the cover.)

3 Push the FILM ADVANCE repeatedly with your right thumb until the advance locks (about 8 full strokes). You will see arrows in the window as you advance the film. The number (or numbers) that you see serves as an exposure counter.

IMPORTANT: Always operate the film advance until it locks, or you cannot depress the shutter release.

wrist strap

A removable WRIST STRAP, provided for your carrying convenience, is furnished with the camera. Attach the strap to the WRIST-STRAP CLIP.
**built-in lens cover**

Your camera has a built-in, sliding LENS COVER to protect the lens. Whenever the lens cover is not completely open, a WARNING FLAG appears in the VIEWFINDER.

To open the lens cover, slide it away from the viewfinder.

**IMPORTANT:** If the warning flag appears in the viewfinder before you press the shutter release, the lens cover is not completely open.

Slide the lens cover toward the viewfinder to protect the lens when you are not using your camera.

Store camera and film away from heat and direct sunlight—never in glove compartment, on rear-window shelf, or other “hot-spot” in a car.

**double-exposure prevention**

You never lose a picture by double exposing a frame. After taking a picture, you must operate the film advance until it locks, or you cannot take another picture.

Your vacation pictures will be more interesting if you include close-up pictures of people. Take them as close to the subject as 5 feet.
outdoor pictures

- Your subject should be in bright or hazy sunlight with the sun behind you. For cloudy-bright conditions, see note on page 12.
- Keep at least 5 feet from your subject for sharp pictures.

View your subject by bringing the rear opening of the viewfinder close enough to your eye to see all four sides of the LUMINOUS FRAME in the finder. Then frame your subject (within the luminous frame) the way you want it to appear in your picture. With the rectangular 110-film format, compose your pictures either horizontally or vertically by holding the camera as shown on page 9.

When you hold the camera upright for vertical pictures, keep your hands and the wrist strap behind the front edge of the camera or they will appear in your picture.

Hold the camera steady and slowly press the SHUTTER RELEASE all the way down to take the picture. (Make certain that the lens is clean and that your hands are not beyond the front edge of the camera.)

Push the film advance with your right thumb until it locks (1½ strokes). To be ready for the next picture, hold the camera at eye level while you advance the film.

IMPORTANT: Do not hold your finger on the shutter release while you advance the film.
**Flash pictures**

Your camera features easy, rapid, flash picture-taking with the self-powered magicube. As you advance the film, the cube rotates counterclockwise to bring one of its four blue bulbs into firing position.

When you make flash pictures, the camera-to-subject distance must be between 5 and 10 feet with all the films listed on page 3.

**IMPORTANT:** Be sure to use only the self-powered magicube. You will damage your camera if you try to use battery-powered flashcubes.

1. **Insert magicube**—Insert a cube into the socket on top of the camera; then press down on the cube until it snap-locks in place. (If a used bulb faces forward, rotate the cube until a fresh bulb faces forward.) To remove a cube, simply lift it off the camera.

2. **Check the distance**—The camera-to-subject distance is very important for proper flash exposure. If you are closer than 5 feet, your subject will appear very light (overexposed) and unsharp in the picture; farther than 10 feet, your subject will appear dark in the picture. Therefore, make sure that your subject is no closer than 5 feet or farther than 10 feet from the camera.

3. **Take the picture**—View your subject by bringing the rear opening of the viewfinder close enough to your eye to see all four sides of the luminous frame in the finder. Then frame your subject the way you want it to appear in your picture. Hold the camera steady and slowly press the shutter release to flash the bulb and take the picture (the WARNING FLAG will appear in the finder as the bulb flashes).
Then advance the film to the next exposure (the magicube will rotate automatically to bring another bulb into firing position).

**NOTE:** With a magicube in the socket, the shutter speed is 1/40 second; without the cube, 1/100 second. Outdoors, when you don’t have bright or hazy sunlight, insert a used cube for picture-taking under cloudy-bright conditions.

**Used-Bulb Warning—** When a used bulb faces forward, a WARNING FLAG will appear in the viewfinder as you press the shutter release. To observe this signal, it is very important that you press the shutter release very slowly.

**Fill-In Flash—** When you take pictures outdoors in bright sunlight, shadows may appear on the faces of your subjects. To help lighten these shadows, place a magicube on the camera, check the distance (5 to 10 feet), and then take the picture.

**NOTE:** Under some circumstances, your subjects’ eyes may appear red in flash pictures. To minimize this, turn up the room lights and use the optional Kodak Magicube Extender (see page 16) in the cube socket. This raises the cube to minimize the red reflections, and also produces pleasing shadow effects in your pictures.

**unloading camera**

When you have taken the last picture on a cartridge, operate the film advance (about 6 full strokes) until you feel a stiff resistance on the advance. **Do Not Force the Advance Any Farther.** (Backing paper will still be visible in the camera window.) Open the camera cover and remove the cartridge. **Do Not Break Open the Cartridge or Your Pictures Will Be Ruined.**

**NOTE:** Removing and replacing partially exposed cartridges, even under darkroom conditions, will result in the loss of at least one exposure.
film processing

For best results, have your exposed film processed as soon as possible. Have your photo dealer arrange for processing (by Kodak or other laboratory) or purchase the appropriate Kodak Prepaid Processing Mailer from your dealer (see chart on page 3).

Standard color prints from Kodacolor II Film are 3½ x 4½ inches, with the frame number and processing date photographically printed in the margin. Kodak Processing Laboratories will return Kodacolor II Negatives (strips of 4) in a protective sleeve with an attached form for ordering extra prints or 5 x 7-inch enlargements.

Slides from Kodachrome-X and Ektachrome-X Films are returned from Kodak Processing Laboratories in a protective wallet. Each slide is mounted in a 30mm x 30mm plastic mount, with frame numbers visible in an opening in the mount. Two "sticks" (plastic holders) hold ten slides each for storage or viewing. Duplicate slides and color prints are available from your original color slides.

For best results, project your slides with a Kodak Pocket Carousel Projector (120 slides per tray). You can also use a Kodak Carousel Projector if you insert each 110 slide in a Kodak 2 x 2 Adapter for 110 Slides.

camera care

With proper care and handling, your camera will provide years of enjoyment. When you carry the camera in your pocket or purse, close the lens cover to protect the lens.

Clean the picture-taking and viewfinder lenses when necessary by blowing away any dust or dirt. Then breathe on the surfaces and wipe them gently with a soft, clean, lintless cloth (or use Kodak Lens Cleaning Paper moistened with Kodak Lens Cleaner).
**Photo Aids... See Your Photo Dealer**

**Kodak Pocket Instamatic Carry Case, Model A**—A convenient way to carry camera. Attach to your belt, or use camera's wrist strap to carry camera.

**Kodak Magicube Extender**—Increases separation between magicube and camera lens to reduce red reflections from subjects' eyes. Often produces more pleasing shadow effects to enhance your flash pictures.

**Kodak Publications**—Keys to snapshot fun are found in *Picture the Fun with Your Kodak Instamatic® Camera*. Your photo dealer will be glad to show you this and many other inexpensive books on photography.

**Kodak Pocket Carousel Projectors**—Show your 110-size color slides big, bright, and sharp on the screen. Up to 120 slides can be stored in a single Pocket Carousel 120 Slide Tray.

**Kodak 2 x 2 Adapter for 110 Slides**—Adapts your slides for showing with projectors accepting 2 x 2-inch slide mounts, such as the Kodak Carousel Projectors. Use one adapter for each slide.

**Technical Details**

Film Size—110 cartridge; 12 or 20 exposures producing 13mm x 17mm negatives or transparencies.

Film Speeds—
- Negative films—ASA 32-125
- Reversal films—ASA 40-80

Film Advance—Two-stroke thumb advance on bottom of camera.

Lens—25mm, f/9.5 triplet Luminized lens; fixed focus—5 feet to infinity.

Lens Cover—Sliding, built-in cover with signal in viewfinder for closed lens cover.

Shutter—Mechanical:
- Daylight—1/100 sec.
- Flash—1/40 sec.

Flash—Uses self-powered magicubes; cube rotates as film advances; flash distances—5 to 10 feet.

Viewfinder—Projected frame; warning flag for used bulb or closed lens cover.

Construction—Plastic with metal and vinyl panels; tripod socket; clip for wrist strap.
**helpful hints for better pictures**

Taking pictures with your camera is fun and easy. We believe you'll be happy with the many fine pictures you take with it. If occasionally one of your pictures isn't all that you expected, refer to the chart below. When you know what went wrong, you can make sure it won't happen again.

<table>
<thead>
<tr>
<th>What Happened</th>
<th>Probable Cause</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daylight pictures too dark.</td>
<td>Not enough light on subject.</td>
<td>Subject must be in bright or hazy sunlight, or put used magicube in socket for cloudy-bright conditions (page 12).</td>
</tr>
<tr>
<td>Flash pictures too dark.</td>
<td>Subject too far from flash.</td>
<td>Subject must be no farther than 10 feet from flash (page 10). DO NOT WASTE FILM ON GREATER DISTANCES.</td>
</tr>
<tr>
<td>Flash pictures too light.</td>
<td>Subject too close to flash.</td>
<td>Subject must be at least 5 feet from flash (page 10).</td>
</tr>
<tr>
<td>No picture or partial picture.</td>
<td>a) Lens cover closed.</td>
<td>a) Observe warning flag in viewfinder (page 6).</td>
</tr>
<tr>
<td></td>
<td>b) Hand, fingers, or wrist strap in front of lens.</td>
<td>b) Keep both hands and wrist strap behind front of camera.</td>
</tr>
<tr>
<td>Pictures blurred.</td>
<td>a) Camera movement.</td>
<td>a) Hold camera steady; press shutter release slowly.</td>
</tr>
<tr>
<td></td>
<td>b) Subject movement.</td>
<td>b) Subject must be stationary or moving very slowly toward or away from camera.</td>
</tr>
<tr>
<td></td>
<td>c) Too close to subject for proper focus.</td>
<td>c) Keep at least 5 feet from subject (page 8).</td>
</tr>
<tr>
<td>Subject not centered or partly cut off.</td>
<td>Improper use of finder.</td>
<td>View subject within luminous frame of viewfinder (page 8).</td>
</tr>
</tbody>
</table>
service facilities

If your Kodak camera should require service, complete facilities are provided in Rochester and at Kodak Regional Marketing and Distribution Centers. Also, service covered under the warranty is available through independent service shops in many cities. For such local warranty-covered service, please see your photo dealer or refer to the yellow pages of your telephone directory under Photographic Equipment and Supplies—Retail (Kodak Factory-Approved Warranty Service).

Eastman Kodak Company, Central Equipment Service Center, 800 Lee Road, Rochester, New York 14650
Eastman Kodak Company, Regional Equipment Service Center, 1901 West 22nd Street, Oak Brook, Illinois 60521
Eastman Kodak Company, Regional Equipment Service Center, 2800 Forest Lane, Dallas, Texas 75234
Eastman Kodak Company, Regional Equipment Service Center, 5315 Peachtree Industrial Blvd., Chamblee, Georgia 30341

Eastman Kodak Company, Regional Equipment Service Center, 9100 Alcosita Blvd., San Ramon, California 94583
Eastman Kodak Company, Regional Equipment Service Center, 1334 York Avenue, New York, New York 10021
Eastman Kodak Company, Regional Equipment Service Center, 12100 Rivera Road, Whittier, California 90606
Eastman Kodak Company, Regional Equipment Service Center, P.O. Box 1260, Honolulu, Hawaii 96807

warranty

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

In case of a manufacturing defect, the camera should be sent through your photo dealer or directly 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.