KODAK INSTAMATIC® M22

**MOVIE CAMERA** 

Your compact, easy-to-use Kodak Instanatic M22 Movie Camera allows you to make quality movies right from the start. Install the batteries, drop in a cartridge, and start making good movies. No winding or film "flip-over" is necessary—the electric motor drives 50 continuous feet of film.

IMPORTANT: Project super 8 movies only in a movie projector designed to accept super 8 film. You will damage your super 8 movies if you attempt to project them in an 8mm projector. Projectors are described on page 17.



## You can make super 8 movies as easy as 1.2.3

Only brief instructions are presented on this page. Read on for important details

1

After you install the batteries, open the camera door and insert a super 8 cartridge.

2

Set the lens opening according to the exposure guide on the back of the pistol grip. 3

Look through the viewfinder and aim the camera at the subject. Press the exposure release—you're making movies. For the sharpest movies, hold your camera still, except to follow moving subjects.



#### wrist strap

A wrist strap, provided for your convenience, is packed in the film compartment. Fold out the PISTOL GRIP, as shown; then open the CAMERA DOOR by sliding the CAMERA-DOOR LATCH toward the back of the camera, gripping the top and bottom of the door, and swinging it open. Remove the wrist strap; then thread the strap through the EYELET at the base of the camera.

#### batteries

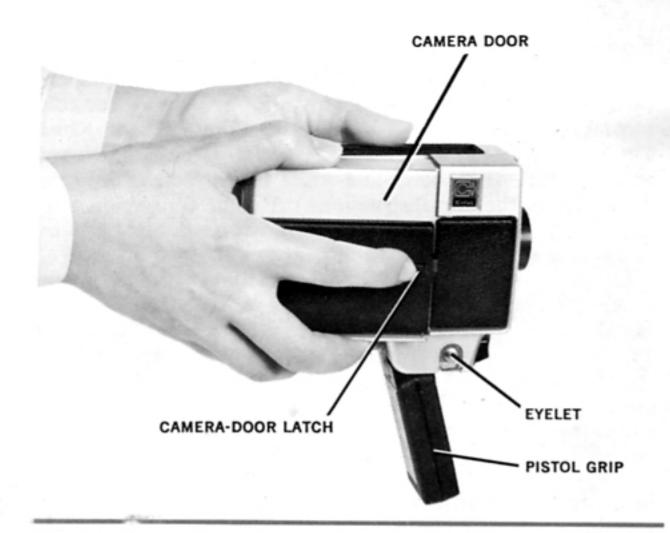
Your Kodak Instantic M22 Movie Camera uses two AAsize, 1.5-volt alkaline batteries (not supplied) to power the camera motor. Have these batteries checked when you purchase them. Use zinc-carbon-type batteries only in an emergency, and only when the temperature is above 55 F.

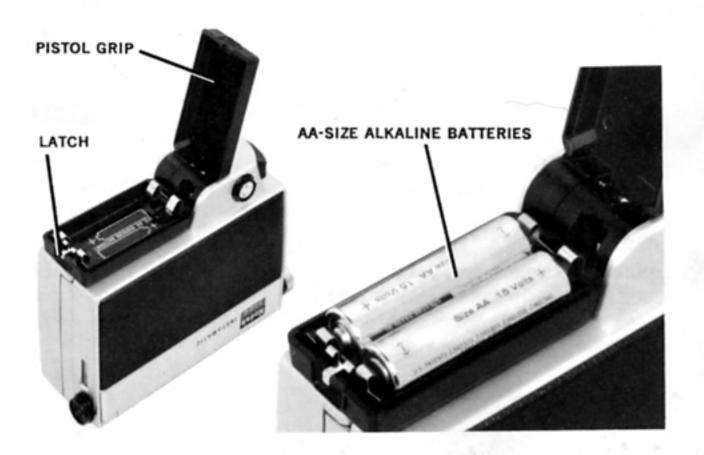
Some batteries give off a substance (often invisible) which coats the contacts and keeps battery power from reaching the motor. Therefore, to provide dependable camera operation, clean battery and camera contacts periodically with a rough cloth. For maximum protection of camera contacts, remove the batteries if you store the camera for long periods of time. See "Tips," page 15.

### installing batteries

Swing the PISTOL GRIP out, toward the front of the camera, until it locks into place. Then push in the LATCH, located in the base of the pistol grip, and lower the rear half of the pistol grip. Clean the contacts on the two AA-size ALKALINE BATTERIES with a rough cloth. Then insert them into the pistol grip, with the "+" on each battery matching the "+" on the label in the pistol grip. Raise the lowered half of the pistol grip (until it snap-locks with the upper half) to close the battery compartment.

Warning: Never dispose of used batteries in a fire as they may explode.





#### Kodak super 8 movie film

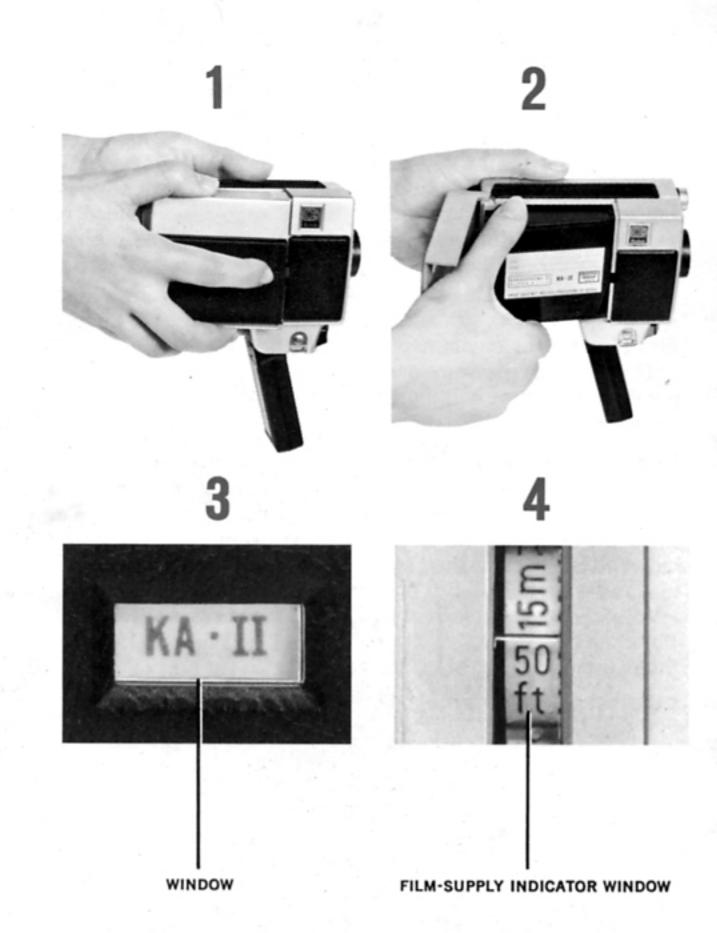
Your Kodak Instamatic M22 Movie Camera uses super 8 cartridges of Kodachrome II Movie Film, Type A, for color movies, and Kodak Plus-X Reversal Film 7276 or Kodak Tri-X Reversal Film 7278 for special-purpose black-and-white movies. (For black-and-white film exposure information, refer to the film instructions.) A color conversion filter, built into your camera for daylight movies, can be moved out of position for artificial-light movies as described on page 12.

Do not carry unwrapped, unexposed film cartridges in your pocket or purse, because dust may accumulate on the film and show up as black specks on your movies.

Before making any especially important pictures—on a trip or at some special event—shoot a cartridge of film and check the results. This will give you practice in camera operation and will provide a check on your equipment. If you have any questions, your dealer will be glad to help.

#### loading your camera . . . in any light!

- 1. Slide the door latch toward the back of the camera; grip the top and bottom of the door; then swing open the door.
- 2. Slip a super 8 movie cartridge into the camera, with the notches in the cartridge toward the front of the camera and the cartridge label facing out. Push down the end of the cartridge near the door hinge until it is seated.
- 3. Swing the camera door closed and be sure it latches. The film-type designation on the cartridge label will appear in the WINDOW on the camera door, indicating that the camera is loaded with film.
- 4. Check the FILM-SUPPLY INDICATOR WINDOW; the film-supply indicator should be at the line which indicates 50 feet or 15 meters. As you take pictures, the indicator will move to show how much film remains to be exposed. The film-supply indicator is marked in both feet and meters.



#### lens opening

To get bright, colorful, well-exposed movies outdoors, simply set the lens opening to suit the light conditions for daylight movie-making. Refer to the EXPOSURE GUIDE on the back of the pistol grip to select the proper lens opening. Set the lens to this opening by rotating the knurled LENS MOUNT until the INDEX MARK on the lens mount is opposite the INDEX LINE of the lens opening.\* The exposure guide shows symbols for various lighting conditions with their respective lens-opening settings. An explanation of these symbols is provided on page 9. The exposure guide is for average, frontlighted subjects in daylight from 2 hours after sunrise to 2 hours before sunset.

**Note:** Set lens opening to f/26 only when you are using a high-speed film (such as Kodak Tri-X Reversal Film 7278) and the film instructions recommend this lens opening.

If you use an exposure meter, the camera speed is 18 frames per second, and the shutter speed is approximately 1/40 second. \*These lens openings are in terms of f/numbers.

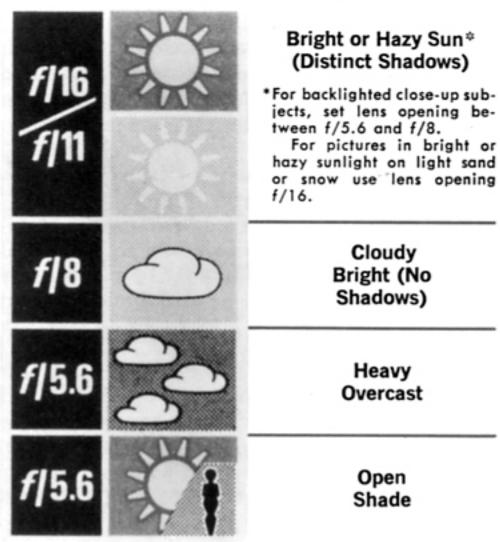
#### nearness to subject

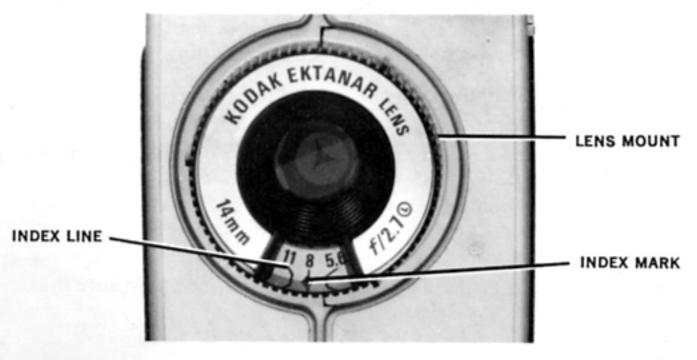
The 14mm f/2.7 Kodak Ektanar Lens of your Kodak Instanatic M22 Movie Camera is factory-set for sharp pictures at normal distances. However, the subject should be no closer to the camera than a certain distance at each lens opening, as shown below. For example, with the lens opening at 8, all objects 4 feet and farther from the camera are in focus. For camera-to-subject distances closer than those given in the table, use a close-up lens. See page 17.

Nearest Camera-to-Subject Distances at Various Lens Openings

Lens Openings	Nearest Camera-to-Subject Distance			
2.7	7 ft			
4	6 ft			
5.6	5 ft			
8	4 ft			
11	3 ft			
16	2½ ft			
26	2½ ft			

## Exposure Guide Symbols (Kodachrome II Movie Film, Type A)





#### viewfinder

View the subject by bringing the rear eyepiece just close enough to your eye to see the entire outline of the front viewfinder frame. Except at close distances, the scene viewed through the finder will be approximately the same as that which will be projected on the screen after the film is processed.

At close distances, because the viewfinder lens and the picture-taking lens are separated, they do not "see" quite the same view. This effect is called "parallax" and is especially noticeable in close-ups. Therefore, when you are making movies at 8 feet or closer, aim the camera slightly above and to the left of the area you want in your movie to avoid "cutoff."

#### exposure release

The EXPOSURE RELEASE is controlled by the two-position EXPOSURE-RELEASE LOCK KNOB. With the INDEX TAB in the "L" (lock) position, the exposure release cannot be operated. This prevents accidental running of the camera. With the index tab in the "R" (run) position, press in and hold the exposure release to make movies. Remove pressure quickly to stop.

For continuous running, press in and hold the exposure release; then rotate the exposure-release lock knob to the "L" position. To stop the camera, rotate the lock knob to the "R" position. If you want to be in the movie, place the camera, with the pistol grip folded up, on a tripod or other firm support and set the camera for continuous running.

#### daylight movies

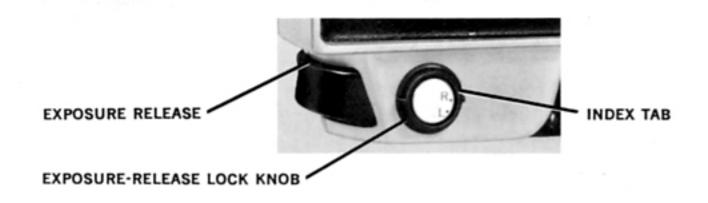
For bright color movies, your subject should be either entirely in bright or hazy sunlight with the sun approximately behind you, or entirely in shade (not partially in each).

- 1. For sharp pictures, keep at least as far away from your subject as the distance suggested in the "nearness to subject" section on page 8.
- 2. Compose your picture through the viewfinder. Be sure that nothing obstructs the lens.

3. Hold the camera steady and make movies by firmly pressing in the exposure release. To stop making movies, release pressure quickly.

**Note:** If the camera stops running while the exposure release is depressed, check the batteries. See page 15.

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







#### indoor movies with movie lights

Your camera accepts a movie light with a bracket which fits in the slot on top of the camera. This provides an easy-to-use light source for indoor movies. Your photo retailer will recommend a movie light suitable for use with your camera.

Position the movie light by inserting the light bracket into the slot on top of the camera. The bracket will "click-stop" when fully seated. This moves the camera's built-in filter out of position since no filter is required for indoor movies with a movie light. (If your movie light does not have a bracket which fits into this slot, or if you use the light away from the camera, insert the supplied FILTER KEY into the slot to move the filter out of position.)

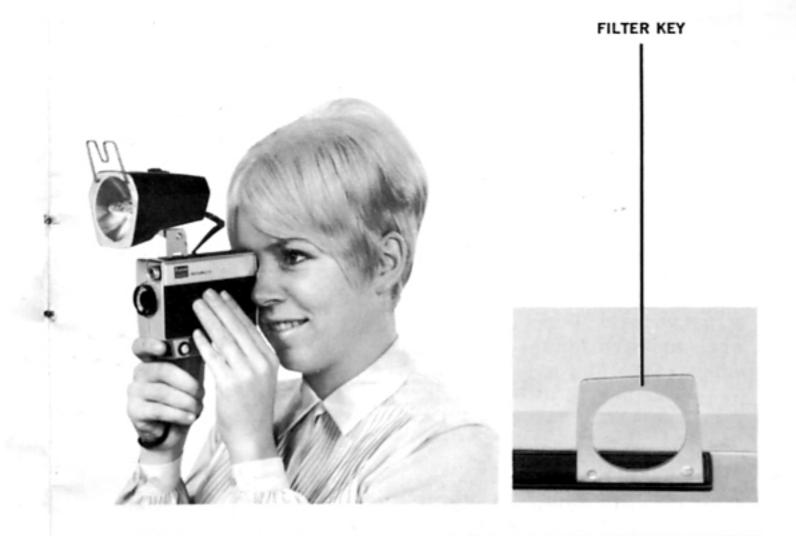
**Caution:** For the safety and comfort of your subjects, read the manufacturer's instructions *carefully* before using any movie light.

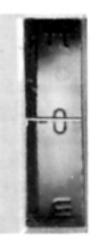
To make movies of night subjects which are brightly lighted by other tungsten-light sources, remove the filter from use by inserting the filter key into the slot on top of the camera. Do not try to remove the filter from use with any object other than the filter key. Do not lift the camera by means of the filter key or the movie light.

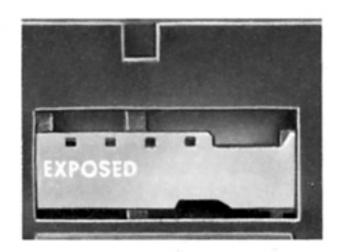
Set the lens opening (as described on page 8) according to an exposure-meter reading or the exposure label on the movie light. The lens opening will vary according to the subject's distance from the movie light. Remember to remove the movie light or the filter key before making daylight movies.

#### unloading

When the figure "0" begins to appear in the film-supply indicator window, you are nearing the end of the film. Listen for the sudden "free-running" sound of the mechanism, which tells you that the film is fully exposed. Open the camera door and lift out the cartridge by the end near the door hinge. The word "EXPOSED" appears on the film in the aperture of a fully exposed cartridge. Never open the cartridge.







12

**Note:** We do not recommend the interchange or removal of partially exposed film cartridges, because some "light-fogging" of the film will result. In addition, when a film cartridge is placed in the camera, the film-supply indicator will read 50 feet (15 meters), even if the film is partially exposed.

However, if you choose to remove the film cartridge before it is fully exposed, note the setting of the film-supply indicator before you remove the cartridge.

Mark this setting below the film type on the cartridge so that it will appear in the window. Since the indicator will be at 50 feet (15 meters) when the cartridge is reinserted in the camera, subtract the footage noted on the partially exposed cartridge from 50 feet (15 meters) to determine approximately when to listen for the "free-running" mechanism sound that indicates the film is fully exposed. For example, if the noted footage setting is 30 feet, make movies until the indicator is at 20 feet.

#### film processing

You can have your film processed as follows: (1) Take the exposed super 8 film cartridge to your dealer, who will arrange for processing (specify the processor, if you desire), or (2) mail exposed Kodachrome II Movie Film directly to a Kodak laboratory (as described below) or to any laboratory that offers such a processing service.

To mail your exposed cartridge of Kodachrome II Movie Film to a Kodak laboratory (Kodak doesn't process black-and-white film), first purchase a Kodak Prepaid Processing Mailer, PK59, from your photo retailer. Then send the exposed film cartridge directly to a Kodak laboratory, according to the instructions on the mailer. The laboratory will mail your processed film directly to any address you specify.

MORE INFORMATION—If you have questions about the use of this camera, write to Eastman Kodak Company, Dept. 841, 343 State Street, Rochester, N.Y. 14650.

#### tips

1. Batteries—If the camera stops running, clean the battery and camera contacts with a rough cloth. Have the batteries checked for their power output. Replace them if necessary. Removing and replacing a movie cartridge may give a false impression, since the "rest" given the batteries during the short time it takes to replace the cartridge may result in enough restored power to pull several feet of film. To prevent needless interruption during movie-making, use live batteries and keep battery and camera contacts clean.

If the footage counter does not advance when you have a film cartridge in the camera and the camera motor is running, check to see if the batteries are correctly installed with the "+" ends of the batteries matching the "+" on the label in the pistol grip. Improper battery insertion causes the motor to run backwards without driving the film. If your processed film is "black" (unexposed), check to see if the batteries are inserted correctly.

When you go on a trip, always take along a spare set of fresh batteries. Replace batteries after about a year of use or after exposing up to 25 cartridges. Batteries will run fewer cartridges of film through the camera under cold temperatures.

- 2. Scene length—Usually, about 5 to 10 seconds of taking time (approximately 1½ to 2½ feet of film) is appropriate for movie scenes of average action. Give your movies an interesting change of pace and make them more fun to see by making some scenes longer than others. It takes the same time to show the movie as it does to shoot it. So decide how long you want the shot to be on the screen, and shoot for that length of time. Some scenes need to be long, some medium in length, and some short. An overall shot of a beach to establish location may last only a few seconds, but the more interesting close-ups may deserve a much longer time.
- 3. Panning—"Panning" is a term that means moving the camera while you're shooting to cover an extended view. Your movies will be more enjoyable if you keep panning to

a minimum. When panning is excessive, subjects and backgrounds seem to race by on the screen.

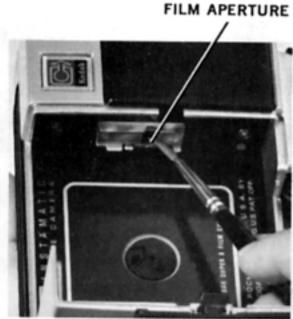
By holding your camera still for most of the time, you can make movies with the "professional" touch—ones that are easy on the eyes, and more fun to see. "Pan" only in rare instances. Whenever possible, try to photograph a wide view by making a series of shots, moving the camera between shots and overlapping each scene slightly. However, in some instances, a panning shot may be desirable. The secret of a good pan is to move the camera slowly and smoothly. Plant your feet solidly on the ground, hold the camera steady on the first part of the scene for a moment, pivot from the waist, and pan slowly. Never pan on nearby objects.

Another kind of pan is to follow a moving subject. In this type of pan, you keep the moving subject centered in the viewfinder, so the subject remains sharp and the background will be blurred.

#### camera care

Cleaning lenses—The picture-taking lens and the viewfinder lens are built into the camera and cannot be removed for cleaning. Clean front and rear viewfinder lenses and the protective glass in front of the picture-taking lens by first blowing away any dust or grit from the surface; then gently wipe the surface with Kodak Lens Cleaning Paper or a clean, soft, lintless cloth.

Cleaning film aperture—Clean the FILM APERTURE in the camera frequently to prevent build-up of dust at the aperture. Open the camera cover; then, while holding the camera lens up so that the dust will not fall onto the rear of the lens, use a small, soft brush to clean the aperture. Remove any dust in the film compartment.



#### auxiliary equipment . . .

#### . . . see your photo retailer

#### KODAK INSTAMATIC Movie Case, Model B

This durable case protects your camera from dust and damage when you are not making movies.

#### KODAK PRESSTAPE Universal Splicer

This easy-to-use dry splicer for super 8, 8mm, and 16mm films uses pressure-sensitive adhesive tape to make splices.

#### Close-up lenses

Close-up lenses extend the scope of your movie-making and make your camera more versatile. For example, these lenses allow you to get extra-close pictures of flowers, trinkets, animals, or other interesting subjects. To use close-up lenses, obtain a Series 5,  $30 \text{mm} \left(1\frac{3}{16}\text{-inch}\right)$  slip-on adapter ring and the desired close-up lens from your photo retailer.

#### KODAK INSTAMATIC M50 Movie Projector—for super 8 film

This projector features fully automatic threading, and compact, lightweight design. It has a 200-foot-reel capacity. A single knob controls both forward projection and rapid rewind.

#### Kodak Instamatic M65A Movie Projector for super 8 and 8mm film

Offers fully automatic threading and high-speed automatic rewind, plus a film-selector switch and a removable supply-spindle adapter for projecting both super 8 and 8mm films. It is self-cased and has a 200-foot-reel capacity.

#### KODAK INSTAMATIC M68A Movie Projector—for super 8 film

This budget-priced projector features fully automatic threading onto the take-up reel, and has a 400-foot-reel capacity, plus forward, reverse, and still projection.

#### Kodak Instamatic M67 Movie Projector for super 8 and 8mm film

Has the same features as the M68A Projector, plus a film-selector switch and a removable supply-spindle adapter for projecting both super 8 and 8mm films.

#### KODAK INSTAMATIC M70 Movie Projector—for super 8 film

Modern, low-format design is seen in this projector. It has automatic threading and a single control for forward, reverse, and still projection, with a choice of seven forward and reverse projection speeds. The projector is equipped with a tungstenhalogen lamp which operates at peak efficiency throughout its life. The motor-lamp switch gives you a choice of lamp brilliance. This projector has a 400-foot-reel capacity.

#### Kodak Instamatic M80 Movie Projector for super 8 and 8mm film

Has the same features as the M70 Projector, plus a film-selector switch and a removable supply-spindle adapter for projecting both super 8 and 8mm films.

#### Kodak Instamatic M85 Movie Projector for super 8 and 8mm film

Offers the same features as the M70 Projector, except it has forward and reverse (18 fps), plus still projection, rather than the choice of seven projection speeds. In addition, the projector offers a film-selector switch and a removable supply-spindle adapter for projecting both super 8 and 8mm films. It has one lamp position (high).

#### Kodak Instamatic M95 Movie Projector for super 8 and 8mm film

This projector has the same features as the M70 Projector, plus a film-selector switch and supply-spindle adapter for using both super 8 and 8mm films, a low-voltage tungsten-halogen lamp which assures high light output and longer lamp life, and a room-light receptacle.

#### KODAK INSTAMATIC M105 Movie Projector—for super 8 film

This model projects cartridges (50- or 100-foot) of super 8 movie film and standard super 8 reels of up to 400-foot capacity. Automatic threading of your super 8 film and automatic cartridge rewind provide easy operation of the projector. The projector has a built-in film trimmer. Storage space for a 400-foot take-up reel is provided in the cover.

#### Kodak Instamatic M109 Movie Projector for super 8 and 8mm film

This projector has all the features of the Kodak Instamatic M105 Movie Projector, plus the capability of projecting 8mm film in addition to super 8 movie film.

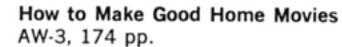
Your photo retailer will be glad to help you select a projector that fulfills your needs.

#### **KODAK Photo Information Books**

To help you make movies you and your friends will enjoy seeing over and over again, Kodak publishes many fascinating idea books, such as the two described below.

## Better Movies in Minutes AD-4, 40 pp.

Covers super 8 and 8mm cameras, and tells how to make movies interesting, colorful, and sharp. Includes suggestions on editing, titling, and projecting.



Leads the way to real pleasure in taking and showing home movies. Part One covers just the essentials that most beginners want; Part Two goes into the technicalities of more advanced movie-making. Profusely illustrated.







See your photo retailer for these and other Kodak publications.

#### service facilities.

If your movie camera should require service, complete facilities are provided in Rochester, as well as in Kodak Regional Marketing and Distribution Centers at the addresses listed below. 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 retailer or refer to the yellow pages of your telephone directory under Photographic Equipment and Supplies-Retail (Kodak Factory-Approved Warranty Service).

in Rochester:

Eastman Kodak Company

Central Equipment Service Center

800 Lee Road

Rochester, New York 14650

regional centers:

Eastman Kodak Company

Regional Equipment Service Center

P.O. Box 1260

9100 Alcosta Boulevard

San Ramon, California 94583

1065 Kapiolani Boulevard Honolulu, Hawaii 96807

12100 Rivera Road

Whittier, California 90606

5315 Peachtree

Industrial Boulevard Chamblee, Georgia 30341

1901 West 22nd Street Oakbrook, Illinois 60521

1334 York Avenue

New York, New York 10021

1400 Hi Line Drive Dallas, Texas 75207

#### warranty.

Within a year after purchase, any repairs necessary to this HAWKEYE INSTAMATIC Movie 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 inconveniences, or for any consequential damages occasioned by the equipment.

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

Consumer Markets Division Kodak Rochester, New York 14650

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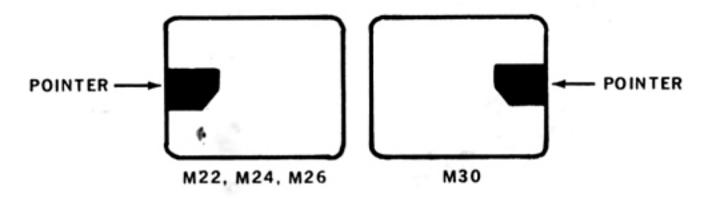
# IMPORTANT SUPPLEMENTARY INSTRUCTIONS for Your KODAK INSTAMATIC® Movie Camera

To make movie-making easier and more enjoyable for you, your camera is changed slightly from the one described in the manual. Follow the instructions given below to install the new eyecup and to understand the use of the new end-of-film and film-supply indicators.

#### end-of-film indicator

M22, M24, M26, and M30 Movie Cameras

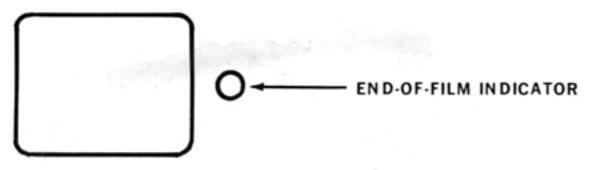
When approximately 3 to 5 feet of film remains to be exposed, a POINTER (end-of-film indicator) will begin to appear in the bottom of the viewfinder. It will slowly rise to the area indicated in the drawing when the cartridge is fully exposed (listen for the sudden "free-running" sound of the camera mechanism).



#### M28 Movie Camera

When approximately 3 to 5 feet of film remains to be exposed, a small round hole will begin to appear to the right center of the viewfinder. When the cartridge is fully exposed, the hole will

be completely visible as shown in the drawing, and you will hear the sudden "free-running" sound of the camera mechanism.

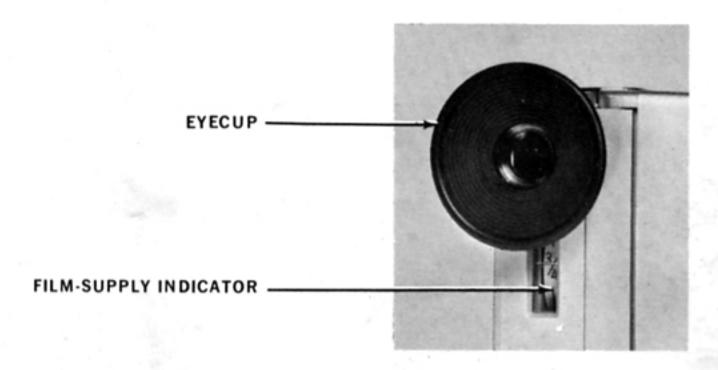


→ WARNING SIGNAL FOR AUTOMATIC EXPOSURE CONTROL

#### eyecup

M22, M24, and M26 Movie Cameras

A rubber EYECUP, which reduces extraneous light and helps you to position your eye at the center of the viewfinder, is packed in the film compartment along with the battery envelope and the wrist strap. After you remove these items from the film compartment as described on page 4 of the manual, snap the eyecup onto the rear eyepiece.



#### film-supply indicator

M22, M24, M26, M28, and M30 Movie Cameras

The FILM-SUPPLY INDICATOR in your camera is marked with a " $1-\frac{3}{4}-\frac{1}{2}-\frac{1}{4}=0$ " designation. When you insert a cartridge into the camera, the indicator will be at "1." As you make movies, the indicator will show how much of the cartridge remains to be exposed.

For example, when the indicator is at "½" you have exposed approximately 25 feet of film and have approximately 25 feet of film remaining to be exposed. Continue to make movies until the end-of-film indicator is visible in the viewfinder, or until the film-supply indicator is at "0" and you hear the sudden "free-running" sound of the camera mechanism.

If you should choose to remove a film cartridge from the camera and later reinsert it (we do not recommend this), note the setting before you remove the cartridge from the camera. Mark this setting on the film-cartridge label so that it will appear in the film-type window. Since the indicator will be at "1" when you reinsert the cartridge, subtract the noted setting from "1" to determine when to listen for the "free-running" sound of the camera mechanism. For example, if the noted setting was "¾," make movies until the film-supply indicator is at "¼." Under such conditions, the end-of-film indicator will not appear in the viewfinder.

## Kodak

Consumer Markets Division • Rochester, New York 14650

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## KODAK INSTAMATIC® M22 Movie Camera

MAY WE ASK YOUR H	IELP?				
We would like to know a please mark your answer Thank you.					
Was camera a gift? Yes	□ No □				
Ever owned a movie car	nera before	? Yes 🗆 No	) 🗆 💮		
Do you own a super 8 m	ovie project	or? Yes 🗌 I	No 🗆		
Your age? Under 20	20-24 🗆	25-34 🗆	35-44 🔲	45-54 🗆	55 or over
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