

**Kodak**

# *Enlarging* **EQUIPMENT**



Kodak Hobbyist,  
Fluorolite and  
Precision Enlargers  
Enlarging Lenses  
Enlarging Accessories

# ENLARGING

Enlarging is one of the most fascinating phases of photography . . . a process that offers a series of picture controls beyond the limits of your camera.

Making a big picture from a tiny negative is quite a thrill in itself, but enlarging can accomplish much, much more than that. By enlarging you can select just the ideal portion of your picture . . . eliminate unwanted areas . . . and go all the way toward making your finished print a realization of what you hoped for when you clicked the shutter.

A good enlarger is the basic piece of equipment around which the dark-room is built. In this booklet you will find descriptions of Kodak's newest enlargers—the basic, modestly priced Kodak Hobbyist Enlarger, the revolutionary  $2\frac{1}{4} \times 3\frac{1}{4}$  Kodak Fluorolite Enlarger, and the versatile  $4 \times 5\frac{1}{2}$  Kodak Precision Enlarger.

## KODAK HOBBYIST ENLARGER

It has the newest features essential to its sole purpose . . . making fine enlargements. You need no accessories—it comes complete with its lens.

### New Cold Light

This is the product of the enlarger's Circine fluorescent lamp. It means light without heat—perfect protection for your negatives. At the touch of a button the light flashes on, without a flicker.

### New Integrating-Sphere Lamphouse

So designed that all the light reaching your negative is reflected light. The contour of the lamphouse gives amazingly even light distribution. This, with the new lamp, assures excellent contrast. To utilize the maximum available light, a special paint was created to coat the inside of the lamphouse. This highly reflective surface contributes to the enlarger's fine printing speed and contrast.





## "Squeeze Action"

The mechanism positively controls easy, smooth elevation on the inclined column. The inclination of the column gives you greater enlargements, while retaining the compact over-all size of the enlarger. With the Hobbyist Enlarger you can make prints up to seven times larger than the original negative.

## Focusing

Adjustments are velvet-smooth—made quickly, accurately, by rotating the lens. The lens supplied with the enlarger is a Kodak Enlarging Ektanon 2-inch  $f/6.3$  Lens with click stops.

## New Negative Carrier

Simplifies loading. Circular in shape, it easily rotates in the enlarger. The negative carrier in any one of the following sizes is supplied with the enlarger: 24 x 36mm. (35mm.), 28 x 40mm. (Bantam),  $1\frac{5}{8} \times 1\frac{5}{8}$ ,  $1\frac{5}{8} \times 2\frac{1}{4}$ ,  $1\frac{5}{8} \times 2\frac{1}{2}$ ,  $2\frac{1}{4} \times 2\frac{1}{4}$ ,  $2\frac{1}{4} \times 3\frac{1}{4}$  roll film,  $2\frac{1}{4} \times 3\frac{1}{4}$  sheet film. If no size is specified, the  $2\frac{1}{4} \times 3\frac{1}{4}$  roll-film carrier will be supplied. The Kodak Combination Negative carrier A and its masks, and roll-film cups (described on page 6), may be purchased separately and used with the Hobbyist Enlarger. These are the only accessories recommended for use on this enlarger.

## Easy to use

Easy to set up or stow away, the Hobbyist Enlarger can be quickly disassembled and packed in its suitcase-type packing case. The packing case measures  $35\frac{5}{8} \times 13\frac{1}{2} \times 7\frac{1}{4}$  inches—with enlarger it weighs approximately 17 pounds. Compact, light, the "Hobbyist" is ideal for use where space is limited.

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Integrating sphere lamphouse and Circline lamp



Accessory roll-film cups attached to negative carrier



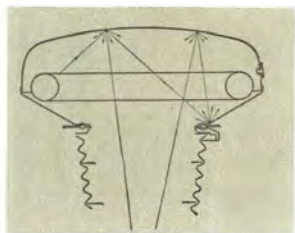
Kodak Hobbyist Enlarger disassembled for storage in its packing case

## KODAK FLUOLITE ENLARGER

New from the baseboard on up—tradition and precedent have had little part in its design. It's modern in appearance—modern in function. The pictures below indicate its many uses beyond its primary function—making fine enlargements. Following are the features that make the Kodak Fluorolite Enlarger truly unusual.

### Integrating-Sphere Light Source

Gives exceptionally even illumination. The lighttight lamphouse has been constructed to utilize the new fluorescent Circline lamp at its best. All the light reaching the negative is reflected light. The interior surfaces of the lamphouse have been coated with a new, highly reflective white paint. The on-and-off action of the lamp is instantaneous and its life is estimated at over 10,000 actuations.



Lamphouse diagram showing path of a light ray

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### Focusing

Rapid—accurate—faster than ever before with manual focusing. The knobs for focusing and elevating are so placed that both may be used at the same time and with a minimum of effort. The lock for height is positive, yet by means of the micromatic adjustment wheels, the height can be precisely varied by using only one hand.

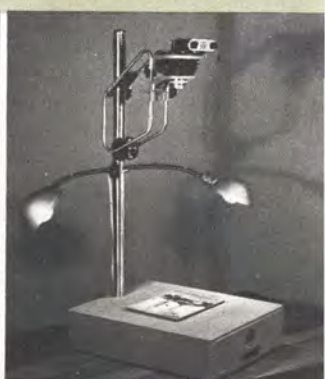
For enlarging . . .



As a view camera . . .



For copying . . .





## Bellows

Made of long-lasting chemical-resistant neoprene, reinforced with flare-reducing forms, and rigidly attached with strong die-castings for steadiness and permanent alignment. The tilting back, with zero indicator, provides distortion control. The filter holder can be moved close to the lens to eliminate filter reflections and stray light. The holder accepts B glass or 2-inch gelatin square filters.

## Stand

So well constructed that, for working purposes, it is practically free of vibration. A leakage reactance transformer is located in the base. It guarantees instant starting of the lamp and its location accounts for absence of weight in moving parts of the enlarger. The counterbalance has a coil spring which provides free, easy manipulation without danger of kinking the spring. The steel column and its chrome-plated, steel bellows support member can be removed from the base by loosening a single screw. The big storage compartment which forms the base is completely lighttight—a convenient, safe place for keeping film and paper.

## Glassless Negative Carrier

A new rotary type which, with swing head, insures the positioning of the picture in the center of the board—right side up. The carrier is the open-frame, open-hinged type, designed for easy, fast loading. One carrier is supplied with the enlarger—for the sizes available, see the next page.

## Color Work

“Color” was an important consideration in the design of the enlarger—it was planned for present and future color processes. The new cold light is properly balanced for color with normal use of filters. The color head is easily slipped into position and permits the use of 5-inch-diameter filters immediately above the negative or transparency—an important feature when correcting for color temperature. Precise relative positioning of filter and negative carrier reduces dust problems.

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For close-ups ...



For photomicrography, microfilming,  
clinical photography ...



For cine-titling and  
slide-making ...



## ACCESSORIES FOR USE WITH "FLUROLITE" ENLARGER

### ENLARGING ACCESSORIES

#### **Kodak Glassless Negative Carrier for Kodak Flurolite Enlarger**

Supplied with the enlarger in any one of the following sizes: 24 x 36mm., 28 x 40mm., 1 $\frac{5}{8}$  x 1 $\frac{5}{8}$ , 1 $\frac{5}{8}$  x 2 $\frac{1}{4}$ , 1 $\frac{5}{8}$  x 2 $\frac{1}{2}$ , 2 $\frac{1}{4}$  x 2 $\frac{1}{4}$ , 2 $\frac{1}{4}$  x 3 $\frac{1}{4}$  roll film, and 2 $\frac{1}{4}$  x 3 $\frac{1}{4}$  sheet film.

#### **\*Kodak Combination Negative Carrier A for Kodak Flurolite Enlarger**

Its built-in gray scale is useful for black-and-white and color work. Film-locating pins are removable to permit the use of a large-size sheet of film. Kodak Die-Cut Masks for this carrier are available in ten sizes (see price list).

#### **\*Kodak Lens Board**

An accessory lens board for lenses other than those listed on page 10 is available in two sizes: No. 0, blank (not illustrated); and No. 2 (shown here).

#### **\*Kodak Flurolite Roll-Film Support Cups A**

These cups fit on any of the negative carriers. The cups then rotate with the carrier. Removable pins guide the film and hold it in place.

#### **\*Kodak Optical Diffusing Plate, 2-inch**

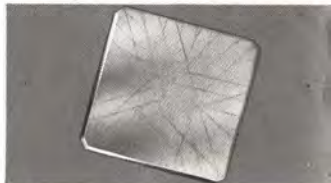
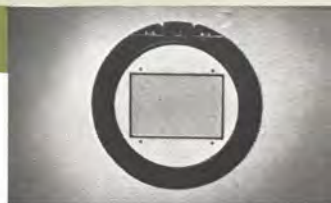
Useful in producing soft, slightly diffused effects in an enlargement. The plate fits the enlarger filter frame holders, 2-inch.

### COLOR ACCESSORIES

#### **\*Kodak Filter Frames**

Black metal frames designed to accept 2-inch gelatin filters. The filter and frame then slip onto the holder supplied with the enlarger. The convenient Kodak Filter Frame File holds twelve frames in dust-free storage.

\*Separate accessories—not included with the enlarger.





### **\*Kodak Fluorolite Color Head Adapter A**

Easily positioned, it can be used with Kodak Wratten Filters, 5-inch Gelatin Film Circles. The lamphouse and color head are lighttight—there is no problem of stray light in color work with the Fluorolite Enlarger.



## **PICTURE-TAKING ACCESSORIES**

### **\*Kodak Fluorolite Camera Back Adapter**

Attaches to the back casting of the bellows, where it revolves more than 90°. Exceptionally thin, it permits infinity focus with short focal length lenses. The back accepts Combination Film and Plate Holders  $2\frac{1}{4} \times 3\frac{1}{4}$  and  $6.5 \times 9$ cm., 35mm. Film Adapter, Film Pack Adapter  $2\frac{1}{4} \times 3\frac{1}{4}$  and Ground-Glass Focusing Back.



### **\*Kodak Fluorolite Camera Bed**

Converts the bellows assembly into a capable  $2\frac{1}{4} \times 3\frac{1}{4}$ -inch view camera. With its swing- and rotating-back action and interchangeable lens feature, it constitutes a sturdy, versatile view camera.



### **\*Ground-Glass Focusing Back**



When used with the Camera Back Adapter, it permits critical focusing and offers the opportunity of accurate image composition.

### **\*Kodak 35mm. Film**



### **Adapter A**

With this and the Camera Back Adapter, it is possible to use 35mm. films when the enlarger is set up as a camera.

### **\*Kodak Copying Lights, Model 2**



These lights are fully adjustable for copying with still or movie cameras or with the enlarger used as a camera.

### **\*Kodak Microscope**



### **Attachment**

Replaces the enlarger lens and makes a perfect, lighttight connection with a microscope for photomicrography.

\*Separate accessories—not included with the enlarger.



## KODAK PRECISION ENLARGER B ASSEMBLY

The Kodak Precision Enlarger and its accessories, like the Kodak Fluorolite Enlarger, constitute a group of parts skillfully designed to serve a wide range of photographic functions. These parts are all completely interchangeable. This system provides the opportunity to acquire, in the beginning, just sufficient equipment to meet immediate needs, and thereafter to acquire additional equipment with complete assurance of accurate fit and precise operation. The Precision En-

larger is primarily intended for making fine enlargements, but it has been constructed for ready conversion to copying, cine-titling, slidemaking, independent use as a camera, close-up photography, photomicrography, and clinical photography.

The B Assembly of the Kodak Precision Enlarger will accommodate any negative up to 4 x 5 or  $3\frac{1}{4} \times 5\frac{1}{2}$  inches. It consists of a Stand Assembly, Power-Cooled Lamphouse Assembly B, Adjustable Negative Mask B, Photo Enlarger Lamp, Combination Negative Carrier B, and Bellows Assembly B. Lenses and lens board are not included.

Since enlargements made with the Enlarging Head B are usually from sizable negatives, less illumination is required than for those made at high magnifications. For this reason, the Enlarging Head B is provided with a diffuse illumination system. The cooling system includes a sheet of heat-absorbing glass and a motor-driven fan.

### The Stand Assembly

The Stand Assembly used by the B Assembly consists of a non-warpage plywood baseboard and vertical column with a sliding bracket adjustable to any height. The B Enlarger Head can be attached to this bracket by a simple screw. A counterbalance permits the operator to adjust the head with ease. A slight turn of the knob will lock it securely at whatever elevation may be desired.

### Lenses

Lenses offering a wide selection are provided for the Kodak Precision Enlarger B. They are described on page 10.



## ACCESSORIES FOR THE KODAK PRECISION ENLARGER B

The following list gives the component parts of the "B" Assembly and the accessories which adapt the enlarger to its many specialized uses.

### For Enlarging

#### Enlarging Head B

Consists of Power-Cooled Lamphouse Assembly B (see next item) and Bellows Assembly B without lens

#### Power-Cooled Lamphouse Assembly B

Includes one No. 212 Mazda Photo Enlarger Lamp, one Combination Negative Carrier B, Adjustable Masks B, and Power-Cooling Unit

#### Bellows Assembly B

#### Stand Assembly

#### Optical Diffusing Plate, 3-inch

#### No. 0 Lens Board (not drilled or tapped)

#### Tilting Lens Mount

Adapter Ring No. 2; Adapter Ring No. 3; Adapter Ring No. 5

#### Exposure Meter Bracket for 3- and 4-inch lenses

#### Dust Cover B

### For Use as a Camera

Camera Back Adapter B (for  $3\frac{1}{4} \times 4\frac{1}{4}$  Kodak Combination Film and Plate Holders)

Kodak Combination Film and Plate Holders  $3\frac{1}{4} \times 4\frac{1}{4}$ , and  $9 \times 12$ cm.

#### Ground-Glass Focusing Back

#### 35mm. Kodachrome Adapter B

#### Bantam Kodachrome Adapter B

#### Copying Lights, Model 2

#### Microscope Attachment

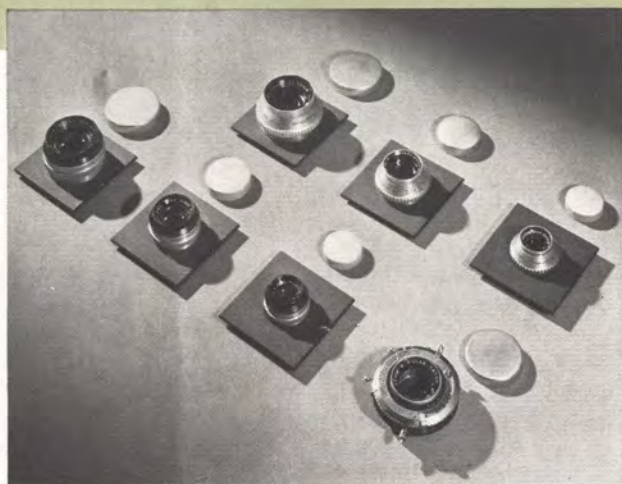
### For Color Printing

#### Kodak Gelatin Filter Frame, 3-inch

#### Kodak Filter Frame Holder

#### Kodak Filter Frame File, 3-inch

# KODAK ENLARGING LENSES



The lenses shown here are designed for the Kodak Fluorolite Enlarger and the Kodak Precision Enlarger. They are all Lumenized and all designed for maximum correction at the close working distances used in enlarging and copying. The choice of lens depends upon the size of the negative to be used. The Kodak Enlarging Ektar Lenses have special lateral and longitudinal color correction. They are recommended for use particularly when color requirements and definition are above the standards of normal photographic work. They are as follows:

Kodak Enlarging Ektanon Lens, 2-inch $f/4.5$	<i>For negatives up to—</i> $1\frac{3}{16} \times 1\frac{9}{16}$ in.
Kodak Enlarging Ektanon Lens, 3-inch $f/4.5$	$2\frac{1}{4} \times 2\frac{1}{4}$ in.
Kodak Enlarging Ektanon Lens, 4-inch $f/4.5$	$2\frac{1}{4} \times 3\frac{1}{4}$ in.
Kodak Enlarging Ektar Lens, 2-inch $f/4.5$	$1\frac{3}{16} \times 1\frac{9}{16}$ in.
Kodak Enlarging Ektar Lens, 3-inch $f/4.5$	$2\frac{1}{4} \times 2\frac{1}{4}$ in.
Kodak Enlarging Ektar Lens, 4-inch $f/4.5$	$2\frac{1}{4} \times 3\frac{1}{4}$ in.

*In addition, the Kodak Precision Enlarger B will accept these lenses:*

Kodak Enlarging Ektanon Lens, $5\frac{3}{8}$ -inch $f/4.5$	$3\frac{1}{4} \times 4\frac{1}{4}$ in.
Kodak Enlarging Ektanon Lens, $6\frac{3}{8}$ -inch $f/4.5$	$4 \times 5$ in.

*When the Fluorolite and Precision Enlargers are used as a camera, the following lenses are recommended:*

- Kodak Ektar Lens, 101mm.  $f/4.5$  in Kodak Flash Supermatic Shutter
- Kodak Ektar Lens, 127mm.  $f/4.7$  in Kodak Flash Supermatic Shutter



## ENLARGING ACCESSORIES

### Kodak Utility Footswitch

A light control for enlargers, contact printers, and safelights—a control that leaves the darkroom worker's hands free to handle equipment and materials. Its cord and combination plug connect with the electrical outlet. Cord from the equipment in use connects with the combination plug. The switch is designed for not more than 125 volts A.C. Attaches to floor or vertical support. Safe, low-intensity neon light glows through slots in the surface of the switch and marks its location.

### Kodak Electric Time Control

Gives precise timing in both contact and projection printing. Ruggedly built for long service, it easily plugs into your printer or enlarger. The timing range is from 1 to 57 seconds. Repeat timing requires only an original setting and a turn of the dial for each printing. For non-repeat timing, you set the dial and move the switch. Continuous light for focusing is provided. The Kodak Electric Time Control may either be used on the darkroom bench or hung on a wall by means of the slot at the back. Compact, the device measures only  $3\frac{1}{4}$  inches wide,  $2\frac{1}{2}$  inches deep, and  $4\frac{3}{8}$  inches high. It is for use on 110-volt, 60-cycle alternating-current circuits. The maximum electric load is 7 amperes.

### Kodak Print Projection Scale

Saves you both paper and time. It is a transparency divided into 10 sectors of varying density, each indicating a different printing time. The full instructions will guide you effectively in the choice of the best exposure.

### Kodak Enlarging Easel, 11 x 14

An attractive and efficient complement to any enlarger. Its masking arms provide perfect right angles and margins of varying widths. A toggle spring mechanism holds the ruled masking frame upright while paper is being positioned. The tilting legs, sold separately, permit correction of distorted perspective.



## KODAK ENLARGING PAPERS

Whatever the type and purpose of your enlargement, the paper you select plays the final important part in producing a picture of quality and beauty. In that selection, you express your artistic interpretation of the subject.

Kodak photographic papers are extremely helpful in the wide choice that they provide in image tones, contrasts, surfaces, and textures.

### **Kodabromide Paper**

A general, all-purpose enlarging paper of exceptional quality. Its rich, brilliant blacks commend it for use in making exhibition prints. Remarkable for high speed, and exposure and development latitude, it maintains the characteristic cold image uniformly.

### **Kodak Opal Paper**

It has a warm tone and a tonal gradation which produce enlargements with all the quality of contact prints. Its speed is adequate for enlarging with standard equipment, and its variety of surfaces offers a wide selection for projection printing of portraits from normal negatives.

### **Kodak Platino Paper—**

Moderately warm in tone. Has an intermediate speed, between that of Kodabromide Paper and that of Kodak Opal Paper, which permits shorter exposures with average enlargers and their lenses. Its exceptionally high quality makes it ideal for portrait work.

### **Kodak Illustrators' Special Paper**

A full-scale, brilliant emulsion, coated on a pure white stock. With its warm tone, it serves as an excellent medium for illustrative or reproduction purposes. This paper is well suited for retouching or other artwork.

### **Kodak Royal Bromide Paper**

The first choice in enlarging papers whenever extremely high speed is essential. It is particularly well suited to the quick-finish enlarging methods used in news photography for reproduction. Four contrast grades.

### **Kodak Resisto Rapid Paper**

An enlarging paper with the same dimensional stability and quick processing advantages as Kodak Resisto Paper. The processing time is approximately seven minutes. "Resisto Rapid" dries quickly. Cold image tone, is similar to "Kodabromide."

**Eastman Kodak Stores Co.**

**133 North Wabash Avenue**

**CHICAGO 2, ILLINOIS**





**KODAK**

# ENLARGING

**EQUIPMENT**

## LIST PRICES

Prices are subject to change without notice and include Federal Tax where applicable

	List Prices
KODAK HOBBYIST ENLARGER.....	\$ 49.50
KODAK FLUROLITE ENLARGER (without lens).....	112.50
ACCESSORIES FOR USE WITH "FLUROLITE" ENLARGER	
Kodak Glassless Negative Carrier for Kodak Flurolite Enlarger..	5.50
*Kodak Combination Negative Carrier A for Kodak Flurolite Enlarger.....	18.50
*Kodak Die-Cut Mask	
Blank, 24 x 36mm., 28 x 40mm., $1\frac{3}{16} \times 1\frac{9}{16}$ , $1\frac{5}{8} \times 1\frac{5}{8}$ , $1\frac{5}{8} \times 2\frac{1}{4}$ , $1\frac{5}{8} \times 2\frac{1}{2}$ , $2\frac{1}{4} \times 2\frac{1}{4}$ , $2\frac{1}{4} \times 2\frac{1}{2}$ , $2\frac{1}{4} \times 3\frac{1}{4}$ .....	.60
*Kodak Lens Board	
No. 0.....	2.00
No. 2.....	3.75
*Kodak Flurolite Roll-Film Support Cups A.....	5.25
*Kodak Optical Diffusing Plate, 2-inch.....	7.00
*Kodak Filter Frame, 2-inch.....	.90
*Kodak Filter Frame File, 2-inch.....	5.75
*Kodak Flurolite Color Head Adapter A.....	8.50
*Kodak Flurolite Camera Back Adapter.....	16.50
*Kodak Flurolite Camera Bed.....	16.50
*Kodak Ground-Glass Focusing Back A.....	4.50
*Kodak 35mm. Film Adapter A.....	52.50
*Kodak Copying Lights, Model 2.....	28.00
*Kodak Dust Cover A.....	2.75
KODAK PRECISION ENLARGER B ASSEMBLY.....	180.83
ACCESSORIES FOR KODAK PRECISION ENLARGER B	
Bellows Assembly B.....	43.75
Stand Assembly.....	46.67
Optical Diffusing Plate, 3-inch.....	7.50
No. 0 Lens Board.....	2.00

\*Separate accessories—not included with the enlarger

	List Prices
Tilting Lens Mount.....	\$24.19
Adapter Ring No. 2, Adapter Ring No. 3, Adapter Ring No. 5	2.25
Exposure Meter Bracket.....	11.50
Camera Back Adapter B.....	20.42
Kodak Combination Film and Plate Holders	
2¼ x 3¼.....	5.25
3¼ x 4¼.....	5.83
6.5 x 9cm.....	5.54
9 x 12cm.....	6.13
Ground-Glass Focusing Back B.....	9.50
Bantam Kodachrome Adapter B.....	42.50
Copying Lights, Model 2.....	28.00
Microscope Attachment.....	7.00
Kodak Gelatin Filter Frame, 3-inch.....	.90
Kodak Filter Frame File, 3-inch.....	11.50
LENSES IN LENS BOARD	
Kodak Enlarging Ektanon Lens, 2-inch f/4.5.....	22.50
Kodak Enlarging Ektanon Lens, 3-inch f/4.5.....	25.75
Kodak Enlarging Ektanon Lens, 4-inch f/4.5.....	32.75
Kodak Enlarging Ektar Lens, 2-inch f/4.5.....	49.75
Kodak Enlarging Ektar Lens, 3-inch f/4.5.....	52.50
Kodak Enlarging Ektar Lens, 4-inch f/4.5.....	56.00
Kodak Enlarging Ektanon Lens, 5¾-inch f/4.5.....	50.00
Kodak Enlarging Ektanon Lens, 6¾-inch f/4.5.....	55.00
Kodak Ektar Lens, 127mm. f/4.7, in Kodak Flash	
Supermatic Shutter.....	73.50
KODAK UTILITY FOOTSWITCH.....	10.00
KODAK ELECTRIC TIME CONTROL.....	13.50
KODAK PRINT PROJECTION SCALE.....	1.34

**EASTMAN KODAK COMPANY • ROCHESTER 4, N. Y.**