



IN the Kodak Medalist you will find a combination of features never before available in a roll film camera making a picture as large as  $2\frac{1}{4} \times 3\frac{1}{4}$  inches.

### These features include:

• The superb Kodak Ektar Lens f/3.5, with treated inner lens surfaces to give greater clarity and brilliance to pictures.

• The accurate Supermatic Shutter with 9 speeds ranging from 1 second to 1/400 second, plus "bulb" action and a provision for making time exposures.

• The lens and shutter mounted in a helical gear focusing tube thus assuring the finest possible hairline focusing.

• Prevention of accidental double exposure.

• Location of diaphragm and speed controls so that they are accessible and can be read from the top of the camera. This makes it unnecessary to turn the camera over for changing lens opening or speed.

• Removable back permitting the use of the Accessory Back for Sheet Film, Film Packs, and Plates. This back with the Kodak Combination Film and Plate Holder makes possible the use of Kodachrome Professional Film. A film pack adapter makes 12 films available for exposure with a single loading.

• Extension units which permit precision copying and close-up photography of small objects without the use of supplementary lenses.

How to Use the

# KODAK MEDALIST

#### 1. LOADING

The Kodak may be loaded in daylight, but not in direct sunlight. Use Kodak Roll Film 620; for the various types of films, see pages 18 and 19.

Before loading your camera with film look at the EXPOSURE COUNTER window, to see if "O" is in the forward half of the window; if it is, proceed with the loading as described below. If any figure but zero shows in the forward half of the EXPOSURE

Figure 1





COUNTER window, Figure 1, depress and turn the COUNTER KNOB until "O" appears in the forward part of this window.\*

The back of the camera is hinged at both ends and it can be opened at either end or removed entirely. To open the back, press the two pins toward one another, and swing the back outward, Figure 2.

Insert the roll of film in the recess which has a spring bracket. The spool is inserted so that it rests under the two projections on the sides of the bracket, Figure 3, page 4. The spool must be inserted so that when the paper is drawn off, the colored side of the paper will be up and the black side toward the lens.

Break the seal and pass the protective paper *over* the rollers and thread the end of the paper into the

\*Under normal operation "O" should be in the forward half of the EXPOSURE COUNTER window as described above. However, if the film is removed from the camera before it is wound off completely, it will be necessary to set the EXPOSURE COUNTER to "8" instead of "O."



longer slit in the empty reel as far as it will go, Figure 4.

Turn the WINDING KNOB once or twice to bind the paper on the reel. *Be sure the paper is started straight*. Close the back with a firm pressure until the latches snap outward into place.

#### 2. WINDING THE FIRST SECTION OF FILM INTO PLACE

Draw back the slide which covers the red window on the back of the Kodak. This is a spring slide and it must be held while the WINDING KNOB is turned, Figure 5. Turn the WINDING KNOB until a small hand for appears in the red window. Continue turning the WINDING KNOB slowly until the figure "1" appears at the edge of the red window.



Depress the COUNTER KNOB and turn it until the figure "1" appears in the forward part of the EXPOSURE COUNTER window on the top of the camera, Figure 6; then give a slight turn to the WINDING KNOB until it locks. The figure "1" on the protective paper will now show in the red window.

*Kodacolor Film:* At the end of each roll of Kodacolor Film there is an extra length of film, used as a

Figure 5





processing control, which must never be exposed in the camera. Therefore, since Kodacolor Film is supplied in a six-exposure roll, the instructions given below must be followed:

After the figure "1" appears in the lower part of the red window, depress and turn the Counter Knob until "3" appears in the forward part of the Exposure Counter window. Then give a slight turn to the winding knob until it locks. The Exposure Counter will always be two numbers ahead of the actual exposure. For instance, when "5" is in the Counter window, the figure "3" on the protective paper will show in the red window.

If the film is inserted in the camera and the WINDING KNOB turned with the EXPOSURE COUNTER on some other figure than "O," the winding mechanism will lock. The COUNTER KNOB must then be depressed and turned until "8" appears in the forward half of the window. To release the winding mechanism the lens must be brought to picturetaking position, as described in Section 3 below, and the SHUTTER RELEASE must be pressed. Then proceed

with winding the film as described on pages 4 to 6.

The dial on the top of the camera should be set to show the kind of film with which the Kodak is loaded, Figure 7.



#### 3. BRINGING THE LENS TO PICTURE-TAKING POSITION

Turn the large FOCUSING COLLAR, Figure 8, page 8, on the lens barrel to bring the lens to a picturetaking position. This can be judged by the FOCUS-ING SCALE on the top of the camera. As the lens is brought forward, this scale automatically revolves and when  $\infty$  (Infinity) comes to the index (and not before) the SHUTTER RELEASE can be depressed. **CAUTION:** Damage can be done to the camera if force is used to depress the SHUTTER RELEASE, before the lens is brought to the infinity position.



Figure 8

#### 4. FOCUSING-THE RANGE FINDER

The RANGE FINDER of the Kodak Medalist is coupled with the lens of the camera. The RANGE FINDER is of the split field type. Its eyepiece is directly below the VIEW FINDER, Figure 9. Look Figure 9











As image will appear when RANGE FINDER is set for a distance nearer than the correct one.

As image will appear when RANGE FINDER is set for a distance beyond the correct one.

As image will appear when RANGE FINDER is correctly focused.



through the eyepiece. A distinct horizontal line cuts the field of view into two equal parts. Turn the FOCUSING-COLLAR and look through the eyepiece of the RANGE FINDER at a vertical line in that portion of the subject that you wish to have sharpest in your picture.

The selected vertical line will appear broken. The part seen in the upper area will be either to the right or left of the vertical line which is seen in the lower area. Revolve the FOCUSING COLLAR until the vertical line is unbroken. The RANGE FINDER can be used only for subjects that are not moving. For critical focusing use the focusing knob located next to the FOCUSING COLLAR.

The RANGE FINDER can also be used with the camera held vertically. When it is used in this position, focus on some *horizontal line* in the subject. When the line is continuous the Kodak is in focus.

Another method of using the RANGE FINDER is to set the lens for the distance desired. This is done by turning the FOCUSING COLLAR until this distance is at the black index on the FOCUSING SCALE. While looking through the eyepiece of the RANGE FINDER, move back or forth until a vertical line in the subject appears continuous in the upper and lower areas of the finder.

#### 5. SHUTTER SPEEDS

The Supermatic Shutter on your camera is designed for making automatic exposures of 1, 1/2, 1/5, 1/10, 1/25, 1/50, 1/100, 1/200, and 1/400Figure 10





second. For average subjects revolve the knurled shutter SPEED RING until the black indicator A is at 100, Figure 10.

For any speed slower than 1/25 second the knurled shutter SPEED RING is turned until the red indicator B is at the exposure desired.

To make an exposure of 1/400 second the shutter SPEED RING must be turned to 400 before the film is wound into position.

For "bulb" exposures the indicator B must be at the letter "B." For time exposures the indicator B must be at the letter "B" and the TIME EXPOSURE LEVER must be swung forward as far as it will go, Figure 11. For making time or "bulb" exposures see pages 22 and 23.





#### 6. LENS OPENINGS

The lens openings regulate the amount of light passing through the lens. The openings are enlarged orreduced by moving the lever C of the DIAPHRAGM CONTROL RING. The f/ numbers can be read on the front or top of the shutter, Figure 12.

For average subjects outdoors when the sun is shining, move in-

dicator C to f/8 and make an exposure of 1/100 second with Kodak Verichrome or Kodak Plus-X Film. See directions on pages 23 and 24 for the use of the different lens openings.

#### 7. THE VIEW FINDER

The VIEW FINDER directly above the RANGE FINDER, see Figure 9, page 8, shows what will appear in the picture but on a much reduced scale. Hold the Kodak so that you see the entire front frame of the finder. This will assure the proper aiming of the Kodak. During the exposure, hold the camera steady by pressing the hand supporting it against the face. Unusual effects can be obtained by tilting the Kodak. **CAUTION:** The finder housing should never be removed except by a competent camera repair man.

#### 8. RELEASING THE SHUTTER

Normally the shutter is set when the film is wound; however, after the first section of film is brought into position, it is advisable to push the SHUTTER SETTING LEVER, Figure 13, toward the center of the camera as far as it will go and then release it. Bring the lens to the picture-taking position and press the SHUTTER RELEASE to make the exposure. It will be unnecessary to set the shutter manually for the other exposures. Hold the breath, while the SHUTTER RELEASE is pressed. If the Kodak is moved during

Figure 13



the exposure, the picture will be blurred. *Hold the Kodak steady*.

The RED SIGNAL, located directly behind the FOCUSING SCALE, is a warning that a new section of film must be brought into position. As a new section of film is brought into place the RED SIGNAL disappears, and reappears after the exposure is made.

After an exposure is made, the WINDING KNOB is released. Turn the WINDING KNOB until it locks; this sets the shutter and moves the succeeding exposure number to the forward half of the EXPOSURE COUNTER window.

In trick photography when a double exposure may be wanted, make the first exposure; then push the SHUTTER SETTING LEVER toward the center of the camera as far as it will go; release

#### HOLD THE KODAK STEADY





the lever, permitting it to return to its original position, and again push the SHUTTER RELEASE.

A T.B.I. Cable Release No. 2 can be used with the Kodak Medalist. To attach this cable release or the cable release of a synchronizer, screw it into the CABLE RELEASE SOCKET, Figure 14, directly behind the SHUTTER SPEED RING. After the shutter is tripped with a cable release, the SHUTTER RE-LEASE must be pressed in order to free the winding mechanism.

#### THE SELF TIMER

There is a self-acting release built into the shutter; by using this self timer you can include yourself in the picture.

To use the self timer, place the Kodak on a tripod or other firm support. An unexposed section of film must be in position. After setting the



shutter for the proper speed and lens opening, push the lever D as far as it will go in the direction of the arrow, Figure 15. Press the SHUTTER RE-LEASE, as far as it will go. Get into the picture. After about ten seconds

the exposure will be made. Do not use the self timer for "bulb" exposures.

#### **REMOVING THE FILM**

To unload the Kodak after the last picture has been made, turn the winding knob until the end of the paper on the roll passes the red window.

In a subdued light, open the back of the Kodak. Hold the end of the paper taut and turn the knob until all of the paper is on the roll. If the sticker folds under the roll, turn the knob to bring it up.

Take hold of the end of the paper and sticker, and remove the film, Figure 16. Fold under the end of the paper, and fasten it with the sticker. IMPORTANT: After removing the film, do not wind it tightly with a twisting motion, since this



may cause scratches on the film.

The film is now ready for development, which should be done as soon as possible. We will be glad to send you complete instructions for developing and printing.

Remove the empty spool and place it in the winding end of the Kodak, fitting the key on the KNOB into the slot in the end of the spool. The Kodak should now be reloaded with Kodak Film, see page 2.

**CAUTION:** No type of lubricant should ever be applied to the helical gear focusing tube.

The Films that Meet Every

**Everyday Favorite** 

# KODAK VERICHROME FILM



Has great speed and is well balanced for recording tone values in a black-and-white print. It has great exposure latitude and assures clear, satisfying results. 8 exposures. V620 for the Kodak Medalist.



Fine Grain—Greater Speed

# KODAK PLUS-X PANCHROMATIC FILM



The high speed and fine grain of Kodak Plus-X Panchromatic Film make it the ideal film for general outdoor work when panchromatic results are desired. 8 exposures. PX620 for the Kodak Medalist.



Victure Making Need...

For Pictures at Night

### KODAK SUPER-XX PAN FILM



Gives correct color values in black-and-white. Its speed makes it ideal for taking pictures at night by artificial light, and for outdoor action shots. 8 exposures. XX620 for the Kodak Medalist. For Pictures in Full Color

## KODACOLOR FILM



Now you can have full-color prints—Kodacolor Prints. Finishing is done by the Eastman Kodak Company. Place your finishing order with your Kodak dealer. 6 exposures. C620 for the Kodak Medalist.





SUGGESTIONS ON posure

#### INSTANTANEOUS EXPOSURES

When the sun is shining, it should be behind your back or over the shoulder; if it shines directly into the lens, it will blur and fog the picture. However, beautiful effects can be obtained by back- or sidelighting. When the Kodak is pointed towards the sun, the lens must be shaded so that the direct sunlight will not strike the lens. For the best results, use the Lens Hood of the Kodak Combination Lens Attachments (see pages 32 and 33 for a full description of the various attachments that are available) or use a Kodak Adjustable Lens Hood No. 2.

For ordinary pictures outdoors use Kodak Verichrome or Plus-X Panchromatic Film. Where extreme film speed is necessary, either on account of poor lighting or because a high shutter speed must be used, use Kodak Super-XX Panchromatic Film.

Snapshots should be made during the hours from one hour after sunrise until one hour before sunset. If earlier or later, the exposures must be longer.

For a moving object use 1/200 or 1/400 second with the proper stop opening.

Official Photograph, U. S. Navy

Exposure f/8 and 1/100 second with Kodak Verichrome or Plus-X Film.

#### TIME AND "BULB" EXPOSURES

For all time or "bulb" exposures the Kodak rust be placed on a tripolor one other steady, firm support—do not hold i in the hands or the picture will be blurred.

A tripod socket is provided for making horizontal pictures. A Kodak Tilt-a-pod or Optipod must be obtained to use the Kodak on a tripod for a vertical picture.

For short time exposures of ten seconds or less, "bulb" exposures are recommended.

For a "bulb" exposure, the indicator B must be brought to the letter "B," and the SHUTTER RE-LEASE pressed; the shutter will remain open as long as the SHUTTER RELEASE is held down.

To make a time exposure the indicator B must be at the letter "B" and the time exposure lever

Figure 17



must be swung forward as far as it will go, Figure 17. The shutter RELEASE is then pushed down; the shutter will open and remain open until the TIME EXPOSURE LEVER is swung back to its original position.

#### LENS OPENINGS

The lens openings regulate the amount of light passing through the lens. These openings are enlarged or reduced by moving the lever C, see page 12.

A knowledge of the comparative values of the lens openings is necessary for correctly timing exposures.

The lens openings are marked f/3.5, 4, 5.6, 8, 11, 16, 22, and 32.

The largest lens opening is f/3.5. This opening allows approximately thirty per cent more light to enter than f/4. From f/4 to f/32 each smaller opening (larger number) admits half the light of the preceding larger lens opening. Thus, if the correct exposure is 1/100 second at f/8, then the exposure for f/5.6 should be 1/200 second; for f/4, 1/400second; for f/11, 1/50 second, and for f/16, 1/25second.

The exposure for the average outdoor subject, when the sun is shining, is f/8 and 1/100 second with Kodak Verichrome or Plus-X Panchromatic Film. The important thing to remember is the average

exposure of f/8 and 1/100 second. When the light conditions differ from the average, change the aperture, keeping in mind the basic exposure f/8 and 1/100second. See the exposure guide on pages 26 and 27.

#### DEPTH OF FIELD

Depth of field is the distance from the nearest to the farthest objects that will appear sharp in the negative. It depends upon the distance between subject and lens, the focal length of the lens, and the size of the lens opening used; the smaller the opening the greater the range of sharpness.

#### **DEPTH OF FIELD SCALE**

A depth of field scale is combined with the FOCUS-ING SCALE; this tells at a glance the depth that will be obtained at the distance focused on with the selected lens opening. The depth of field scale will be found convenient for photographing subjects ten feet or farther from the lens. Instead of using the RANGE FINDER, consult this scale and estimate the distance to the subject.

To find the Depth of Field for a given distance and stop opening, read the distances on the outside ring at the lines coming from the chosen f/ number on the circular scale.

Example: If the camera is focused for 6 feet and f/5.6 is used, Figure 18, everything from about  $5\frac{1}{3}$  feet to about 7 feet will be sharp; with f/11



Figure 19

everything from about  $4\frac{3}{4}$  feet to almost 8 feet will be sharp.

If the camera is focused for 15 feet, we find that at f/5.6, Figure 19, everything from about 11 feet to about 20 feet will be sharp, and with f/11 everything from about  $9\frac{1}{2}$  feet to 35 feet will be sharp.

The DEPTH OF FIELD SCALE indicates the depth to the rear only when the camera is focused for  $3\frac{1}{2}$  feet. For  $3\frac{1}{2}$  feet the depth with f/3.5 is 3 feet 4 inches to 3 feet 8 inches; with f/5.6, 3 feet 3 inches to 3 feet  $9\frac{3}{4}$  inches.

# DAYLIGHT EXPOSURE TABLE

Kind of Film	Brilliant <sup>1</sup> Subjects	Bright <sup>2</sup> Subjects	
Verichrome or Plus-X	f/16 and 1/100	f/11 and 1/100	
Super-XX	f/22 " "	f/16 ""	
Verichrome or Plus-X	<i>f</i> /11 and 1/100	<i>f</i> /8 and 1/100	
Super-XX	<i>f</i> /16 " "	<i>f</i> /11 " "	
Verichrome or Plus-X	f/8 and 1/100	f/5.6 and 1/100	
Super-XX	f/11 """	f/8 " "	
Verichrome or Plus-X	f/5.6 and 1/100	f/4 and 1/100	
Super-XX	f/8 " "	f/5.6 " "	

<sup>1</sup>**Brilliant Subjects:** Beach, marine and snow scenes, distant landscapes and mountains without prominent dark objects in the foreground.

<sup>2</sup>Bright Subjects: Near-by people in marine, beach or snow scenes; scenics with foreground objects.

For Kodak Verichrome, Plus-X Panchromatic, and Super-XX Panchromatic Films.

For Kodacolor Film, consult the exposure table included with the film.

Average <sup>3</sup> Subjects	Average <sup>3</sup> Shaded <sup>4</sup> Subjects Subjects	
f/8 and 1/100 f/11 ""	f/5.6 and 1/100 f/8 " "	Bright Sun
f/5.6 and 1/100 f/8 " "	f/4 and $1/100f/5.6$ " "	Hazy Sun
f/4 and 1/100 f/5.6 " "	f/4 and 1/50 f/4 " 1/100	Cloudy-Bright
f/4 and 1/50 f/4 " 1/100	f/4 and 1/25 f/4 " 1/50	Cloudy-Dull

<sup>3</sup>Average Subjects: Near-by people, gardens, houses and scenes, *not in the shade*. Use this classification if in doubt.

<sup>4</sup>**Shaded Subjects:** People, gardens, and other subjects in the *open shade* (lighted by open sky—not under trees, porch roof, etc.).

#### EXPOSURES FOR INTERIORS BY DAYLIGHT

It is easy to make pictures of interiors by daylight where the windows get direct light from the sky.

To make a picture of a room interior by daylight, adjust the shutter for a "bulb" exposure, see page 22, and set the lens at f/16; this opening gives the best average results.

When the Kodak is on a table, do not place it more than two or three inches from the edge, or the table will show in the picture.

Compose the picture in the finder, including more of the floor of the room than of the ceiling. Leave the furniture in the room in its usual place, as far as possible, but be sure there are no pieces close to the camera lens.

Focus the Kodak for the average distance between the objects in the room and the camera.

For an interior with medium-colored walls and furnishings and two windows, with the sun shining, make an exposure of about 4 seconds with stop f/16 and Kodak Verichrome or Plus-X Panchromatic Film. With one window double the exposure, and if there are more than two windows, halve the exposure.

If the day is cloudy, make an exposure of 8 seconds to 16 seconds.

No definite rule can be given for all interiors because of the great variety of light conditions. It is

suggested that a series of exposures be made from about 2 seconds to 16 seconds with opening f/16; make each exposure double the previous one.

With Super-XX Panchromatic Film, give one-half the exposure recommended above.

These exposures are for the hours between three hours after sunrise and three hours before sunset; if earlier or later the exposures must be longer.

#### INDOOR PICTURES AT NIGHT

To take snapshots or other indoor pictures at night, you need only a roll of Kodak Film, a few Kodak Handy Reflectors, and a few Photoflood or Photo*flash* bulbs. Photoflood bulbs can be screwed into all regular lamp sockets.



**PhotoFLOOD** Lamps, either the No. 1 or No. 2, give a steady light of great brilliance. The No. 2 bulb gives twice the light and lasts about twice as long as the No. 1.

#### **SNAPSHOTS WITH PHOTOFLOODS**

To take snapshots at night with the Kodak Medalist, load the camera with Kodak Plus-X Panchromatic, Super-XX Panchromatic, or Verichrome Film. Place two bridge lamps fitted with the Kodak Handy Reflectors and two No. 2 Photoflood Lamps, at any of the distances from the subject given in the table on page 30; then focus the Kodak. **CAUTION:** Photoflood Lamps, especially the No. 2 size, become quite hot and should not be kept burning any longer than necessary. Do not permit bulbs to come in contact with Kodak Handy Reflectors or the fabric of lamp shades.

#### PHOTOFLOOD EXPOSURE TABLE

Lens apertures to use with 1/25 second—two No. 2 Photoflood Lamps in Kodak Handy Reflectors, for average subject in room with light-colored walls.

Lamp Distance	4 ft.	6 ft.	9 ft.	12 ft.
Verichrome or Plus-X	f/8	f/5.6	<i>f</i> /4	
Super-XX	f/11	f/8	<i>f</i> /5.6	

For two No. 1 Photoflood Lamps double the above exposures. For example, if the table calls for an exposure of f/8 and 1/25 second, give an exposure of 1/25 second and f/5.6. See page 23 for a comparison of lens openings.

#### **PHOTOFLASH PICTURES**

For making pictures by Photoflash we strongly recommend a good synchronizer, such as the Kodak Senior Synchronizer, Speedgun Model E, or the Kodak Junior Synchronizer. With most synchronizers the shutter should be adjusted to the synchro-



Kodak Junior Synchronizer attached to Kodak Medalist

nizer before the camera is loaded with film. Be sure to follow the directions which accompany the synchronizer.

Only the Midget Photoflash Lamps No. 5 and SM can be used with the Kodak Junior Synchronizer.

To attach the Kodak Junior Synchronizer to the Kodak Medalist, it is advisable to obtain an extension camera bracket.

After you have made a picture with a synchronizer, press the shutter release on the camera housing, in order to wind the film and automatically set the shutter.









Adapter Ring Insert

Portra Lens

**Retaining Ring** 

Kodak Pola-Screen Wratten Filter

# KODAK COMBINATION LENS

The lens mount of the Kodak Medalist is supplied with a Kodak Adapter Ring Insert. To use a filter or a Portra Lens with the Kodak Medalist, obtain a Series VI Wratten Filter or Series VI Kodak Portra Lens. Unscrew the Insert from the lens mount, place the filter or Portra Lens in front of the camera lens and hold it in place by screwing the Insert back in place.

The lens mount of the Kodak is threaded so that after removal of the Insert you can screw either the Kodak Pola-Screen Series VI or a Series VI Lens Hood in front of the lens.

If you wish to use both a filter and a Kodak Portra Lens, a Kodak Retaining Ring Series VI must be obtained. The Portra Lens is placed in front of the camera lens, the Series VI Retaining



Kodak Lens Hood

# ATTACHMENTS

Ring is then screwed into place, the filter is put into the Retaining Ring and is secured either by the Insert which comes with the Kodak's lens mount or if desired by a Kodak Lens Hood Series VI.

When a Kodak Pola-Screen is to be used with both a supplementary lens and a filter, the Series VI Retaining Ring must be

used. The supplementary lens is placed in front of the lens, the Series VI Retaining Ring is screwed into the lens mount and the Pola-Screen is screwed into the Retaining Ring; then the unmounted Wratten Filter is put in front of the Pola-Screen and held in place either with the Adapter Ring Insert or a Kodak Lens Hood.

#### KODAK PORTRA LENSES

#### 1+, 2+, AND 3+

While the Kodak Medalist can be focused for subjects as close as  $3\frac{1}{2}$  feet (close enough for head and shoulder portraits), it can be focused for even closer distances with one of the Kodak Portra Lenses.

By using a Portra Lens, large images of flowers and "still life" subjects can be obtained.

To use a Portra Lens unscrew the Insert on the front of the camera's lens mount, place the Portra Lens convex side forward, in front of the lens, and hold it in place by screwing in the Insert.

Compose the picture in the finder. When you are holding your camera for vertical pictures with the finder to the right, turn the Kodak just a *little* to the right, and for horizontal pictures tilt the camera up a trifle, because the short distances at which the subject must be from the lens make it necessary to center the subject by eye.

When you are using roll film in your camera, the subject must be at one of the distances from the lens given in the tables on pages 36 and 37. Revolve the focusing knob until the correct figure is at the focusing index on the FOCUSING SCALE and then measure the distance carefully from the lens to the subject.

The same exposure is required as without the Kodak Portra Lens.

The Accessory Back for Sheet Film, Film Packs, and **Plates**, an accessory, will be very useful for obtaining the best results with the Kodak Portra Lenses.

When the Kodak Medalist is fitted with the Accessory Back and the Kodak Portra Lenses for close-up photography, focusing is done on the ground glass. This makes it unnecessary to measure the distance from the camera to the subject.



GROUND-GLASS PANEL (Included with Accessory Back)

KODAK PORTRA LENS 1+			
With the Focus Set at	Distance Subject to Lens	Size of Subject Should not Exceed	
$3\frac{1}{2}$ ft.	20 <sup>3</sup> /8 in.	$10\frac{1}{2} \times 15\frac{1}{4}$ in.	
4 ft.	215/8 in.	11 <sup>3</sup> / <sub>8</sub> x 16 <sup>3</sup> / <sub>8</sub> in.	
5 ft.	233⁄4 in.	123⁄4 x 183⁄8 in.	
6 ft.	$25\frac{1}{2}$ in.	13¾ x 19½ in.	
8 ft.	27 1/8 in.	15 <sup>1</sup> / <sub>4</sub> x 22 <sup>1</sup> / <sub>8</sub> in.	
10 ft.	29 <sup>5</sup> / <sub>8</sub> in.	16 <sup>3</sup> / <sub>8</sub> x 23 <sup>5</sup> / <sub>8</sub> in.	
15 ft.	32 <sup>3</sup> / <sub>8</sub> in.	183⁄4 x 271⁄8 in.	
25 ft.	34 <sup>3</sup> ⁄ <sub>4</sub> in.	19 <sup>5</sup> / <sub>8</sub> x 28 <sup>3</sup> / <sub>8</sub> in.	
50 ft.	37 in.	21 x 30 <sup>1</sup> / <sub>4</sub> in.	
INF.	383⁄4 in.	$22\frac{1}{8} \times 32$ in.	

With the	Distance	Size of Subject
Set at	to Lens	Exceed
$3\frac{1}{2}$ ft.	13 <sup>3</sup> /8 in.	67/8 x 10 in.
4 ft.	14 in.	7¼ x 10½ in.
5 ft.	14 <sup>7</sup> / <sub>8</sub> in.	7 <sup>7</sup> / <sub>8</sub> x 11 <sup>3</sup> / <sub>8</sub> in.
6 ft.	$15\frac{1}{2}$ in.	8 <sup>3</sup> / <sub>8</sub> x 12 in.
8 ft.	163/8 in.	87/8 x 127/8 in.
10 ft.	167/8 in.	9 <sup>3</sup> / <sub>8</sub> x 14 in.
15 ft.	1734 in.	9 <sup>7</sup> / <sub>8</sub> x 14 <sup>3</sup> / <sub>8</sub> in.
25 ft.	$181/_{2}$ in.	10 <sup>3</sup> / <sub>8</sub> x 15 in.
50 ft.	19 <sup>1</sup> / <sub>8</sub> in.	10 <sup>3</sup> / <sub>4</sub> x 15 <sup>5</sup> / <sub>8</sub> in.
INF.	19 <sup>1</sup> / <sub>2</sub> in.	11 <sup>1</sup> / <sub>8</sub> x 16 <sup>1</sup> / <sub>8</sub> in.

With the	Distance	Size of Subject
Focus	Subject	Should not
Set at	to Lens	Exceed
$3\frac{1}{2}$ ft.	10 in.	$5\frac{1}{4} \times 7\frac{1}{2}$ in.
4 ft.	10 <sup>3</sup> / <sub>8</sub> in.	$5^{3}/8 \ge 7^{3}/4$ in.
5 ft.	10 <sup>3</sup> / <sub>4</sub> in.	$5^{3}/_{4} \times 8^{1}/_{4}$ in.
6 ft.	$11\frac{1}{8}$ in.	$6 \times 8\frac{5}{8}$ in.
8 ft.	$11\frac{1}{2}$ in.	$6\frac{3}{8} \times 9\frac{1}{8}$ in.
10 ft.	11 <sup>1</sup> / <sub>8</sub> in.	$6\frac{1}{2} \times 9\frac{1}{2}$ in.
15 ft.	$12\frac{1}{4}$ in.	$6\frac{1}{8} \times 9\frac{1}{8}$ in.
25 ft.	$12\frac{1}{2}$ in.	$7\frac{1}{8} \times 10\frac{1}{4}$ in.
50 ft.	12 1/8 in.	$7\frac{1}{4} \times 10\frac{1}{2}$ in.

Wide angle effects can also be obtained with the Kodak Portra Lenses when the Kodak Medalist is equipped with the Accessory Back.

**Extension Units:** The extension units permit copying and close-up photography of small objects without the use of a supplementary lens.

With four extension units and the Accessory Back, telephoto effects can be obtained with the Kodak Telek Lens.

#### FILTERS

Kodak Verichrome Film and other orthochromatic films and plates are affected by those rays of the spectrum from the ultraviolet through the yellow. Kodak Panchromatic Films and Plates respond to the ultraviolet and the whole of the visible spectrum, right through the red.



Even though the new emulsions have been made more sensitive in the green, yellow and red regions of the spectrum, they all have their greatest sensitivity in the blue violet and ultraviolet regions. In this respect the sensitivity of photographic materials differs from that of the human eye. The eye has its greatest sensitivity in the green, is less sensitive to blue and violet, and is not at all sensitive to ultraviolet. Therefore, in order to have the tone values in a landscape picture almost the same as the eye sees them in the original subject, it is necessary to use a filter.

The filter allows the free passage of certain colors and absorbs others either wholly or in part.

Some of the more commonly used filters are: the Kodak Sky Filter, Kodak Color Filter, K1, K2, G, and A Filters. Other filters are described in the Eastman Kodak Company publications: "The Photography of Colored Objects," "Wratten Light Filters," and the Kodak Data Book, "Filters and Other Kodak Lens Accessories."

The **Kodak Sky Filter** gives correction of the sky and records clouds that may be present, without necessitating increase in exposure.

The Kodak Color Filter, the  $K_I$  and the  $K_2$  Filters are yellow correction filters for photographing through haze; for darkening the sky to record clouds that may be present; for photographing foliage to make it lighter than if no filter were used; for photographing scenes or objects in which strong colors predominate. The  $K_I$  *Filter* gives slightly less correction than the Kodak Color Filter, and the  $K_2$  slightly more.

The **G** Filter is a deep yellow contrast filter intended for use with panchromatic materials. It gives greater penetration of haze than the  $K_2$ Filter. Red and yellow objects are rendered somewhat lighter than they appear to the eye, and blue sky and water are rendered darker. The *G* Filter

FILTER FACTORS FOR DAYLIGHT			
Filter	Kodak Veri- chrome Roll or Film Pack	Kodak Super-XX Panchro- matic Roll or Film Pack	Kodak Plus-X Roll or Film Pack
Kodak Color Filter	2	I 1/2	I 1⁄2
Kı	2	I 1/2	11/2
K2	21/2	2	2
G	5	21/2	3
А		4	7

Most Sheet Films have filter factors included with the instructions packed with the films.

is recommended for photographing architectural subjects against a blue sky.

The **A Filter** is a red filter and can be used only with panchromatic materials. It is used where strongest contrast effects are desired. Red and yellow photograph almost as white, while blues and greens are recorded as black.

**FILTER FACTORS:** The filter factor represents the number of times the exposure must be increased if a filter is used. A filter having a factor of 2 requires twice the exposure necessary without it.

#### **KODAK INFRARED FILM IR620**

This film reaches into that portion of the spectrum beyond the visible red. The most common use for the Kodak Infrared Film is distant landscape photography, though it is also very useful for scientific, medical, and criminological photography.

When a distant landscape is photographed on an ordinary film, the distance often lacks detail on account of the haze. This is because violet and blue light, to which an ordinary film is sensitive, is scattered by atmospheric haze. The longer wave lengths of the visible light and particularly the invisible infrared, however, are freely transmitted by the haze. A photograph made on infrared film, with a deep yellow or red filter over the lens to absorb the violet and blue light, will often (depending on atmospheric conditions) show distant ob-



jects very clearly even if the haze makes them invisible to the eye.

Landscape photographs taken on infrared film, outdoors in sunlight, frequently have the appearance of pictures taken by moonlight.

While several Wratten Filters can be used, we recommend the Wratten Filter No. 25 (A) (red) and an average exposure with bright sunlight of about f/8 and 1/25 second. Use a Wratten Filter No. 25 (A) Series VI, see page 32.

*Important:* After determining the distance between the subject and the Kodak with the RANGE FINDER, move the focusing knob to bring the figure representing the distance for which the lens is focused to the *red index* on the FOCUSING SCALE, which is a little to one side of the regular focusing line. This should be done since the infrared rays come to a focus slightly behind the focus of the visual rays.

Instructions for developing Kodak Infrared Film are enclosed with each roll of film.

For further details, obtain from your dealer a copy of "Infrared Photography with Kodak Materials," sold at a nominal price.

## EASTMAN KODAK COMPANY Rochester, N. Y.

• There is a KODAK MEDALIST REGISTRATION CARD attached to the inside cover of this manual. To register your KODAK MEDALIST give the information required and return card to us. EASTMAN KODAK COMPANY

Rochester 4, N.Y.

4-44-JPS-AX

PRINTED IN THE UNITED STATES OF AMERICA T. M. REG. U. S. PAT. OFF.

