# CAROUSEL CAROUSEL 760H Projector

Congratulations on the purchase of your new KODAK CAROUSEL 760H Projector. It provides the finest of all slide-showing systems. Throughout projection, your slides are kept in sharp focus by an automatic control—whether you show single slides, trays of slides, or stacks of slides with the optional KODAK CAROUSEL Stack Loader.

Only brief operating instructions are given on these two pages. Read on for important details.

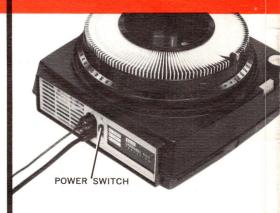
Remove POWER CORD and REMOTE-CONTROL CORD from cord compartment (on underside of projector). Plug cords into rear of projector. Plug power cord into ac power outlet. See page 5.

Place loaded slide tray on projector with TRAY INDEX BAR opposite GATE INDEX. See page 8.

Slide POWER SWITCH to LAMP. See page 8.









Momentarily push FORWARD BUTTON on projector or FOR (forward) button on remote control to project first slide on screen. See page 8.



Rotate FOCUS KNOB until projected image is critically sharp. Only this first slide requires focusing if all slides are in same type of mount. For auto-focus operation with intermixed types of slide mounts, see page 9 under "Focus."



Momentarily push forward button on projector or on remote control to change slides. For immediate random projection of any slide in tray, firmly press and hold down SELECT BAR, rotate tray to desired slide number, and then release select bar. See page 10.



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SERIAL NUMBER—The serial number of your projector is stamped on the bottom of the projector near the cord compartment. Make a note of this number for your records.

### SETTING UP



#### **Projection-Lamp Tips**

- Rough treatment of the projector may damage the projection lamp.
- Allow for unrestricted flow of air to the intake vents on the bottom and side of the projector, and the exhaust vent at the rear.
- Projector operation on line voltages above the range specified greatly reduces the lamp life.
- Unplug power cord before changing lamp.
- See "Projection Lamp Warranty."

#### POWER AND REMOTE-CONTROL CORDS

Place the projector, bottom side up, on a table. Slide the latch on the CORD-COMPARTMENT DOOR in the direction of the arrow marked OPEN. Open the cord-compartment door and remove the power cord and the remote-control cord. Then close and latch door. Turn the projector upright.

Plug the remote-control cord into the remote-control socket at the rear of the projector. The *small* dot on the plug should be upward when the plug is in the socket.

Plug the socket end of the power cord into the 2-prong power-cord receptacle at the rear of the projector. Your Carousel Projector operates on 110- to 125-volt, 60 CPS (Hz) alternating current only. Plug the power cord into a suitable electrical outlet.

#### SCREEN AND SEATS

Because slides may be square, horizontal, or vertical, a square screen is usually most convenient. It should be large enough for easy viewing by everyone present. If possible, your projector should be at the same level as the screen.

For easy viewing, your audience should not be farther from the screen than six times the longer dimension of the projected image. See the projector-to-screen distance chart on the next page. Place the seats as close as possible to both sides of the beam thrown by the projector. The picture appears most brilliant and lifelike when you are seated near the projected beam.

#### DISTANCE IN FEET FROM PROJECTOR LENS TO SCREEN

Long Dimension of	126 Slides (28 x 28mm)					135 Slides (24 x 36mm)					828 Slides (28 x 40mm) and 127 (1 %-inch sq) Super-Slides				
Projected Picture	3-inch Lens	4-inch Lens	5-inch Lens	7-inch Lens	Zoom Lens— 4" to 6"	3-inch Lens	4-inch Lens	5-inch Lens	7-inch Lens	Zoom Lens— 4" to 6"	3-inch Lens	4-inch Lens	5-inch Lens	7-inch Lens	Zoom Lens— 4" to 6"
40"	10	13	16	23	13 to 20	8	10	13	18	10 to 16	7	9	12	16	9 to 14
50"	12	16	20	28	16 to 25	10	13	16	23	13 to 19	8	12	14	20	12 to 17
60"	15	20	24	34	20 to 30	11	15	19	27	15 to 23	10	14	17	24	14 to 21
70"	18	23	29	41	23 to 35	14	18	23	32	18 to 27	12	16	20	29	16 to 25
84"	20	27	34	48	27 to 40	16	21	26	37	21 to 31	14	19	24	33	19 to 29
				Section 1											

#### KODAK PROJECTION EKTANAR ZOOM LENS, 4 to 6-inch, f/3.5

If your projector is equipped with this optional lens, you can vary the size of the projected image to fill a screen without changing the projector-to-screen distance.

#### Using zoom lens

- Install the zoom lens by moving the focus knob toward the side of the projector and guiding the lens into the projector. Insert the lens far enough into its recess so that the gear teeth on the lens barrel will be engaged by the gear on the focus-knob shaft.
- 2. Rotate the focus knob until the projected image is sharp.
- 3. Rotate the front part of the lens barrel until the image fills the screen.
- 4. To obtain maximum image sharpness and the desired image size, you may need to repeat steps 2 and 3 alternately.

# SLIDE TRAY

Furnished with your new projector is the Kodak Carousel 140 Slide Tray. It holds 140 slides in 2 x 2-inch cardboard or thin plastic mounts (not glass or metal mounts) up to  $\frac{1}{16}$  inch thick. Since this tray was designed to hold as many slides as possible, the slide compartments in the tray are quite narrow. For this reason, your slide mounts should be in good condition. Mounts which are warped or bent may fail to drop from the tray into the projector. (If this happens, straighten the mount with your fingers or place the slide in a new mount, such as a Kodak Ready-Mount.)

Clip off all mount corners that are frayed. Do not use slides mounted with loose or sticky tape.

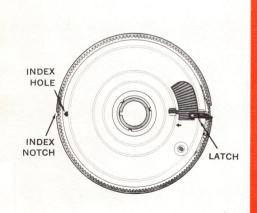
As the tray revolves, the number of the slide being projected will be opposite the gate index on the projector. (Other Kodak slide trays which can be used with your projector are described on page 14.)

#### LOADING SLIDE TRAY

Check the bottom of the tray to make sure the INDEX HOLE is opposite the INDEX NOTCH. If it isn't, slide the LATCH in the direction shown by the arrow, and turn the bottom plate until the index hole points to the index notch. Then release the latch.

Remove the LOCK RING from the tray by turning the ring in the direction of the arrow marked UNLOCK; then lift off the ring. Insert a slide in each slot in the tray, with the top of the picture down. The printed border, or trademark side, of each cardboard-mounted slide—or emulsion (dull) surface of a slide mounted in plastic—should face the next lower number. For example, the bordered, trademark (or emulsion) side of slide No. 2 should face toward slide No. 1; No. 3 toward No. 2, etc.

Replace the lock ring, turning it in the direction of the arrow marked LOCK until the ring is secure on the tray.







#### PLACING SLIDE TRAY ON PROJECTOR

Place the loaded slide tray on the projector so that the hole in the center of the tray fits over the center post on the top of the projector; then turn the tray slowly in a *clockwise* direction until the TRAY INDEX BAR is opposite the GATE INDEX on the projector. The tray will drop down into operating position on the projector. If the tray does not drop easily into place, check the alignment of the index hole and the index notch as described under "Loading Slide Tray" on page 7.

NOTE: The tray will drop farther down on the projector during the first change cycle.

# PROJECTING SLIDES

Turn on the projection lamp by sliding the POWER SWITCH to LAMP. Momentarily press the FORWARD BUTTON on the projector or the FOR (forward) button on the remote control to put the first slide in viewing position.

#### **ELEVATION**

To center the projected image on the screen vertically, elevate the front of the projector by turning the ELEVATING WHEEL. If the image is not aligned horizontally, an adjustment may be made with the LEVELING FOOT.

#### FORWARD AND REVERSE BUTTONS

FORWARD AND REVERSE BUTTONS, located on the side of the projector, control the direction in which the tray rotates.







Momentarily press the forward or reverse button to change slides in the desired direction. The reverse button must be **firmly** pressed.

#### **FOCUS**

Let the projector warm up for about 30 seconds. Focus for maximum sharpness at the center of the screen image by rotating the Focus KNOB. You will need to focus only the first picture if all slides are in the same type of mount.

Under special conditions—for example, when you are projecting slides in intermixed types of slide mounts—you may need to readjust the focus manually.

To demonstrate extreme focus changes, place cardboard-mounted slides in the tray with every other slide in backwards. You can see the action of the automatic focus system by watching the movement of the focus knob or by watching the screen image.

NOTE: A matte-surface (write-on) slide or a mount without film can cause the focus motor to run continuously.

#### REMOTE CONTROL

The remote control has both FOR (forward) and REV (reverse) buttons for controlling the direction in which the slide tray rotates. Momentarily press either the forward or the reverse button to change slides in the desired direction. The reverse button must be **firmly** pressed.

IMPORTANT: If the reverse button is not pressed firmly, the tray may rotate in a forward direction.







#### RANDOM SELECTION OF SLIDES IN TRAYS

To project a particular slide in a tray:

- 1. Press the SELECT BAR firmly and hold it down.
- 2. Rotate the tray until the number of the slide you want to project is opposite the gate index on the projector.
- 3. Release the select bar; the desired slide will be projected immediately.

#### **REMOVING SLIDE TRAY**

- With the projector turned on, press the select bar firmly and hold it down.
- 2. Rotate the tray until the tray index bar is opposite the gate index.
- 3. Release the select bar and then lift off the tray.

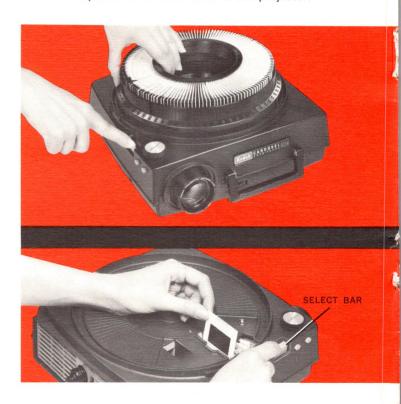
#### SHOWING SINGLE SLIDES

- With the projector turned on, insert a slide (correctly oriented) into the projector gate. Push the slide down into the gate as far as it will go.
- 2. After viewing the slide, press the SELECT BAR to eject the slide from the gate. You can now insert another slide into the gate. (Slides up to ½ inch thick can be projected by this method.)

#### AFTER THE SHOW

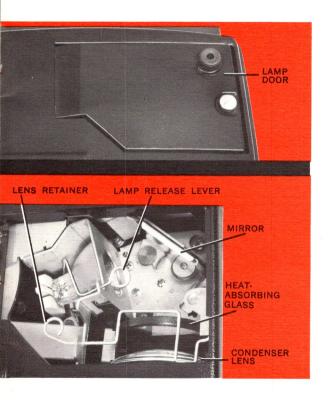
- 1. Remove the tray; then slide the power switch to OFF.
- 2. Lower the front of the projector by turning the elevating wheel. Retract the leveling foot.
- Retract the lens by turning the focus knob counterclockwise.

4. Unplug the power and remote-control cords. Fold the power cord by placing the ends of the cord together and folding it in about 4-inch lengths. Fold the remotecontrol cord in the same way. Place the cords into the cord compartment in the bottom of the projector.



# PROJECTOR CARE

Your Carousel Projector requires no lubrication, as all bearings are self-lubricating.



#### THERMAL FUSE

Your projector is equipped with a thermal fuse to prevent overheating and possible damage to the projector in case of exhaust-fan failure. If overheating causes the fuse to open, the projector will not operate. The projector will require factory or repair-station attention to make it run again. Refer to the service facilities listed at the back of this manual.

#### PROJECTION-LAMP REPLACEMENT

Your projector is equipped with a code ELH projection lamp with a rated life of 35 hours. There are also two special-application lamps available. For longer lamp life (but less brightness), use a code ENH lamp with a rated life of 175 hours. For 30 percent greater brightness than offered by the code ELH lamp, use a code ENG lamp with a rated life of 15 hours.

All of the lamp-life ratings given above are for projectors with the lamp switch set at HIGH. Lamp life can be extended by as much as four times by using the LOW setting.

It's a good idea to keep a spare projection lamp on hand. If the lamp should burn out during use, set the power switch to FAN to speed cooling; then remove the slide tray. When the projector and lamp have cooled sufficiently, turn the projector off and remove the power cord.

Turn the projector bottom side up. Rotate the coin-slotted screw in the LAMP DOOR counterclockwise until the door can be opened.

CAUTION: Be certain that the projector and the projection lamp have cooled before you remove the lamp.

Push the LAMP-RELEASE LEVER downward until it is free of its retaining clip; then raise the lever all the way, grasp the lamp, and remove it.

Slide a new lamp into the socket with a prong of the lamp in each slot of the socket. Be careful not to touch the transparent portion of the lamp. If you accidentally get fingerprints on the lamp, wipe it carefully with a clean, soft cloth moistened with rubbing alcohol. Lower the lamp-release lever to seat the lamp; then push downward on the lever until it is held by its retaining clip. Close and fasten the lamp door.

#### **CLEANING**

To get the brightest, sharpest screen images, keep the optical system of your projector clean. Dust or fingerprints on the projection or condenser lenses will reduce the brightness of the screen image and will cause it to appear unsharp or low in contrast.

#### **Projection Lens**

Turn the focus knob clockwise until the lens is out as far as it will go. Carefully move the focus knob toward the side of the projector as you withdraw the projection lens. Blow any dust or dirt from the lens.

With Kodak Lens Cleaning Paper or a soft, clean, lintless cloth, gently wipe the front and rear surfaces of the lens. If moisture is required, breathe on the lens surface or use a drop of Kodak Lens Cleaner on the paper or cloth.

Replace the lens by again moving the focus knob toward the side of the projector and guiding the lens back into position. Insert the lens far enough into its recess so that the gear teeth on the side of the lens barrel will be engaged by the gear on the focus-knob shaft.

#### Condenser Lens, Heat-Absorbing Glass, and Mirror

Turn the projector bottom side up. Open the LAMP DOOR as described on page 11. Push the LENS RETAINER downward until it is free of its retaining clip; then raise the retainer as far as it will go. Carefully lift out the CONDENSER LENS and the HEAT-ABSORBING GLASS. Clean both sides of the condenser lens and the heat-absorbing glass with KODAK Lens Cleaning Paper or a soft, clean, lintless cloth. Be careful not to leave fingerprints on any of the surfaces. Replace

the lens and heat-absorbing glass in their original locations, with the flat side of the condenser lens toward the front of the projector.

NOTE: Failure to position the large condenser lens correctly can cause the focus motor to malfunction.

Gently clean the surface of the MIRROR with KODAK Lens Cleaning Paper or a soft, clean, lintless cloth moistened with KODAK Lens Cleaner.

Close and fasten the lamp door.



#### **EMERGENCY SLIDE-TRAY REMOVAL**

If the slide-changing mechanism should become inoperative because of a defective slide (see page 7), a foreign object, etc, turn the coin-slotted TRAY-REMOVAL SCREW in either direction, as far as it will go, to retract the tray lock. While holding the screw in this position, lift off the tray.

When you remove the tray in this manner, turn the tray upside down and realign the index notch and index hole as described on page 7; then set the tray to one side. Remove the defective slide from the projector by pushing downward on the select bar, or if necessary, pull the slide from the gate by hand. Replace the tray on the projector.

# PROJECTION TIPS

#### LONG-RUN APPLICATIONS

—Allow for unrestricted flow of air to the projector openings. If the projector is used in a window display or in a cabinet, provide an adequate outlet for the warm air expelled from the rear grill vent. The air circulating through the projector should be as dust-free as possible.

—Better cooling results if cool air is available to the projector. *Normal* room temperatures are adequate.

—If the projector is used outside, it should be protected from the elements.

#### **EDITING SLIDES**

To preview your slides prior to placing them in the tray, you can project them singly, as described on page 10. If you want to reorient or replace a slide in the tray during projection, remove the lock ring from the tray. Firmly press and hold down the select bar; then remove the slide from the tray. You can now change the orientation or replace the slide.

The optional Kodak Carousel Stack Loader, described on page 14, provides a suitable way to edit your slides.

#### DARKENED SCREEN BETWEEN SLIDE TRAYS

If you want the screen to be dark rather than brightly illuminated after you have shown the last slide in a full tray, insert a 2 x 2-inch piece of thin cardboard into the projector gate before placing a tray on the projector. (If you wish, use a slide instead of the cardboard.) The cardboard (or extra slide) will enter the blocked-off space in the tray during projection, and will be returned to the gate when you remove the tray. You can leave the cardboard or slide in the gate and use it each time you project a tray of slides.



# **AUXILIARY EQUIPMENT**

# KODAK Projection Screen (40 x 40 inches)

Designed for use at home with your projector. The Kodak Projection Screen is made of mildew-resistant fabric with a highly reflective, glass-beaded surface for bright screen images. The screen has easyopening legs and can be adjusted for overall height from the floor.



#### KODAK CAROUSEL Slide Tray

Additional slide trays, supplied in attractive bookshelf-type storage boxes, are available from your dealer. Each box contains an identification card and tray sticker.

#### KODAK CAROUSEL Stack Loader

Lets you project and edit up to forty 2 x 2-inch slides in cardboard or very thin plastic mounts without having to load them into a slide tray.

#### **KODAK Projection Lenses (7)**

Give superb sharpness and color clarity. Kodak Projection Ektanar Lens, 3-in. f/3.5, Kodak Projection Ektanar Lens, 4-in. f/2.8, Kodak Projection Ektanar Lens, 4-in. f/3.5, Kodak Projection Ektanar Lens, 5-in. f/2.8, Kodak Projection Ektanar Lens, 5-in. f/3.5, Kodak Projection Ektanar Lens, 7-in. f/3.5, Kodak Projection Ektanar Zoom Lens, 7-in. f/3.5, Kodak Projection Ektanar Zoom Lens,

4 to 6-in. f/3.5.





# KODAK CAROUSEL Projector Case, Model B

Case accommodates projector, one slide tray, extra lenses, cords, and spare lamp. Made of gray, heavy-duty simulated leather. Provides complete protection plus convenience and attractive appearance during transportation and storage.

#### KODAK Carrying Case for KODAK CAROUSEL Slide Trays, Iden No. B583C

Has two compartments so that three slide trays may be carried (or a lesser number plus extension cords, lenses, and other miscellaneous equipment).



#### KODAK Remote Extension Cord, 25-foot

Extends the range of the 12-foot remote control cord so that you can operate the projector from a location near the screen. Up to 4 extension cords can be added to accommodate most projection distances.

# KODAK CAROUSEL Sound Synchronizer, Model 2

This unit permits a stereo record/playback tape recorder that is equipped with an external speaker jack to be used as a programmer with your projector.



# More Information— If you have questions about the use of this projector, write to Eastman Kodak Company, Dept. 841, 343 State Street.

Rochester, New York 14650.

#### Ideas for Better Color Slides

To help you make interesting slides you and your friends will enjoy seeing over and over again, Kodak publishes many fascinating idea books, such as the two described below. They are available from your photo retailer.

# New Adventures in Indoor Color Slides (AE-7).

An idea book to help the color-slide fan explore new fields in indoor color shooting. Includes sections on flash and flood lighting.

# New Adventures in Outdoor Color Slides (AE-9).

An inspiring book of picture-taking suggestions—close-ups of flowers, storytelling sequences, sunsets and other dramatic lighting effects.

# SERVICE FACILITIES

If your Kodak projector 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

9100 Alcosta Boulevard San Ramon, California 94583 P.O. Box 1260 Honolulu, Hawaii 96807

12100 Rivera Road Whittier, California 90606

1901 West 22nd Street Oak Brook, Illinois 60521

5315 Peachtree Industrial Boulevard Chamblee, Georgia 30341

1334 York Avenue New York, New York 10021

2800 Forest Lane Dallas, Texas 75234

## WARRANTY

Within a year after purchase, any repairs necessary to this KODAK CAROUSEL Projector due to a manufacturing defect will be made, or at our option, the projector 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 projector should be sent through your retailer 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 projector, including the date and place of purchase.



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