



HOW TO USE THE

Kodak Carousel[®] projector

5600

5200

4600

4400

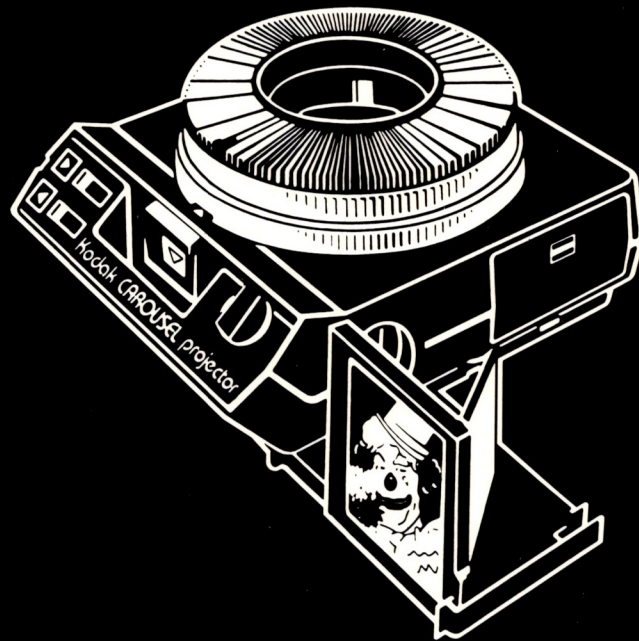
4200

5200-K

4600-K

4400-L

4200-K



IMPORTANT SAFEGUARDS

1. Read and understand all instructions.
2. Close supervision is required when any appliance is used by or near children or others who may not understand the need for the following precautions. Do not leave the projector unattended while in use.
 - Care must be taken, as burns can occur from touching hot parts. Allow the projector to cool before replacing the projection lamp or cleaning the lens.
 - Do not operate an appliance with a damaged cord—or if the appliance has been dropped or damaged—until it has been examined by a qualified service technician.
 - Do not let the cord hang over the edge of the table or counter or touch hot surfaces.
 - If an extension cord is necessary, a cord with a suitable current rating should be used. Cords rated for less amperage than the appliance may overheat. Be careful to place the electrical cord where you, your family, and your guests will not trip on it.
 - Always unplug an appliance from the electrical outlet when not in use. Never yank the cord to pull the plug from an outlet. Grasp the plug and pull it to disconnect it.
 - Let the appliance cool completely before putting away. Wind the power cord around the cord retainer on the underside of the projector.
 - To protect against electrical shock hazards, do not immerse this projector or spill water or other liquids on it.
 - The use of an accessory attachment not recommended by the manufacturer can cause a risk of fire, electric shock, or injury to persons.
 - Connect this projector to a grounded outlet.
 - Disconnect this unit from its source of supply before replacing the projection lamp.
 - This instruction manual contains directions for replacing a burned-out lamp and for cleaning the projection lens, the condenser lens, the heat-absorbing glass, and the mirror. With these exceptions, do not disassemble the projector. Incorrect reassembly can cause electric-shock hazard when the projector is used subsequently. Damage from unqualified disassembly also can cause the warranty to become void.

SAVE THESE INSTRUCTIONS

FULL ONE-YEAR WARRANTY

This Kodak Carousel projector is warranted by Kodak to function properly for one year from the date of purchase. This warranty does not cover the projection lamp. Kodak makes no other express warranty for this projector. This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

Carefully read and follow the instructions in the manual to get good results and prevent damage to your projector.

If this Kodak projector does not function properly within the warranty period, Kodak will repair it without charge. If Kodak is unable to repair it, the option of replacement or refund of the purchase price will be available. These remedies are not available if the projector is damaged by misuse or other circumstances beyond Kodak's control, or if the improper functioning of the projector is caused by failure to follow the care and operating instructions in the manual.

For assistance in using this projector, contact a dealer in Kodak products or write to Kodak. For service on this projector, return it through a dealer in Kodak products or directly to one of the Kodak Equipment Service Centers listed here. Enclosing a note with the projector giving details of the problem and date of purchase will help Kodak return it promptly.

Repair and the option of replacement or refund, in the event that Kodak is unable to repair the projector, are Kodak's only obligations. ***Kodak will not be responsible for any consequential or incidental damages resulting from the sale or use of this projector, even if loss or damage is caused by the negligence or other fault of Kodak. (Some states may not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.)***

SERVICE CENTERS

If your Kodak projector should require service, complete facilities are provided at the following Kodak Equipment Service Centers. For service outside the United States and Canada, contact your photo dealer or write to Kodak in your country. Send your projector to the Service Center nearest you.

12100 Rivera Road, Whittier, California 90606
5315 Peachtree Industrial Blvd., Chamblee, Georgia 30341
1122 Mapunapuna Street, Honolulu, Hawaii 96819
1901 West 22nd Street, Oak Brook, Illinois 60521
800 Lee Road, Rochester, New York 14650
Campo Rico Ave. and 246th Street, Country Club,
Carolina, Puerto Rico 00630
2800 Forest Lane, Dallas, Texas 75234
3500 Eglinton Ave. W., Toronto, Ont., CANADA

Congratulations on the purchase of your new KODAK CAROUSEL Projector. We know that you'll enjoy using it for many years. If you ever feel that you need advice on using your projector, write to our staff of photographic experts at Eastman Kodak Company, Photo Information, Department 841, Rochester, New York 14650. Also, see the service information on page 11, and the warranty and Service Centers on page 2.

*Before you start to use your new projector, learn the **Important Safeguards** on page 2. Keep them in mind whenever you handle or operate the projector.*

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Serial Number and Power Requirements—The serial number and UL/CSA power requirements of your projector are located on the cord retainer on the underside of the projector.

Equipment subject to minor appearance changes.

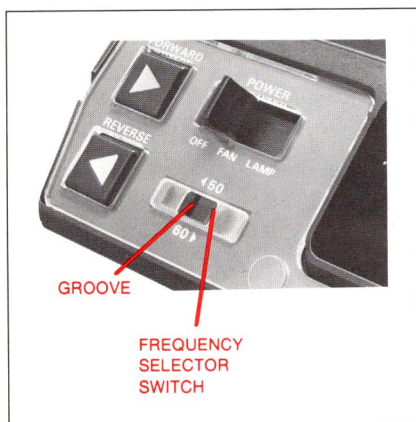
KODAK CAROUSEL® 4200-K, 4600-K, and 5200-K Projectors

Operating instructions for these projectors are the same as those for the KODAK CAROUSEL 4200, 4600, and 5200 Projectors, respectively, with the following exceptions:

Models 4200-K, 4600-K, and 5200-K—Adjusting the frequency selector, located on the left-hand side of the projector control panel, allows you to operate the projector on 110 to 130 volts, 50 to 60 Hz. The information under "Power and Remote-Control Cords" on page 6 should include the following instructions:

Your projector operates on 110 to 130 volts, and either 50 to 60 Hz (cycles per second) alternating current. You must adjust the FREQUENCY-SELECTOR SWITCH for either 50 or 60 Hz, depending on the frequency of your electrical current. Insert a pointed tool, such as a pencil, into the GROOVE to slide the switch back and forth. **For 50 Hz operation**, slide the switch to the left; **for 60 Hz operation**, slide the switch to the right.

Referring to page 6, unwind the power cord from the cord retainer on the underside of the projector. Plug the power cord into a 110- to 130-volt power outlet only.* If you plug your projector into a different electrical source, you can damage the projector.



Models 4600-K and 5200-K—Your projector has a LAMP setting rather than the LO and HI settings described in the manual. Move the power switch to LAMP to project your slides.

*For operation on other voltages, use a transformer to adjust the voltage to within this range.

KODAK CAROUSEL® 4400-L Projector

Operating instructions for this projector are the same as those for the KODAK CAROUSEL 4400 Projector, with the following exceptions:

The projector operates on **210 to 250 volts, 50 Hz power supply** (not 110 to 125 volts, 60 Hz as stated elsewhere in this manual).

Disregard the entry under "Projection-Lamp Tips" concerning operation at 125 volts.

The **serial number** is located on the bottom of the projector.

There is **no** cord compartment in the projector; therefore the remote-control cord cannot be stored in the projector.

Under the section "Slide Tray" it is recommended that you purchase slide trays which are appropriate for the thickness of your slides. Some examples are:

Maximum Slide Thickness	Slide Tray
1.6 mm (1/16-inch)	KODAK CAROUSEL TRANSVUE 140
2.5 mm (1/10-inch)	KODAK CAROUSEL TRANSVUE 80
3.2 mm (1/8-inch)	KODAK EKTAGRAPHIC Universal, Model 2
3.2 mm (1/8-inch)	KODAK EKTAGRAPHIC Deluxe Covered

Features	Model					Page
	4200 4200-K	4400 4400-L	4600 4600-K	5200 5200-K	5600	
Slide-Scan™ screen/built-in viewer				•	•	6
Rear lamp removal	•	•	•	•	•	9
Slide-tray removal without power	•	•	•	•	•	9
Power-cord wrap in base	•	•	•	•	•	9
Dark-screen shutter latch	•	•	•	•	•	8
Integral handle (control panel)	•	•	•	•	•	front cover
Built-in reading light	•	•	•	•	•	8
Illuminated control panel	•	•	•	•	•	8
Remote accessory outlet	•	•	•	•	•	5
Remote forward and reverse	•	•	•	•	•	8
Remote focus		•			•	8
Leveling foot		•	•	•	•	8
HI-LO lamp settings		•	• †	• †	•	8
Auto-focus			•	•	•	8
Variable automatic timer					•	8
Roomlight outlet					•	5
Spare-lamp storage					•	6
Dust cover					•	6
Frequency-selector switch, 50/60 Hz	• ‡		• ‡	• ‡		4

Some models may be supplied without the tray.

†Not on K models

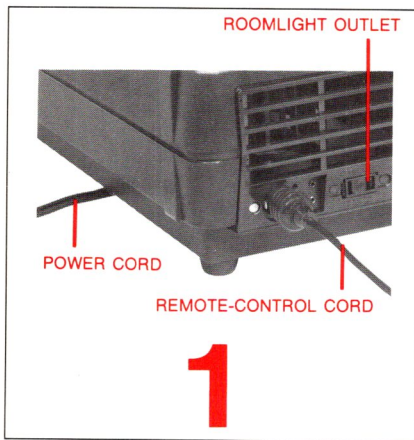
‡K models only

Locate your projector model in the chart above, and note the features for that model. This will help you to use your manual more effectively

because the special features of all models are described, as well as those of your particular projector.

QUICK START-UP

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



Unwind the power cord from the cord retainer on the underside of the projector. (The cord will not be wrapped around the retainer when shipped.) Remove the REMOTE-CONTROL CORD from the cord compartment at the front of the projector, next to the lens. Plug the remote-control cord into the rear of the projector. See pages 4 and 6 for which power outlet to use with your model projector. If you plug your projector into the wrong electrical source, the projector can be damaged.



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



Place a loaded slide tray on the projector with the TRAY INDEX BAR opposite the GATE INDEX. See page 7.



Rotate the FOCUS KNOB until the projected image is critically sharp. With auto-focus projectors, only this first slide requires focusing if all slides are in the same type of mount.

For auto-focus operation with intermixed types of slide mounts, see page 8 under "Focus."



Slide the POWER SWITCH to LAMP, LO, or HI. See page 8.



Briefly push the forward button on the projector or on the remote control to change slides. For immediate random projection of any slide in the tray, press and hold down the SELECT BAR, rotate the tray to the desired slide number, and then release the select bar. The select bar also can be used when the projector is turned off or unplugged. See page 8.

To show your slides on the built-in viewer/Slide-Scan screen, see page 6.

Projection-Lamp Tips

- Rough treatment of the projector may damage the projection lamp.
- Setting the power switch at LO (except for model 4200) considerably lengthens lamp life.
- Projector operation on line voltages above 125 volts greatly reduces the lamp life.
- Turn projector off when finished. Turning to FAN can shorten lamp life.
- Unplug the power cord before changing the lamp.
- Allow for unrestricted flow of air to the exhaust vent at the rear of the projector.

SETTING UP

Dust Cover

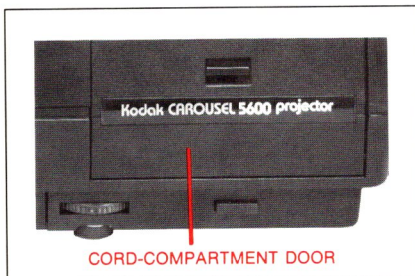
To install the dust cover, position it on top of the projector as shown, with the shallow side next to the projector control panel. Press down on the round section in the center of the cover; the cover will snap into place.

To remove the cover, push the DUST-COVER LATCH away from the center of the projector and lift off the cover. (You must remove the cover to use the projector.)



Power and Remote-Control Cords

Unwind the power cord from the cord retainer on the underside of the projector. (The cord will not be wrapped around the retainer when shipped.) Turn the projector upright. Open the CORD-COMPARTMENT DOOR on the front of the projector by pressing down on the latch, and remove the remote-control cord. Then close and latch the door.



Plug the remote-control cord into the remote-control socket at the rear of the projector. The dot on the plug should be toward the bright dot to the left of the socket when the plug is in the socket.

Plug the power cord into a suitable electrical outlet. *Your CAROUSEL Projector for use in the United States—model 4200, 4400, 4600, 5200, or 5600 (see projector nameplate)—operates on 110- to 125-volt, 60 Hz current only. See information on page 4 about KODAK CAROUSEL® 4200-K, 4600-K, and 5200-K Projectors; and about the KODAK CAROUSEL® 4400-L Projector.* If you plug your projector into the wrong electrical source, the projector can be damaged.

Spare-Lamp Storage

It's a good idea to keep a spare projection lamp on hand in case the lamp should burn out during use. The

CAROUSEL 5600 Projector has a provision for spare-lamp storage inside the cord compartment.

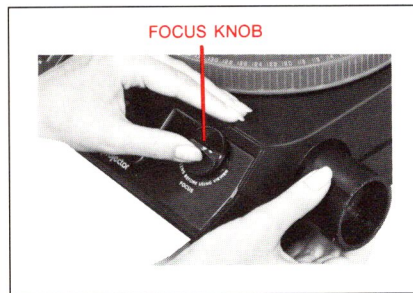
After removing the remote-control cord, push up on the front of the lamp-storage clip at the right-hand side of the cord compartment, and raise the clip. Place a spare lamp (page 9 for lamp-code designations) under the clip, with the lamp reflector facing toward the right and the flat side of the lamp base parallel to the bottom of the projector. Lower the clip and press it down until it snaps.

Built-in Viewer/Slide-Scan™ Screen

The CAROUSEL 5200, 5200-K and 5600 Projectors have a built-in viewer that lets you project your slides in a fully lighted room for your own viewing or for a small group of people. It provides a handy means of editing your slides.

To use the viewer:

1. **Before opening the viewer, you must remove the projection lens from the projector.** Turn the FOCUS KNOB clockwise until the lens is out as far as it will go. Carefully move the knob toward the top of the projector as you withdraw the lens. Store the lens in a safe place.



2. Grasp the VIEWER HANDLE and pull it all the way out from the base of the projector to open the viewer.

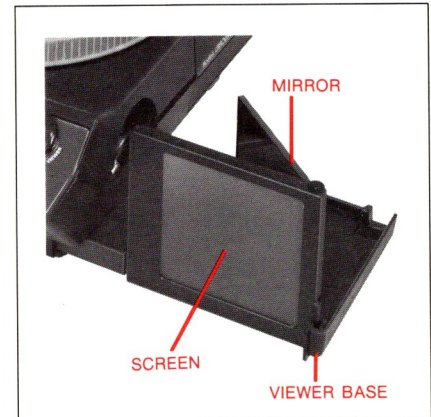


You can then move the power switch to LO or HI and project your slides. Adjust the focus by turning the focus knob (see page 8).

To close the viewer:

1. Press the hinged MIRROR carefully against the SCREEN.

2. Lower the screen and the mirror together into the VIEWER BASE.
3. Push the viewer all the way back into the projector.



Screen and Seats

For projection on a *large* screen, the room should be darkened enough to enable a brilliant image to be projected. This doesn't mean that the room has to be totally dark. You may want to place a small light near the projector but not in a direct line with the projection screen or shining into the eyes of your audience. The CAROUSEL 5600 Projector is equipped with a ROOMLIGHT OUTLET at the rear, which automatically lights a lamp plugged into the outlet when the projector power switch is at OFF.

Because slides may be square, horizontal, or vertical in format, a square screen is usually the most convenient. It should be large enough for easy viewing by everyone present. Your projector should be at the same level as the center of 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 charts listing projector-to-screen distances on page 7. 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.

KODAK Projection EKTANAR C Zoom Lens, 102 to 152 mm f/3.5

KODAK Projection EKTAGRAPHIC FF Zoom Lens, 100 to 150 mm f/3.5

If your projector is supplied with either of these optional zoom lenses, you can vary the size of the projected image to fill a screen without changing the projector-to-screen distance—as long as the distance is within the ranges in the tables.

Approximate Distance in Feet from Projector to Screen (KODAK Projection Lenses)

Long Dimension of Projected Picture	126 Slides (28 x 28 mm)					135 Slides (24 x 36 mm)					110 Slides (13 x 17 mm) in 2 x 2-inch Mounts or Adapters		
	Curved-field	102 mm	127 mm		102-152 mm		102 mm	127 mm		102-152 mm			102 mm
Flat-field	76 mm* Lens	102 mm* Lens	124 mm* Lens	178 mm* Lens	100-150 mm* Zoom Lens	76 mm* Lens	102 mm* Lens	124 mm* Lens	178 mm* Lens	100-150 mm* Zoom Lens	65 mm* Lens	76 mm* Lens	102 mm* Lens
40"	10	13½	17	23½	13½ to 20	8	10½	13	18½	10½ to 16	14	16½	22
50"	12½	16½	21	29	16½ to 25	10	13	16½	23	13 to 19½	17	20½	27½
60"	15	20	25	34½	20 to 30	11½	15½	19½	27	15½ to 23½	20½	24½	33
70"	17½	23	29	40½	23 to 34½	13½	18	22½	31½	18 to 27	24	28½	38
84"	20½	27½	34½	48	27½ to 41½	16	21½	27	37½	21½ to 32	28½	34½	45½

*These flat-field lenses are recommended for slides mounted in glass. See back cover for list of lenses.

Approximate Distance in Metres from Projector to Screen

Long Dimension of Projected Picture	126 Slides (26.5 x 26.5 mm)	135 Slides (22.9 x 34.2 mm)
100 cm	4.0 to 6.0	3.1 to 4.7
125 cm	4.9 to 7.4	3.9 to 5.8
150 cm	5.9 to 8.8	4.6 to 6.9
175 cm	6.8 to 10.2	5.3 to 8.0
200 cm	7.7 to 11.6	6.0 to 9.1

To use the zoom lens:

1. Install the zoom lens by moving the focus knob toward the top 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

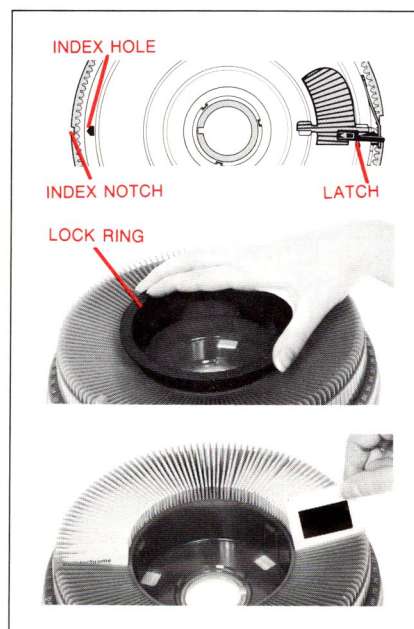
Furnished with some projectors is the KODAK CAROUSEL® TRANSVUE 140 Slide Tray. This tray is made of a translucent material which allows you to see the slide-identification numbers on the tray without turning on the roomlights. It holds 140 slides in 2 x 2-inch cardboard or thin plastic mounts (not glass or metal mounts) up to 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. Slides may not drop if the front of the projector is raised too high. See "Elevation," page 8.

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

As the slide tray revolves, the number of the slide being projected will be opposite the gate index on the projector.

You can obtain additional slide trays from your dealer; see back cover.

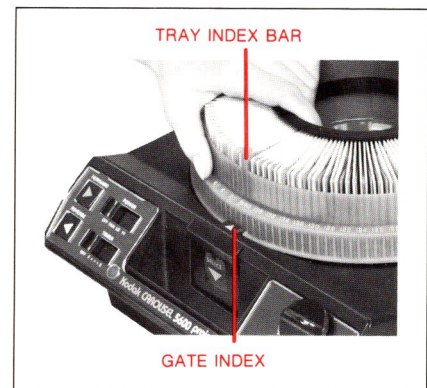


Loading Slide Tray

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 emulsion (dull) surface of a slide should face the next lower number. For example, the 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

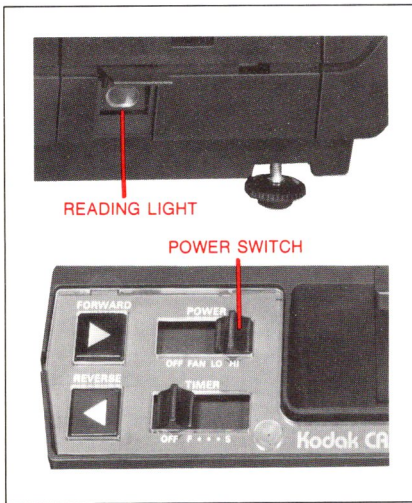
Place the loaded slide tray on the projector so that the hole in the center of the tray fits over the center post on the top of the projector. Then turn the tray slowly until the TRAY INDEX BAR is opposite the GATE INDEX on the projector. The tray will drop down into operating position on the projector. If the tray doesn't drop easily into place, check the alignment of the index hole and the index notch as described under "Loading Slide Tray."

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

PROJECTING SLIDES

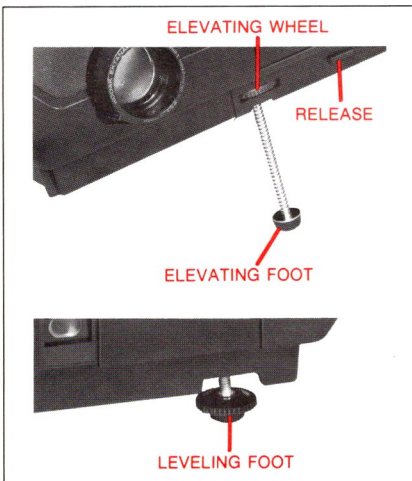
Your projector has a built-in dark-screen shutter latch that interrupts the projection beam when there is no slide in the projector gate. This eliminates the harsh glare of an illuminated white screen before the first slide in a tray, after the last slide in a tray, and during slide-tray changes. The illuminated control panel and built-in READING LIGHT are convenient when room-lights are out. To use the reading light, simply lift the cover.

Turn on the projection lamp by sliding the POWER SWITCH to LAMP (model 4200), or HI (300-watt illumination), or LO (250-watt illumination). Briefly 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

The best image will be obtained by setting the projector on a stand as high as the center of the screen. Center the projected image on the screen vertically by elevating the front of the projector with the ELEVATING FOOT. Additional tilting can interfere with slide changing and seem to cause a malfunction. To release the foot, press the RELEASE while lifting the front of the pro-

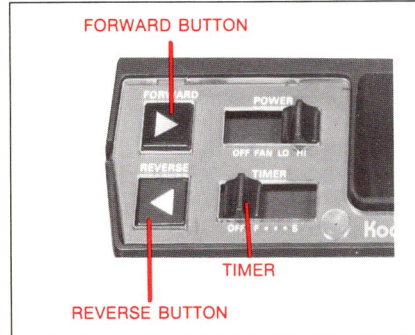


jector to the desired height. Use the ELEVATING WHEEL for fine adjustments in elevation.

If the image is not level, make an adjustment with the LEVELING FOOT at the rear of the projector.

Forward and Reverse Buttons

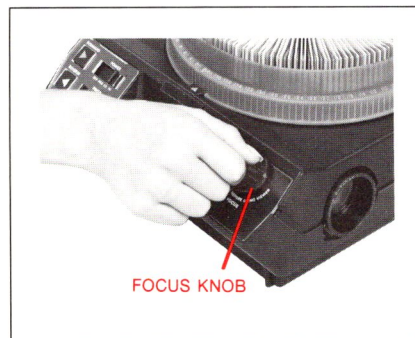
FORWARD and REVERSE BUTTONS, located at the left side of the projector control panel, control the direction in which the tray rotates. Briefly press the forward or reverse button to change slides in the desired direction.



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. *On auto-focus models, you will need to focus only the first slide if all slides are in the same type of mount.*

Under special conditions, you must refocus even with auto-focus models. For example, when you are projecting slides in intermixed types of slide



mounts, you may need to readjust the focus manually by means of the focus knob or the FOCUS lever on the remote control (model 5600; see "Remote Control").

To demonstrate extreme focus changes, place cardboard-mounted slides in the tray with every other slide in backward. 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.

Automatic Timer

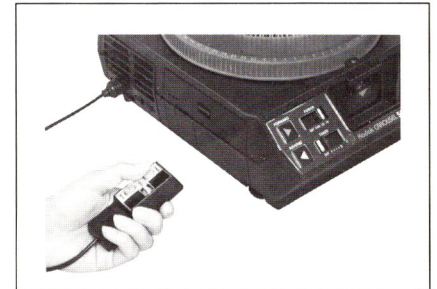
You can use the TIMER (model 5600) to make the projector change slides automatically. Set the timer at F (fast) for slide changes at approximately 3-second intervals, at S (slow) for changes at approximately 22-second intervals, or at any point between.

You can interrupt the automatic operation at any time by pressing the forward or reverse button on the projector or on the remote control. For manual operation, be sure the timer slide is pushed fully to the left.

Remote Control

The remote control has both FOR (forward) and REV (reverse) buttons for controlling the direction in which the slide tray rotates. Press either the forward or the reverse button to change slides in the desired direction.

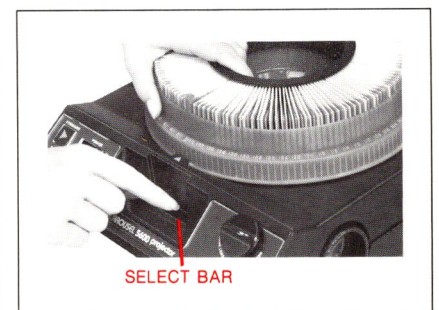
The remote control of the CAROUSEL 4400 and 5600 Projectors also has a FOCUS lever for power-focusing the lens. Moving the lever forward and backward causes the projection lens to move forward and backward respectively. (Using a remote control with a focus lever will *not* add remote focus to projectors without the feature.)



Random Selection of Slides in Trays

To project a particular slide in a tray:

1. Press the SELECT BAR and hold it down.
2. Rotate the tray in either direction until the number of the slide you want to project is opposite the gate index on the projector.
3. Release the select bar to project the desired slide immediately.

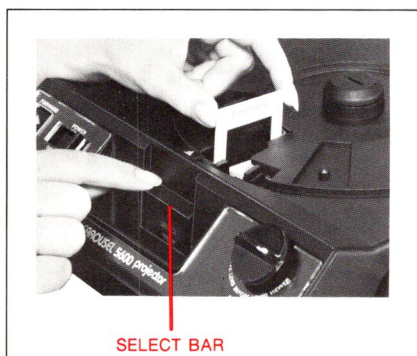


Removing Slide Tray

You can remove the tray from the projector at any time—with the power switch turned off or on:

1. Press the select bar and hold it down. With the power switch in the OFF position, you will need to push the select bar *all the way down*.
2. Rotate the tray until the tray index bar is opposite the gate index.
3. Release the select bar and lift off the tray.

NOTE: When the projector power cord is not plugged in, the select bar will function manually only when the power switch is in the OFF position.



Showing Single Slides

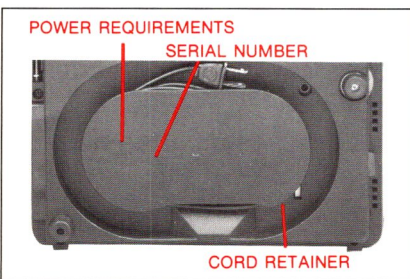
1. With the projector turned on, insert a slide (correctly oriented) into the projector gate. Push the slide down into the gate as far as it will go.
2. After viewing the slide, press the select bar to eject the slide from the gate. You can then insert another slide into the gate. You can project slides up to 1/8-inch thick by this method.

After the Show

Slide the power switch to **OFF** and remove the slide tray.

Then if you've been using the built-in viewer/Slide-Scan screen (models 5200, 5200-K, and 5600):

1. Push the viewer back into the projector as described on page 6.
2. Replace the projection lens in the projector as described on page 10.



Or if you've been projecting slides on a large screen:

1. As you support the front of the projector, release the front elevating foot by pressing the release. Then lower the front of the projector; the elevating foot will be retracted into the projector.
2. Retract the rear leveling foot.
3. Retract the lens by turning the focus knob counterclockwise.

Then unplug the power and remote-control cords. Wind the power cord around the CORD RETAINER on the underside of the projector. Fold the remote-control cord by placing the ends together and folding it in about 4-inch lengths. Then place it in the cord compartment.

PROJECTOR CARE

Your CAROUSEL Projector requires *no* lubrication; all bearings are self-lubricating.

Projection-Lamp Replacement

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

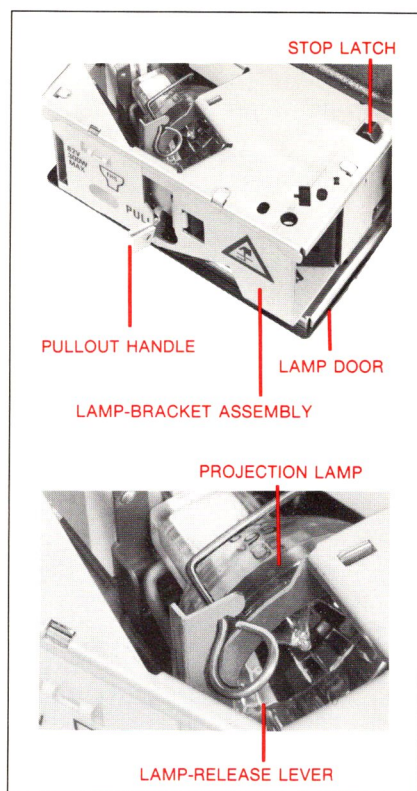
Your projector is equipped with a code FHS projection lamp with a rated life of 70 hours. There are also two special-application lamps available. For longer lamp life (but less brightness), use a code EXY lamp with a rated life of 200 hours. For 25-percent greater brightness than offered by the FHS lamp, use a code EXR lamp with a rated life of 35 hours. Use of high-brightness lamps may cause some buckling or premature fading of your slides.

All the lamp-life ratings given above are for projectors with the power switch set at HI. Lamp life can be extended by as much as 3 times by using the LO setting.

If your lamp should burn out during use, you can set the power switch at FAN to speed cooling. *It is better to turn off the projector and let it cool without the fan (about 10 minutes).* When the projector and lamp have cooled sufficiently, turn the projector off and unplug the power cord.

Open the LAMP DOOR by pressing down on the latch. Grasp the small PULLOUT HANDLE on the LAMP-BRACKET ASSEMBLY, and pull it away from the projector to the stop position.

If you cannot wait 10 minutes for the projector to cool without the fan, you may want to use a complete, spare lamp module with an extra (cool) lamp already in place. See back cover.



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

Insert a new lamp into the socket with a prong of the lamp in each slot of the socket. *Do not 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.*

Do not use the lamp-release lever to seat the new lamp. Lower the lever *while* you seat the lamp. Then push down on the lever and slide it under its retaining clip. With your forefinger, press down firmly on the reflector base of the lamp to be sure that the lamp is correctly seated.

Push the lamp-bracket assembly all the way back into the projector. Then close the lamp door.

Cleaning

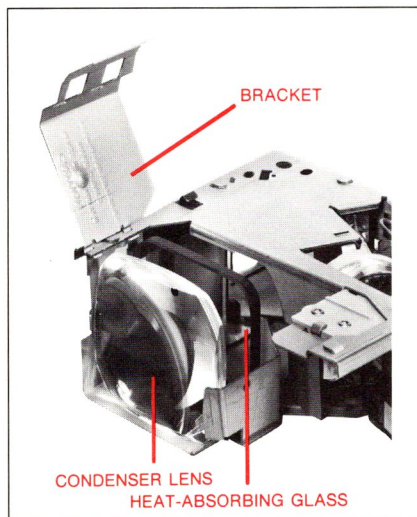
To get the brightest, sharpest screen images, keep the optical system of your projector clean. Dust or fingerprints on the projection or condenser lens will reduce the brightness of the screen image and will cause it to appear unsharp or low in contrast.

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 top of the projector as you withdraw the projection lens. Blow any dust or dirt from the lens.

Breathe on the lens surface or use a drop of cleaner such as KODAK Lens Cleaner. Then with paper such as KODAK Lens Cleaning Paper or a soft, clean, lintless cloth, gently wipe the front and rear surfaces of the lens.

Replace the lens by again moving the focus knob toward the top 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 focus-knob shaft.



Condenser lens, heat-absorbing glass, mirror, and Slide-Scan™ screen/ built-in viewer

CAUTION: The heat-absorbing glass may shatter. Handle it only **when cool** with gloves. Keep the glass covered with a cloth or other material while it is out of the projector.

Open the lamp door. Remove the entire lamp-bracket assembly by pulling it straight back out of the projector as you push down on the STOP LATCH (page 9). Unscrew the small retaining screw, and raise the hinged BRACKET. Then *carefully* lift out the CONDENSER LENS and the HEAT-ABSORBING GLASS, and *gently* place them on a soft cloth.

Clean both sides of the condenser lens and the heat-absorbing glass with paper such as 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 the heat-absorbing glass in their original locations. Lower the bracket and securely tighten the retaining screw.

Turn the entire lamp-bracket assembly upside down so that you can reach the mirror through the opening in the underside. Gently clean the surface of the mirror with KODAK Lens Cleaning Paper or a soft, clean, lintless cloth

moistened with KODAK Lens Cleaner. Then replace the assembly in the projector and close the lamp door.

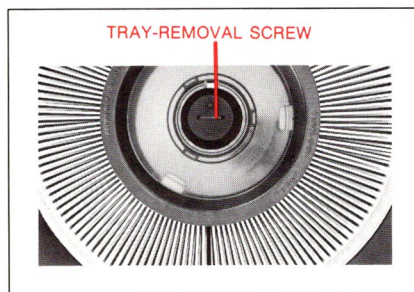
If your projector is equipped with a Slide-Scan screen/built-in viewer (model 5200, 5200-K, or 5600), this screen has a front surface mirror which seldom needs cleaning. Usually any dust simply can be blown away. However, these mirrors on Kodak slide projectors have an overcoating which will allow cleaning with a soft cloth dampened with water or lens cleaner.

Thermal Fuses

Your projector is equipped with thermal fuses to prevent overheating and possible damage to the projector in case of exhaust-fan or motor failure. If overheating causes the fuses to open, the projector will not operate. The projector will require factory or repair-facility attention to make it run again. See the Service Centers on page 2.

Emergency Slide-Tray Removal

If the slide-changing mechanism becomes inoperative because of a defective slide (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. **Be sure that the tray lock ring is in place.** Then turn the tray upside down and realign the index notch as described on page 7; set the tray to one side. Remove the defective slide from the projector by actuating the forward button, or if necessary, pull the slide or foreign object from the gate by hand. Remount the damaged slide. Replace the tray on the projector.



PROJECTION TIPS

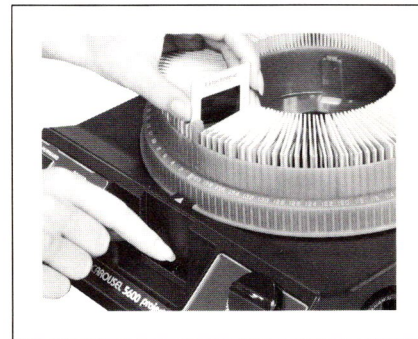
Long-Run Applications

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

Editing Slides

If you want to edit your slides, you can project them singly, as described on page 9. Or you can place a tray of slides on the projector. Remove the lock ring from the tray. To edit a slide after viewing, firmly press and hold down the select bar, and remove the slide from the tray. You can then reorient the slide or replace it with another.

The optional KODAK EC Stack Loader, described on the back cover, provides a convenient means of editing your slides. Using the built-in viewer (models 5200, 5200-K, and 5600) is a quick and easy way to set up for editing.



MORE INFORMATION

If you need help with your projector or with other photographic questions, see your photo dealer.

OR

Specify the model of your projector and write to:

Eastman Kodak Company
Photo Information
Department 841
343 State Street
Rochester, New York 14650

Do **NOT** send your equipment to the above address.

TROUBLESHOOTING GUIDE

Important: So that you won't be without your projector unnecessarily, please consult this guide **before** requesting service.

WHAT HAPPENED	PROBABLE CAUSE	CORRECTION
Projector doesn't operate.	No power to projector	Plug power cord into suitable electrical outlet. Set power switch on LO or HI.
No illumination on screen with slide in projector gate	Power switch on OFF or FAN	Set switch on LO or HI.
	Lamp burned out.	Install new lamp; see page 9.
	Lamp not seated in socket	Check lamp; see page 9.
Slide not in proper focus on screen	Lamp door not closed	Close lamp door.
	Slide itself not sharp	Examine slide for proper focus.
	First slide in tray not properly focused manually (auto-focus models)	Focus center of first slide manually; see page 8.
Slide fails to drop into projection position.	Slide in different type of mount from others (auto-focus models)	Focus manually; see page 8.
	Projection lens installed improperly	Follow instructions for replacing lens on page (9) 10.
	Tray baseplate not properly indexed	Align index hole and index notch; see page 7.
Uneven illumination on screen	Tray not properly positioned on projector	Position tray on projector as described on page 7.
	Slide mount warped or frayed at corners	Straighten mount or remount slide; see page 7.
	Projector not level or tilted too high	Set projector on a stand as high as screen center. See page 8.
Projector won't cycle to next slide.	Projection lamp not fully seated	Check lamp; see page 9.
	Condenser lens not installed or not positioned properly in mount	Check condenser lens; see page 10.
	Slide mount not seated properly in projector gate	Check slide position and slide-mount condition; see page 8.
Projector won't cycle to next slide.	Tray not properly positioned	Position tray as described on page 7.
	Slide or foreign object stuck in tray or gate	If necessary, see "Emergency Slide-Tray Removal" on page 10.

SERVICE FOR YOUR PROJECTOR

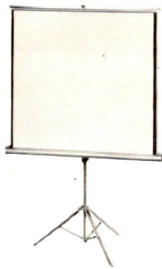
Carefully reread the sections of this manual that pertain to questions you have. *Especially* be sure to consult the "Troubleshooting Guide." Since some projectors that are returned for repair do not need service, please review this information carefully.

If your projector does require repair, you may send it through your photo dealer or directly to one of our Equipment Service Centers, listed on page 2. **Be sure to specify the model of your projector and the serial number.**

Packing Instructions

1. Include a note with your projector giving all details: model, serial number, date and place of purchase, and a description of the problem.
2. Enclose your projector or other photographic equipment in a plastic bag to keep it clean from dust and packing material.
3. Use a sturdy carton that is large enough for you to surround the projector completely with packaging material such as crumpled newspaper.
4. Securely fasten the carton with tape. Clearly write the address of the Equipment Service Center and your name and address on the top and bottom of the carton.
5. Mail the carton to the Kodak *Equipment Service Center*. Remember to insure the projector.

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 easy-opening legs that can be adjusted for overall height from the floor.



KODAK CAROUSEL® TRANSVUE Slide Trays

Additional slide trays to accommodate 80 or 140 slides, supplied in attractive bookshelf-type storage boxes, are available from your dealer.



KODAK EC Stack Loader

Lets you project and edit up to forty 2 x 2-inch slides in cardboard or very thin plastic mounts (or up to thirty 110 slides in 2 x 2 adapters) without loading them into a tray.



KODAK Projection Lenses (3)

Curved-field lenses for slides mounted in cardboard or other non-glass mounts

KODAK Projection EKTANAR C Lens,
102 mm *f*/2.8

KODAK Projection EKTANAR C Lens,
127 mm *f*/2.8

KODAK Projection EKTANAR C Zoom
Lens, 102 to 152 mm *f*/3.5



KODAK Projection Lenses (6)

Flat-field lenses for slides mounted in glass

KODAK Projection EKTAGRAPHIC FF
Lens, 65 mm *f*/3.5 (recommended
only for 110 slides in 2 x 2 mounts or
adapters)

KODAK Projection EKTAGRAPHIC FF
Lens, 76 mm *f*/3.5

KODAK Projection EKTAGRAPHIC FF
Lens, 102 mm *f*/2.8

KODAK Projection EKTAGRAPHIC FF
Lens, 124 mm *f*/2.8

KODAK Projection EKTAGRAPHIC FF
Lens, 178 mm *f*/3.5

KODAK Projection EKTAGRAPHIC FF
Zoom Lens, 100 to 150 mm *f*/2.8

KODAK CAROUSEL® Projector Case, Model E

This lined compartment case accommodates your projector, a slide tray in its carton, and such Kodak accessories as a stack loader, slide clip set, zoom lens, spare lamp, or extension cords. It is constructed of nylon-stitched brown simulated leather with panels that are reinforced with ebony board. All hardware is brass-finished.

KODAK CAROUSEL® Slide Tray Case

This handsome case will accommodate three slide trays or a lesser number with room for your miscellaneous equipment. It is a matching case to the KODAK CAROUSEL Projector Case, Model E.

KODAK EC 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 four extension cords can be added to accommodate most projection distances.

KODAK 2 x 2 Adapter for 110 Slides

If you have slides that are in 30 x 30 mm mounts, snap each slide into an adapter for projection with your CAROUSEL Projector. Project your slides singly, in trays, or with the KODAK EC Stack Loader. Adapters are supplied in boxes of 20.

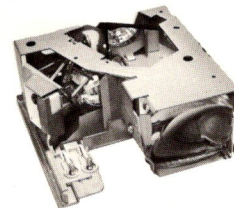
KODAK Slide Clip Set (for KODAK EC Stack Loader)

Makes handling stacks of slides easier than ever—no loose slides to slip out of your hands. Each clip holds up to 36 slides in cardboard or plastic mounts up to 1/20-inch (1.27 mm) thick, or up to 25 slides in 2 x 2 adapters for 110 slides. The label on each clip provides space for slide identification.

A set of 12 clips provides compact, low-cost storage for up to 432 slides in an attractive bookshelf-type storage box.

KODAK EC Sound-Slide Synchronizer

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



KODAK EC Lamp Module

Replacement lamp module for KODAK CAROUSEL 4000 and 5000 Projectors. Includes lamp bracket assembly, condenser lens, and heat-absorbing glass. Lamp not included.

Other special-purpose accessories are available for use with your CAROUSEL Projector. See your photo dealer.

Consumer/Professional & Finishing Markets

EASTMAN KODAK COMPANY • ROCHESTER, NEW YORK 14650

