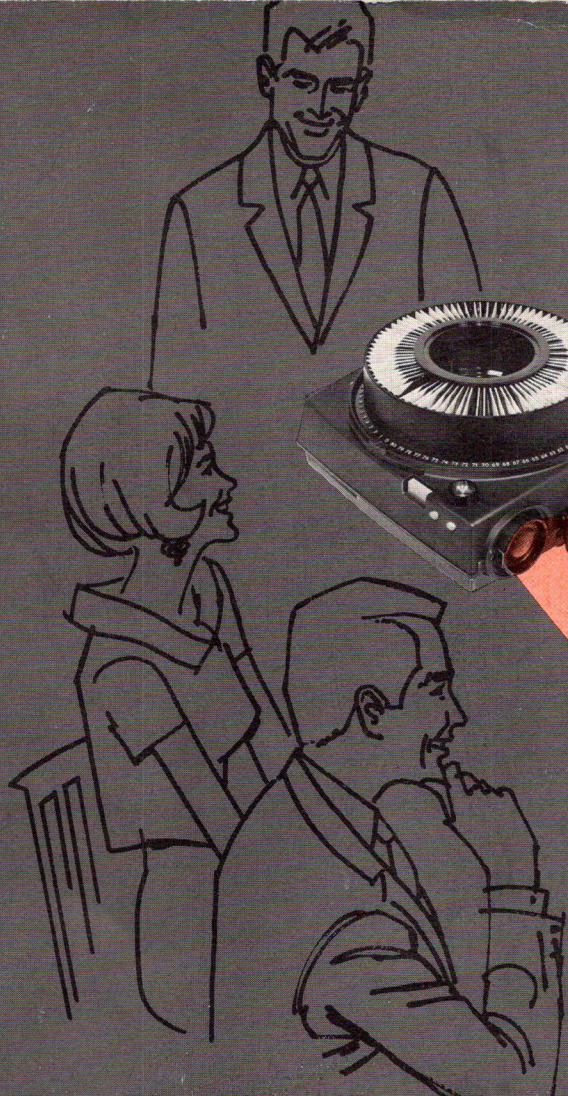


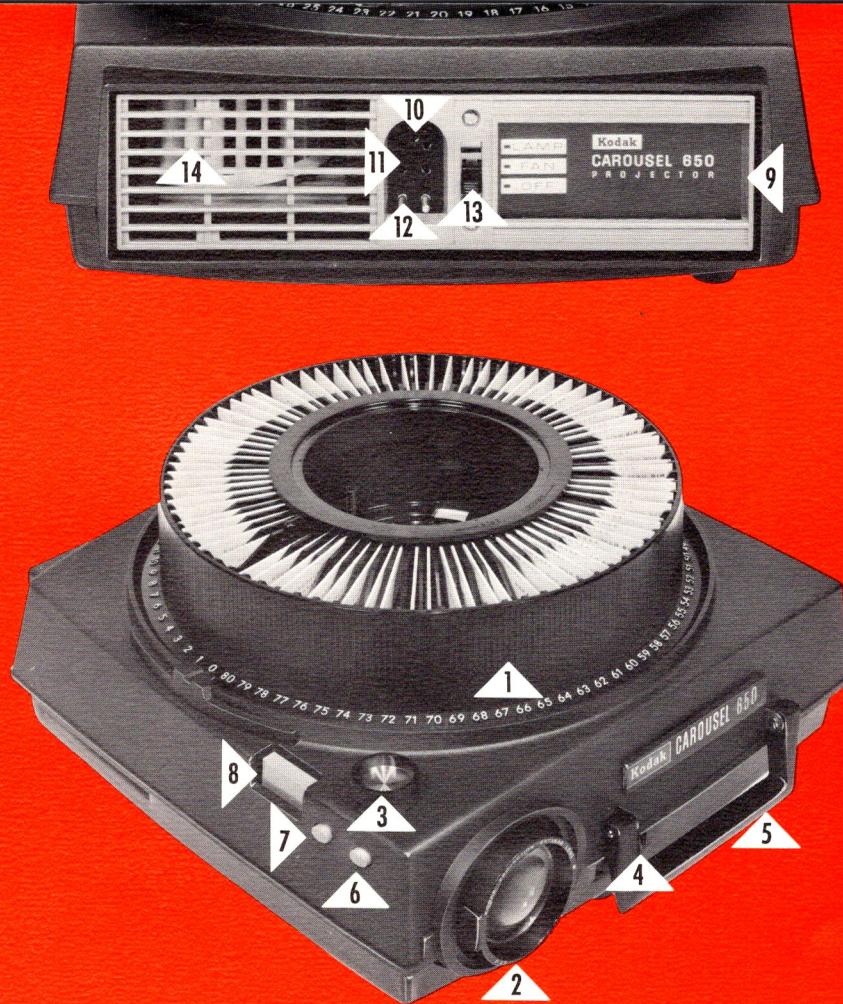
Kodak



**CAROUSEL
650
Projector**

- 1 SLIDE TRAY
- 2 LENS
- 3 FOCUS KNOB
- 4 ELEVATION WHEEL
- 5 HANDLE
- 6 FORWARD BUTTON
- 7 REVERSE BUTTON
- 8 SELECT BUTTON
- 9 ILLUMINATED CONTROL PANEL
- 10 REMOTE CONTROL RECEPTACLE
- 11 DISSOLVE CONTROL RECEPTACLE
- 12 POWER CORD RECEPTACLE
- 13 POWER SWITCH
- 14 FAN

NOTICE: Equipment subject to minor appearance changes.



The KODAK CAROUSEL 650 Projector contains the finest of all slide-showing systems. This jamproof, gravity-feed system utilizes a rotary tray—a precision unit that holds 80 slides. The projector provides the luxury of remote forward and reverse control of the slide tray—the comfort of sitting away from the projector with your guests. It has instant editing of any slide, anytime; handy controls; and a wide choice of projection lenses.

features

Jamproof • Design of this projector, with the slide tray on top, insures jamproof operation. Even though a bent or broken slide may "hang-up" in the gate, the slide tray can always be lifted off and the defective slide removed.

Round Slide Tray • Placed upright on top of the projector, the tray accommodates 80 slides. Tray accepts 28 x 28mm, 24 x 36mm, 28 x 40mm, and 1 $\frac{5}{8}$ x 1 $\frac{5}{8}$ -inch slides in cardboard, glass, metal, or plastic—all in 2 x 2-inch mounts. KODAK CAROUSEL Slide Tray accepts slides up to $\frac{1}{10}$ -inch thickness; KODAK CAROUSEL Universal Slide Tray accepts slides up to $\frac{1}{8}$ -inch thickness. Slide-identification numbers are molded on the tray. The lock ring fits on top of the tray and keeps slides from spilling. Ring is removable for loading or editing.

Showing Single Slide • Single slides can be manually inserted into projector gate—retrieved by depressing *select button*.

Select-o-matic • Select-button operation lets you choose any slide in the tray for projection.

Minimizes Focus-Shift • Special, built-in duct circulates temperature-controlled air over every slide, "treating" each before projection.

Forward and Reverse Buttons • Permit you to change slides, in either direction, at the projector.

Remote Changing • Twelve-foot, remote-control cord (furnished) changes slides (forward or reverse) by simple push of a button. One or more 25-foot extension cords (available from your dealer) can be added to the twelve-foot remote control cord.

Power Switch • In OFF position, projector is completely turned off. In FAN position, fan operates with projection lamp turned off. In LAMP position, projection lamp is lit and fan is operating.

Handy Elevation and Focusing Controls • Finger-tip elevation wheel and focusing knob work smoothly, never need lubrication. Elevation from 0° to 6 $\frac{1}{2}$ °.

Big, Sharp Pictures • KODAK Projection Lenses give brilliant, needle-sharp pictures. The 3-, 4-, 5-, and 7-inch lenses, and the 4- to 6-inch zoom lens cover most projection requirements.

Compact • This KODAK CAROUSEL Projector is only 4 inches high, 11 inches wide, and 11 inches long. It weighs about 11 pounds.

Handy Storage Box • Provides a means of carrying and storing the projector.

Direct Dissolve Control • A unique feature of this projector. Projector has wiring built-in for use of the KODAK CAROUSEL Dissolve Control described on page 19.

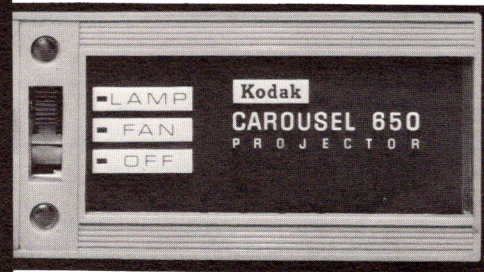
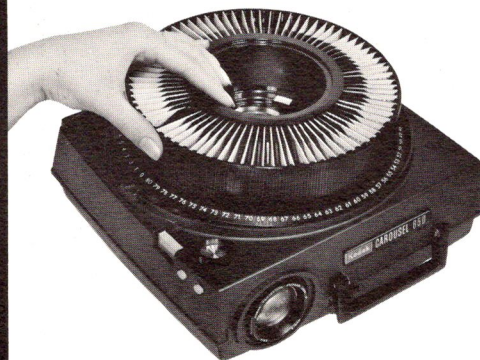
simple steps for showing slides

Remove the power cord, and the remote control cord (if it is going to be used), from the cord compartment located in the bottom of the projector. Plug the cords into their respective receptacles at the back of the projector.

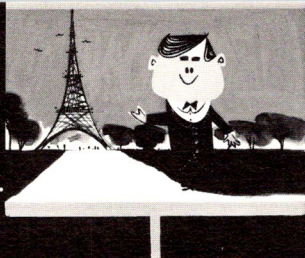
1

2 Seat loaded slide tray. See page 9.

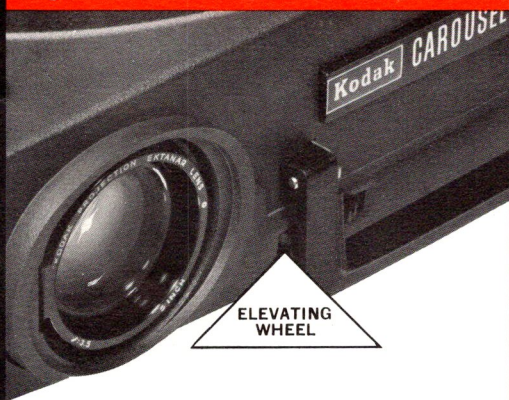
3 Slide power switch to LAMP.



4



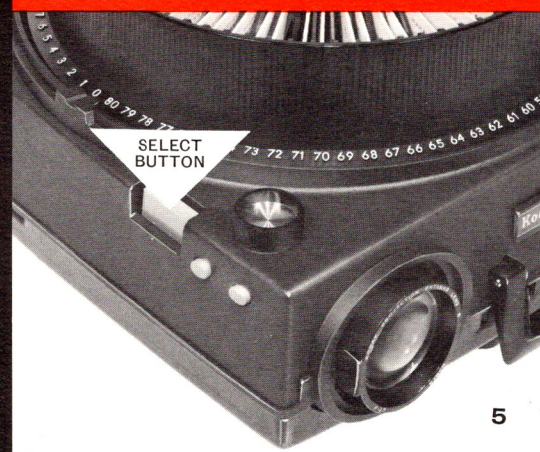
4 Turn off the room lights.
Elevate the projector, see page 10.



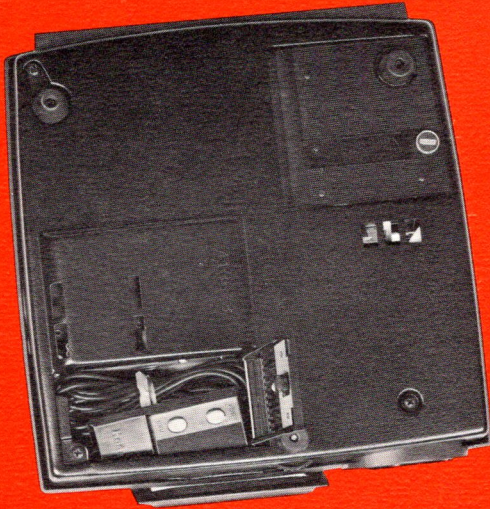
5 Momentarily depress the FORWARD BUTTON on the projector or the FOR (forward) button on the remote control to put the first picture on the screen; then focus the picture.



6 Momentarily depress the forward button on the projector or on the remote control to change the slides.



setting up



POWER AND REMOTE CONTROL CORDS

Place the projector, bottom side up, on a table. Slide the cord compartment door latch in the direction of the arrow marked OPEN. Open the door and remove the power cord, and the remote control cord (if it is going to be used). Then close the compartment door. Turn the projector upright.

Plug the remote control cord into the remote control receptacle at the back of the projector. The *small dot* on the plug should be upward when the plug is engaged in the receptacle.

POWER SUPPLY

Plug the socket end of the power cord into the 2-prong, power-cord receptacle on the back of the projector; plug the other end of the cord into a 110- to 125-volt, 60-cycle, a-c electrical outlet. If the voltage of your electric supply is not known, ask your electric service company.

SCREEN AND SEATS

Because slides may be either horizontal or vertical, a square screen is most convenient. It should be large enough for easy viewing by everyone present and should be at the same level as (or higher than) the projector.

For best results, the rear row of seats should not be further from the screen than six times the longer dimension of the projected picture. 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 projector beam.

Projection Lamp Tips

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

Distance in Feet from Projector Lens to Screen

Long Dimension of Projected Picture	126 Slides (28 x 28mm)					135 Slides (24 x 36mm)					828 Slides (28 x 40mm) and 127 (1 $\frac{5}{8}$ -inch sq.) Super-Slides				
	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	14 to 20	8	10	13	18	11 to 16	7	9	12	16	9 to 14
50"	12	16	20	28	17 to 25	9	12	15	21	13 to 19	8	11	14	19	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"	17	23	28	40	23 to 35	14	18	23	32	18 to 27	12	16	20	29	16 to 24
84"	20	27	34	48	27 to 40	16	21	26	37	20 to 31	14	19	24	33	19 to 29

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

This zoom lens lets you vary the size of the projected image so that it fills the screen over a range of projector-to-screen distances. Also, if you wish, you can enlarge any part of the picture on the screen.

USING THE ZOOM LENS

1. Focus the picture on the screen by turning the focus knob back and forth.
2. Rotate the lens barrel until the picture fills the screen.
3. It may be necessary to readjust the focus and/or rotate the lens barrel to obtain the desired image size and maximum sharpness.

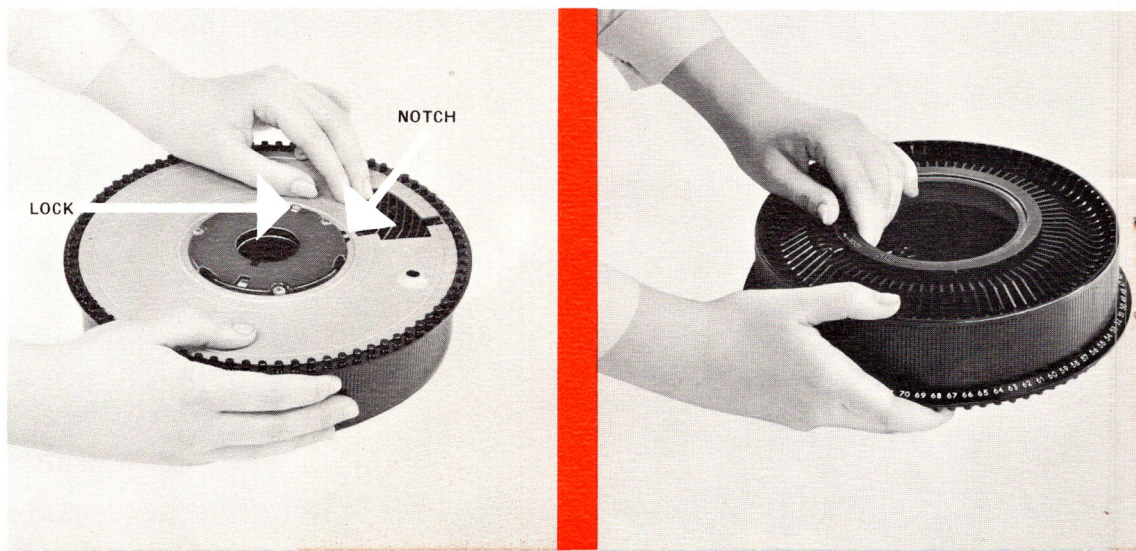
SLIDE TRAY

Furnished with the projector is a slide tray that holds 80 slides. The tray accepts 126 (28 x 28mm), 135 (24 x 36mm), 828 (28 x 40mm), and 127 (1 $\frac{5}{8}$ x 1 $\frac{5}{8}$ -inch) slides in cardboard, glass, metal, or plastic—all in 2 x 2-inch mounts. The KODAK CAROUSEL Slide Tray accepts slides up to $\frac{1}{10}$ -inch thick; the KODAK CAROUSEL Universal Slide Tray accepts slides up to $\frac{1}{8}$ -inch thick. *Slides mounted with loose or sticky tape, or mounts that have sharp glass corners are not recommended for use in the slide tray.* Slide-identification numbers are molded onto the tray. As the tray revolves, the number of the slide being shown will be opposite the gate index on the projector.

LOADING SLIDE TRAY

Check to be sure that the **LOCK** on the bottom of the tray is engaged in the **NOTCH** in the metal slide-retainer. If it is not, turn the retainer until the lock engages the notch in the retainer.

Remove the lock ring from the top of the tray by turning it 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 the emulsion (dull) surface of a slide mounted in glass, metal, or plastic—should face the next lower number. For example, the bordered,



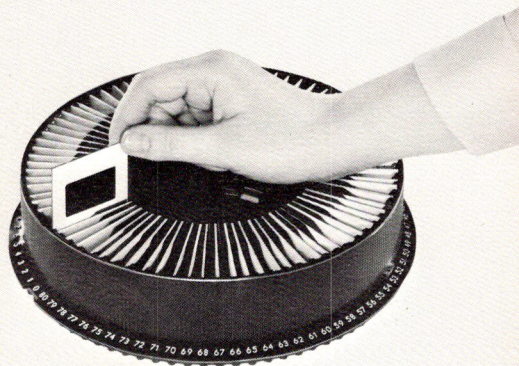
trademark (or emulsion) side of slide No. 2 should face toward slide No. 1; No. 6 should face toward No. 5, etc.

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

NOTE: If you wish the addition of a title slide, or the darkening of the screen after the showing of 80 slides, see the instructions on page 13 under "Editing Slides."

PLACING SLIDE TRAY ON PROJECTOR

Put 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 revolve the tray slowly until the identification number "0" is opposite the GATE INDEX on the projector. Push the tray down into operating position on the top of the projector. If the slide tray does not fit, see "Loading Slide Tray" on page 8.



operation

PROJECTION LAMP

Turn on the projection lamp by sliding the power switch to LAMP.

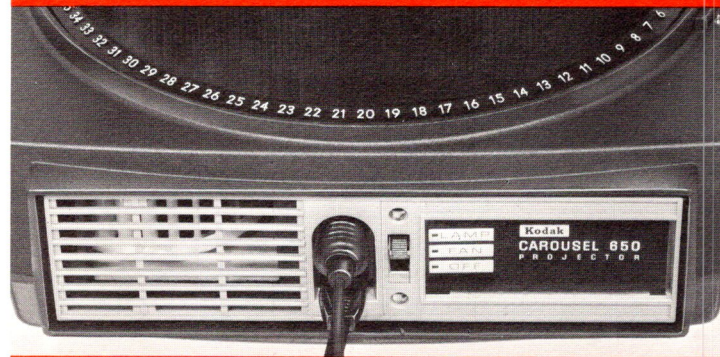
Momentarily depress the forward button on the side of the projector or the FOR (forward) button on the remote control, to put the first slide into viewing position.

ELEVATION

To center the projected image on the screen, elevate the projector by turning the ELEVATING WHEEL.

FOCUS

Focus the picture on the screen by turning the FOCUS KNOB on the projector back and forth.



FORWARD AND REVERSE BUTTONS

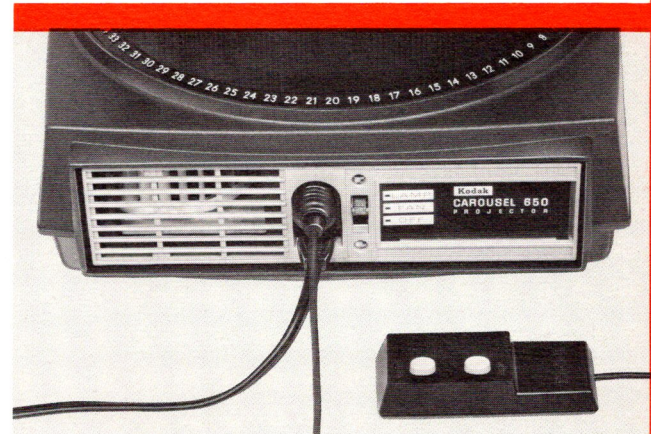
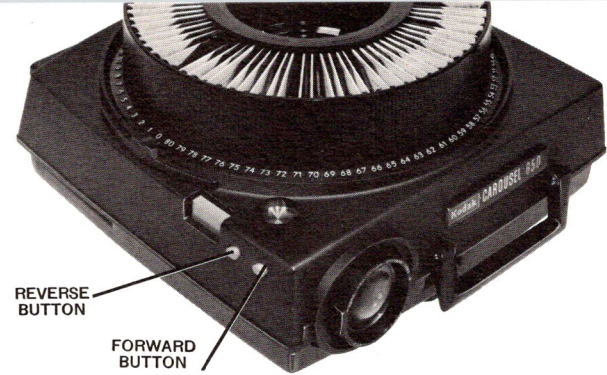
Forward and reverse buttons are located on the side of the projector for controlling the direction of the slide tray. The reverse button must be *firmly* pressed. Momentarily depress the forward or reverse button to change the slides in either direction, at any desired time-interval.

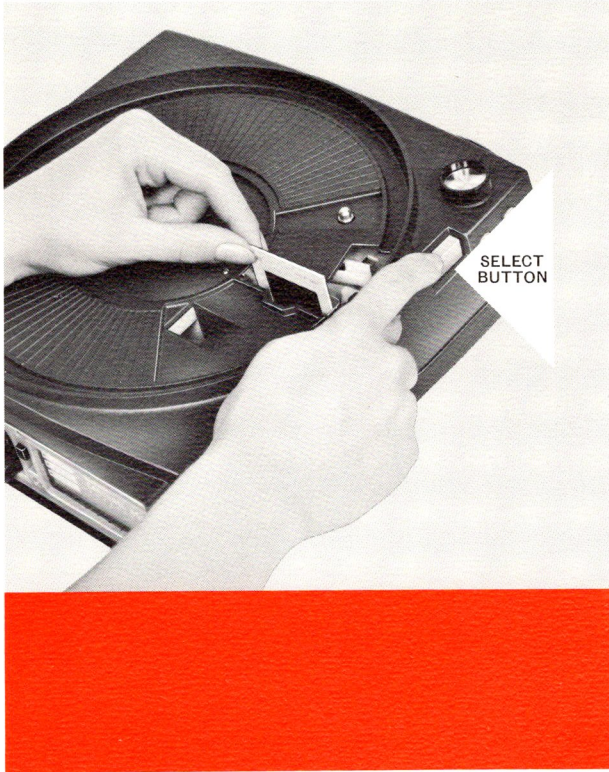
REMOTE CONTROL

The remote control has both FOR (forward) and REV (reverse) buttons for controlling the slide tray. The REV (reverse) button must be *firmly* pressed.

Momentarily depress the forward or reverse button to change the slides in either direction at any desired time-interval.

Important: If the reverse button is not depressed fully, the slide tray may rotate in a forward direction.





REMOVING SLIDE TRAY

1. With the projector turned on, depress firmly and hold the SELECT BUTTON down.
2. Rotate the slide tray until the identification number "0" is opposite the gate index on the projector.
3. Release the select button and then lift off the slide tray.

SKIP PROJECTION

1. Depress firmly and hold the SELECT button down.
2. Rotate the slide tray until the number of the slide you wish to project is opposite the gate index on the projector.
3. Release the select button; the selected slide will be immediately projected. This permits your showing any individual slide out of sequence.

Note: The SELECT button is *not* intended to be a manual forward button.

EDITING SLIDES—SHOWING SINGLE SLIDES

If this is the first time you have viewed the slides, you may want to edit them in the slide tray, or you may wish to show single slides by inserting them into the gate as illustrated at the left, or by using the KODAK CAROUSEL Stack Loader, described on page 16.

WITHOUT SLIDE TRAY

Insert a slide, correctly oriented, into the slide gate. Push the slide down into the gate as far as it will go. After viewing the slide, depress the SELECT button; the slide will be ejected from the gate. Slides of any make or thickness can be shown by this method.

WITH SLIDE TRAY

Put the tray of slides on the projector. Remove the lock ring from the tray. To edit a slide after viewing, depress firmly and hold down the SELECT button; then remove the slide from the tray.

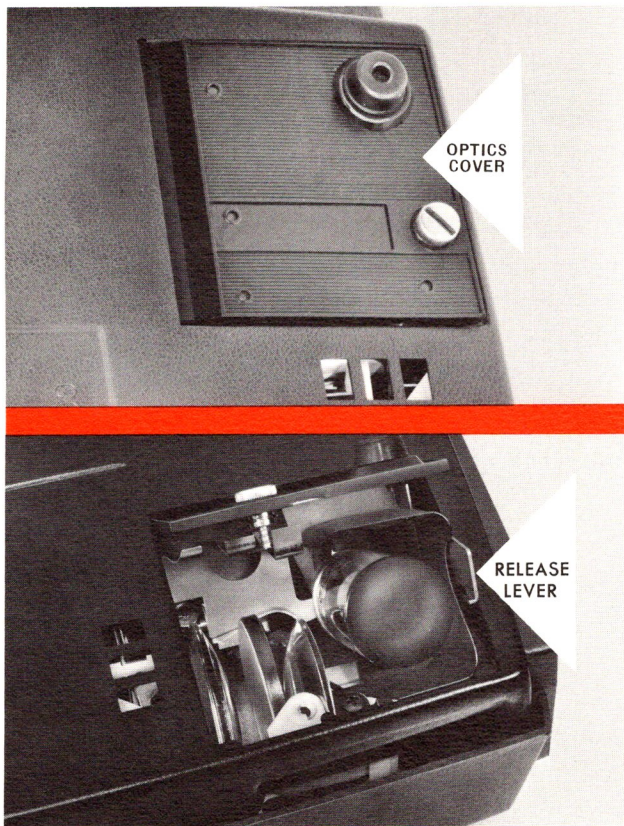
If you wish to use an extra slide, or a title slide (one is furnished) insert the slide into the gate before putting the slide tray in position. If you want the screen to be dark after you have shown a tray of slides, insert a 2 x 2-inch piece of thin cardboard into the gate before putting on the slide tray. The slide or piece of cardboard (only one can be put in the gate) will enter the blocked-off space in the slide tray during projection and be returned to the gate when the slide tray is removed. You can leave it in the gate and use it each time you project a tray of slides.

AFTER THE SHOW

1. Remove the slide tray (turn to identification number "0" at gate index).
2. After showing your pictures, the projector will be warm. Slide the power switch to FAN and allow the fan to run for several minutes until the projector feels cool; then slide the switch to OFF.
3. Lower the projector by turning the elevating wheel.
4. Retract the lens by turning the focus knob.
5. Unplug the power and remote control cords. Fold the power cord by putting the two ends of the cord together and folding it in about 4-inch lengths. Fold the remote control cord in the same manner. Put the cords into the cord compartment in the bottom of the projector.

CARE OF THE PROJECTOR

After use, it is good practice to make sure that the power cord is disconnected and that the projector has cooled sufficiently before attempting to disassemble the projector for cleaning or lamp replacement. Cooling can be accelerated by running the projector with the power switch set at FAN.



PROJECTION LAMP REPLACEMENT

Turn the projector bottom side up. Open the OPTICS COVER by turning the coin-slotted cover screw counter-clockwise until the cover can be opened to the position illustrated. Do not force the door further. Remove the lamp by pushing the lamp RELEASE LEVER upward towards the optics cover to release the lamp from the socket. Then lift out the lamp.

To install a lamp, place the center post of the lamp in the center hole of the socket; rotate the lamp until the key on the center post locates in its socket slot; then push the lamp in *all the way*. The replacement lamp should be an ASA code DEK lamp (500-watt, 115- 120-volt, T-12 bulb, C-13D filament). Close and secure the optics cover.

SERIAL NUMBER

Each KODAK CAROUSEL Projector has a serial number stamped on the bottom of the projector near the cord compartment. Make a note of this number for your records in case your projector is lost or stolen.

MODEL NUMBER

The model number 650 is included in the name of your projector. Use this number if you should have occasion to correspond with the Eastman Kodak Company concerning your projector.

CLEANING

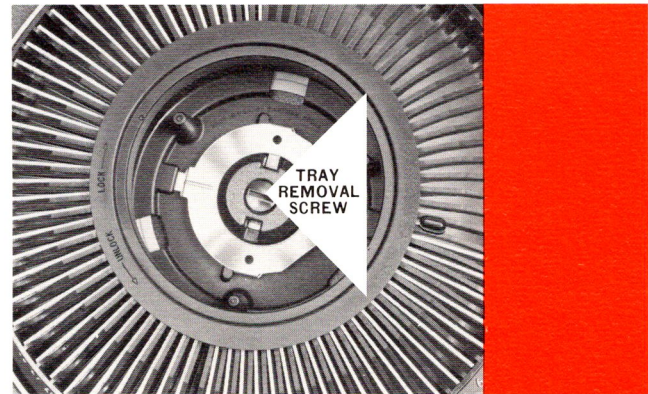
The optical system of your projector must be kept clean if it is to continue to give the best results. Dust or fingerprints on the lenses will reduce the brightness of the picture on the screen and will cause it to appear cloudy or flat.

Projection Lens—Turn the focus knob until the lens is out as far as it will go. Carefully push the focus knob toward the side of the projector; at the same time, withdraw the projection lens. With a soft, clean, lintless cloth or KODAK Lens Cleaning Paper, wipe the front and back surfaces of the lens.

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

Condenser Optics—Turn the projector bottom side up. Open the optics cover as described on page 14. Carefully lift out the condenser lenses and the heat-absorbing glass, one at a time. Clean both sides of the condenser lenses and heat-absorbing glass with a clean, soft, lintless cloth or KODAK Lens Cleaning Paper. Be careful not to leave fingerprints on the elements. Replace the condenser lenses and heat-absorbing glass. The small condenser lens fits in the guides nearest the projection lamp, with the flat side of the condenser toward the lamp. The heat-absorbing glass fits in the center guides, and the large condenser lens fits in the guides nearest the front of the projector. Close and secure the optics cover.

Emergency Slide Tray Removal—If the slide-changing mechanism should become inoperative because of a defective slide, 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 slide tray. Because the slide tray has been removed in this manner, the lock on the bottom of the tray is no longer engaged by the notch in the metal slide-retainer, as illustrated on page 8. With the tray placed upside down, turn the retainer until the lock engages the notch in the retainer; then remove the defective slide from the projector by pushing the select button, or if necessary, pull the slide from the gate by hand. Replace the tray on the projector.



auxiliary equipment

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.



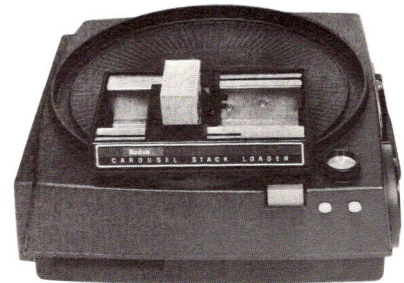
KODAK Carrying Case for KODAK CAROUSEL Slide Trays

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



KODAK CAROUSEL Stack Loader

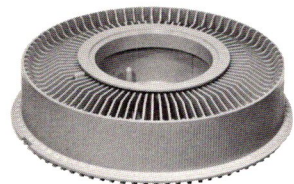
Lets you project and edit up to 40 2 x 2-inch slides in cardboard or very thin plastic mounts without having to load the slides into a slide tray.



KODAK CAROUSEL Slide Tray **KODAK CAROUSEL Universal 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 SLIDE TRAY



KODAK CAROUSEL UNIVERSAL SLIDE TRAY

KODAK Projection Lenses

Give superb sharpness and color clarity. Six KODAK Projection Lenses are available for use on the KODAK CAROUSEL 650 Projector—EKTANAR, 3-in. $f/3.5$, EKTANON, 4-in. $f/3.5$, EKTANAR, 5-in. $f/2.8$, EKTANAR, 5-in. $f/3.5$, EKTANON, 7-in. $f/3.5$, and KODAK Zoom Lens, 4 to 6-in. $f/3.5$.



KODAK CAROUSEL 135 Slide Kit

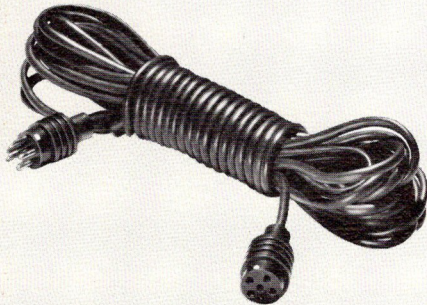
Contains materials necessary to mount 50 2x2-inch slides in glass. Includes 50 KODAK Metal Binders, 50 KODAK Masks for Glass Slides, and 100 pieces of KODAK Slide Cover Glass (thin).



auxiliary 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. Any number of extension cords can be added to accommodate any projection distance.



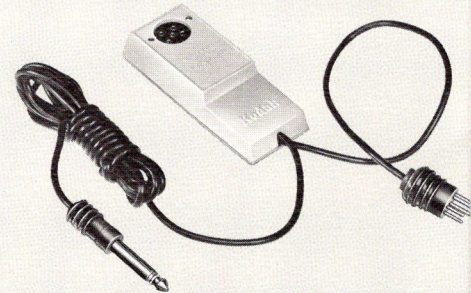
KODAK CAROUSEL Programmer

Programmer lets you connect CAROUSEL Projector to a tape recorder . . . tape voice commentary and music, and put "trip signals" on tape for each slide. In playback, the sound synchronizes with each slide as it appears on the screen, and the "trip signal" changes each slide automatically at the correct moment.



KODAK CAROUSEL Sound Synchronizer

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. In operation, one of the tape tracks is used for "change slide" signals while the voice recording is made on the other track.

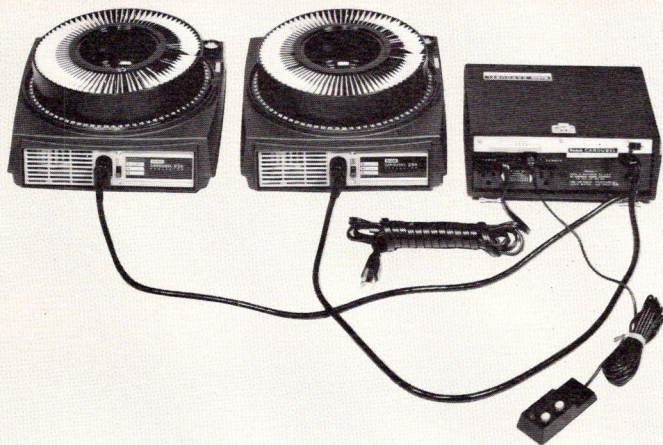


KODAK CAROUSEL Dissolve Control

For the ultimate in showing slides, the KODAK CAROUSEL Dissolve Control unit controls two CAROUSEL Projectors for fading one picture into another. Ideal for animation, sales presentations, display work or professional showings.

The unit plugs into a standard power outlet, and connects two projectors. It dims and brightens their lamps alternately, and changes

the slide on the dim projector. The cycle may either: be fully automatic, controlled by an automatic interval timing switch in the unit; or be manually operated, controlled by a remote push button switch when the remote control cord from one of the projectors is plugged into the unit.



Ideas for Better Color Slides

This manual shows you how easy it is to operate your KODAK CAROUSEL Projector. To help you make interesting slides you and your friends will enjoy seeing over and over again, Kodak publishes many fascinating idea books. They are available from your Kodak dealer.

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. 75c.

Adventures in Outdoor Color Slides (AE-9). An inspiring book of picture-taking suggestions—close-ups of flowers and birds, story-telling sequences, sunsets and other dramatic lighting effects. 75c.

service facilities

If your KODAK Projector should require attention, complete service facilities are provided at Rochester and in Kodak Regional Sales Divisions at the addresses below. Also, service, covered under the guarantee, is available through independent service shops in many cities. For such local, guarantee-covered service, please see your Kodak dealer or refer to the yellow pages of your telephone directory under Photographic Equipment and Supplies—Factory Approved Warranty Service.

Eastman Kodak Company
Apparatus Service
800 Lee Road
Rochester, New York 14650

Eastman Kodak Company
Apparatus Service
1901 West 22nd Street
Oak Brook, Illinois 60523

Eastman Kodak Company
Apparatus Service
6300 Cedar Springs Road
Dallas, Texas 75235

Eastman Kodak Company
Apparatus Service
5315 Peachtree
Industrial Blvd.
Chamblee, Georgia 30005

Eastman Kodak Company
Apparatus Service
3250 Van Ness Avenue
San Francisco, California 94119

Eastman Kodak Company
Apparatus Service
1334 York Avenue
New York, New York 10021

Eastman Kodak Company
Apparatus Service
808 Rivera Road
Whittier, California 90606

Eastman Kodak Company
Apparatus Service
1065 Kapiolani Blvd.
Honolulu, Hawaii 96807

guarantee

Within a year after purchase, any repairs necessary to this KODAK CAROUSEL Projector due to a defect in materials or workmanship will be made or, at our option, the projector will be replaced without charge. No other warranty or guarantee, 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 unsatisfactory operation, the projector should be sent directly or through a Kodak dealer 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.

EASTMAN KODAK COMPANY
Rochester, New York 14650