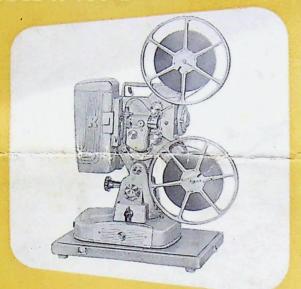
# Keystone 8 MILLIMETER PROJECTOR

MODEL K-109-D



INSTRUCTIONS FOR THE USE AND CARE OF YOUR NEW HOME MOVIE PROJECTOR

Keystone Camera Company, Inc.

HALLET SQUARE



BOSTON 24, MASS.

#### FOREWORD

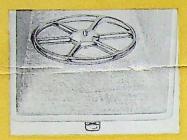
You will enjoy the satisfaction and pleasure of being able to produce lifelike pictures upon the screen, of people and scenes which are familiar. This instruction book is intended to guide and help you operate your projector.

Standard equipment consists of one empty 400 foot reel and a 750

watt lamp packed with the projector.

This projector operates on 110-120 Volts ALTERNATING CUR-RENT ONLY. If you do not know the line voltage we suggest that you ask your local electric service company. If the voltage of the lamp is less than the line voltage the life of the lamp will be much shorter. The operation of this projector is very simple. Follow these instructions carefully and you will guard against possible injury to your projector or film.

## **OPERATING THE PROJECTOR**



Remove the Projector Carrying Case.

Remove the Spare Reel from the inside of the Carrying Case.

FIG. 1

Turn the Speed Control Knob to approximately the half-way mark. The Rewind Lever should be in the "Off" position and the Still Picture Lever should be in the "Motion Picture" position (Fig. 7).

Plug the Line Cord into a convenient room electrical outlet and turn the Master Switch clockwise to the "Lamp" position.

If the frame of light is not central on the screen adjust the projector for the proper height by turning the Tilt Knob either clockwise or counter-clockwise.



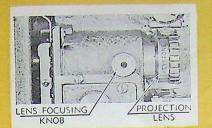


FIG. 3

Place the Take-Up (Empty) Reel with the round hole facing outward on the Take-Up Reel Shaft. The lug on the surface of the Reel Shaft will fit into one of the reel slots.

Move the Reel Lock Clip against the face of the reel to lock it in position.

In the same manner place the Supply Reel containing the film, on the Supply Reel Shaft.

Focus the lens on the screen by merely turning the Lens Focusing Knob clockwise or counterclockwise until the frame of light is sharp and clear. Then turn the Master Switch to the "Off" position.

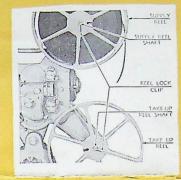


FIG. 4

#### PROJECTOR THREADING THE

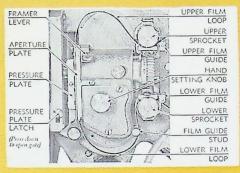


FIG. 5

Open the Pressure Plate by pressing the Pressure Plate Latch down. Press the Upper Film Guide down and the Lower Film Guide up. Unwind about 2 feet of film from the Supply Reel. Thread the film through the projector as shown in Fig. 5 following the film outline on the projector body and the instructions on the following page.

The Upper and Lower Film loops should be evenly formed and should follow the film outline on the projector body. Close the Pressure Plate by pressing the Pressure Plate Latch to the left and check to insure that it lies flat on the film surface. Close the Upper and Lower Film Guides checking to insure that the film perforations engage with the teeth on the Upper and Lower Sprockets.

Bend end of film slightly and insert the film into the slot in the Take-Up Reel Hub. Take-Up film slack by turning the Take-Up Reel clockwise. Check for correct threading by turning the Hand Setting Knob (Fig. 5) counter-clockwise until you are sure that the film is properly engaged (the film should move uniformly over the Upper and Lower Sprockets and the Upper and Lower Film Loops should retain their shape).

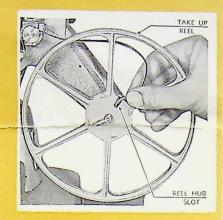
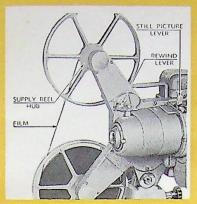


FIG. 6

#### BEGIN YOUR SHOW

Turn off all room lights. Turn Master Switch (Fig. 2) clockwise to "Lamp" position. If picture is fuzzy, focus by carefully turning the Lens Focusing knob clockwise or counter-clockwise until the picture is sharp and clear. If picture is cut off on top or bottom, move Framer Lever (Fig. 5) up or down until full picture comes in view.

Set Speed Control Knob (Fig. 2) for Normal Speed by turning the knob clockwise (to increase speed) or counter-clockwise (to decrease speed) until the subjects appear normal on the screen and no light flicker is noticeable.



After film has been projected turn Master Switch (Fig. 2) to "Off" position. Move Rewind Lever (Fig. 7) to "On" Position. Guide film as shown and insert end of film into slot in Supply Reel Hub. Turn Master Switch to "Rewind" position and turn Speed Control Knob (Fig. 2) to high speed. When film has been rewound turn Master Switch to "Off" position and turn the Speed Control Knob back to normal speed. Move Rewind Lever back to "Off" position and you are ready for your next showing.

FIG. 7

#### STOPPING FOR STILL PROJECTION

The film may be stopped on any desired picture by merely moving the Still Picture Lever (Fig. 7) to the "Still Picture" position. If the picture does not appear on the screen turn the Hand-Setting Knob (Fig. 5) counter-clockwise slowly until the picture appears on the screen.

#### REVERSING THE FILM MOVEMENT

Many amusing effects can be obtained by reversing the film movement. This is done merely by turning the Master Switch (Fig. 2) counter-clockwise to the "Lamp" position. The film will change its direction of movement immediately.

#### ROOM LAMP RECEPTACLE

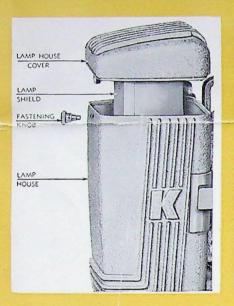
A room lamp may be plugged in to the receptacle marked "Room Lamp Plug". The room lamp will automatically go off when the Master Switch (Fig. 2) is in the "Lamp" positions. The room lamp will be on when the Master Switch is in the other switch positions.



#### REPLACING THE LAMP

Furnished with this projector is a T12, Medium Prefocus Base, 750 Watt Lamp. When ordering a replacement lamp make sure that the voltage rating specified is the same as your line voltage. If in doubt ask your local electric service company or your dealer.

Before attempting to replace the lamp check to insure that the Master Switch (Fig. 2) is in the "Off" position and that the Lamp House is cool.



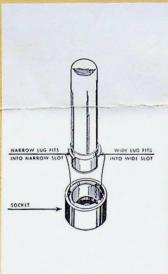


FIG. 9

FIG 10

Unscrew the Fastening Knob (Fig. 9) and remove the Lamp House Cover. Grasp lamp top with fingers, press lamp down, turn counterclockwise a quarter turn and lift lamp out of socket.

Insert new lamp as shown in Fig. 10. Grasp lamp top with fingers, press lamp down and turn clockwise a quarter turn. The lamp will lock in place.

#### CARE OF THE PROJECTOR

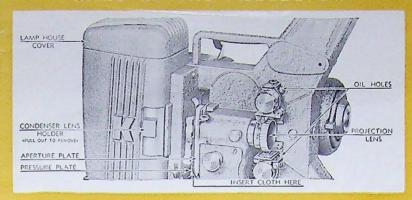


FIG. 11

OILING: All moving parts except the Upper and Lower Sprocket Shafts are lubricated for life at the factory. Oil the Upper and Lower Sprocket Shafts after every 10 hours of operation with a high grade light oil (See Fig. 11).

CLEANING THE LENSES: Remove the Projection Lens (Pull Lens Focusing Knob out slightly before removing) and Condenser Lens (Pull out to remove) and wipe the outside lens surfaces with a soft, clean, lintless cloth or a small, soft-haired brush (See Fig. 11).

CAUTION: Before removing or inserting the Projection Lens, pull out the Lens Focusing Knob slightly. (See Fig. 3)

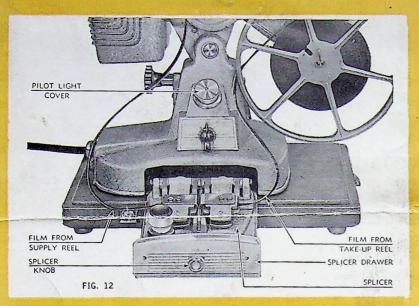
CLEANING THE REFLECTOR: Remove the Lamp House Cover (Fig. 11) and wipe the inside Reflector surface with a soft, clean, lintless cloth.

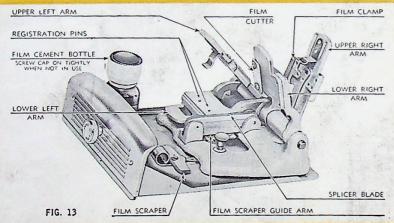
CLEANING THE APERTURE: Remove the Projection Lens. Insert a small, soft-haired brush or a piece of soft cloth wrapped about a pencil through the Lens Holder and into the Aperture.

CLEANING THE PRESSURE PLATE AND APERTURE PLATE: Open the Pressure Plate as described on Page 2. Insert a lintless cloth moistened slightly with alcohol or dry cleanser between the Aperture Plate and Pressure Plate and wipe the surfaces clean. (See Fig. 11).

### HOW TO USE YOUR KEYSTONE SPLICER

Your projector is equipped with a built-in Splicer. To remove the Splicer from the Projector Base merely turn the Splicer Knob clockwise and slide the Splicer out (Fig. 12).





NOTE: Refer to Fig. 13 for nomenclature. Be sure to keep emulsion (dull) side of film up at all times.

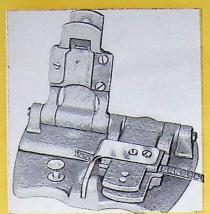


FIG. 14

Raise Upper and Lower Right Arm leaving film clamped between them. Place film on left side on Registration Pins and clamp film with Upper Left Arm.

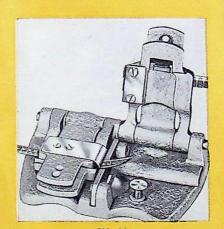


FIG. 16

Raise Upper and Lower Left Arm and Upper Right Arm. Place film on right side on Registration Pins and clamp film with Upper Right Arm.

Cut film by pressing Lower Left Arm Down.

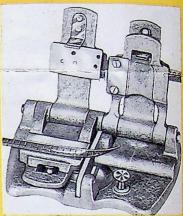


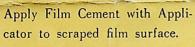
FIG. 15

Cut film by pressing Right Arm down. Raise Right Arm after cutting.



Dip one end of Felt Pad into water and moisten film resting on Splicer Blade. Scrape all emulsion from this portion of film by sliding Film Scraper back and forth. Wipe off all scrapings with Felt Pad. Check to insure that film surface is clean and dry.

FIG. 17



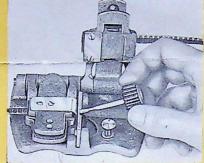
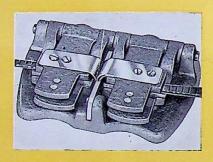


FIG. 18



Press Right Arm down securely. Allow Film Cement to dry for at least one minute. Raise Upper Right and Upper Left Arms and remove film from Registration Pins slowly and carefully. The splice is now complete.

# HOW TO ATTACH AND USE YOUR KEYSTONE VIEWER

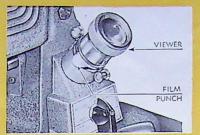


FIG. 20

Thread Projector in the normal manner (Pages 2 and 3) leaving the Lower Loop much longer than usual (Fig. 21).

The Viewer is used to edit your film. Pull out Pilot Light Cover (Fig. 12). Insert Viewer with Film Punch pointing directly to your left (Fig. 20)

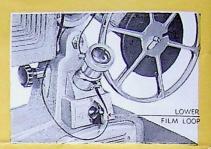
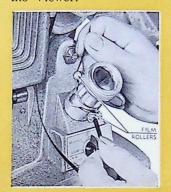


FIG. 21

Grasp film in both hands with the emulsion (dull) side of film facing down and film perforations on left side. Place film under rollers (Fig. 22) and insert film between Film Punch and Film Guide Plate (Fig. 23). Seat film in Aperture Track (Fig. 23).

The threaded Projector and Viewer should look like Fig. 21. The large, lower film loop is necessary in order to feed the film through the Viewer.



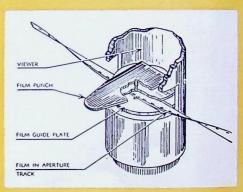


FIG. 19

FIG. 22

Operate your projector in the normal manner (See page 3). From your screen select the first portion of film you wish to cut out and stop the projector by engaging the Still Picture Lever (Fig. 7) Sight through the Viewer and disengage and engage the Still Picture Lever intermittently until the first frame of film that you wish to cut out appears (the film may have to be moved backward or forward through the Viewer by hand until the first frame is centered in the Viewer) Press down the Film Punch (Fig. 23). A punch mark will be made on the frame of film (Fig. 24).

Disengage the Still Picture Lever and continue to project your film. From your screen select the last portion of film you wish to cut out and stop the projector by engaging the Still Picture Lever. Sight through the Viewer and disengage and engage the Still Picture Lever intermittently until the last frame of film that you wish to cut out

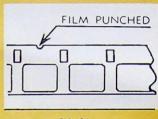


FIG. 24

appears (the film may have to be moved backward or forward through the Viewer by hand until the last frame is centered in the Viewer). Punch this frame in the same manner as the first frame.

With both hands (Fig. 22) remove film from Viewer. Cut film between punch marks and splice film together. To use your Keystone Splicer see pages 7, 8 and 9.

#### PROJECTED PICTURE WIDTHS WITH VARIOUS LENSES

FOCAL LENGTH OF LENS	DISTANCE FROM SCREEN									
	4'	5'	6'	8′	10'	12'	14'	16'	18'	20'
	WIDTH OF PICTURE									
MAGNA-SCOPE	0'11''	1'2"	1'4''	1'10''	2'3"	2'9"	3'2"	3'8"	RECOMMEND USING 1" LENS	
1"	0'8''	0'10"	1'0"	1'4"	1'8"	2'1"	2'5"	2'9"	3'1"	3'5"

The projector serial number is located on the Master Switch Nameplate.

Make out the registration card complete and send to

#### KEYSTONE CAMERA CO., INC.

Hallet Square, Boston 24, Mass.

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