

ELMO

ELMO CO., LTD.

PRINTED IN JAPAN

ELMO

8mm DUAL PROJECTOR

FP-H

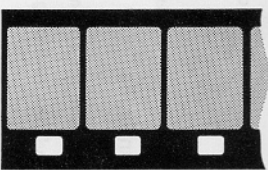
Important

Your Elmo FP-H will accommodate both Super 8 and regular 8mm film. Before using it, be sure it is adjusted to accept whichever type of film you are projecting.

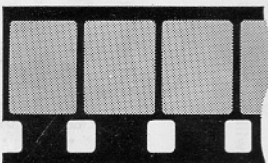
The procedure, which is described on page 8, is simple. If **it is not followed, serious damage to the film will result.**

The reason for the selective sprocket system of the Dual-8 projector is illustrated by these two drawings. When compared with ordinary type 8 mm film, Super 8 is approximately 50% larger in picture frame area. This is accomplished by making the sprocket holes smaller, and by positioning the perforations differently than in ordinary 8mm film. The push-button changeover mechanism of the Dual-8 will position the projector for smooth, brilliant projection of either type film.

Super-8 film



Ordinary film

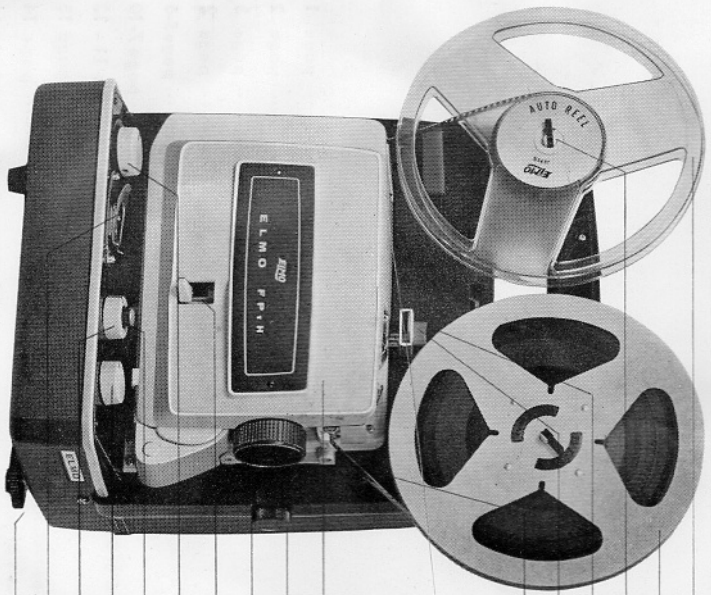


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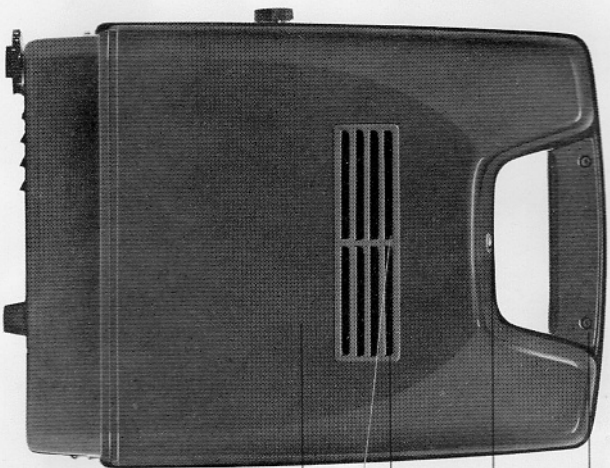
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Open this flap of your instruction booklet

Keep this flap open as you read through the instructions. This will allow quick reference to the working parts of your new Elmo FP-H projector. Familiarity with these parts will assure success at your very first show.



- Automatic take up reel
- Feed reel
- Reel latch
- Threading button
- Loop setter
- Film indicating window
- Lamp house cover
- Threading knob
- Projection lens
- Framing lever
- Speed controller
- Reverse button
- Lamp switch
- Motor switch
- Film trimmer
- Tilting knob



- Handle
- Rear cover holding screw
- Ventilation window
- Rear cover

Features

1. Two projectors in one

You can enjoy instant movie projection of ordinary 8 mm, Super 8 films with the Elmo single-action Selective Sprocket System.

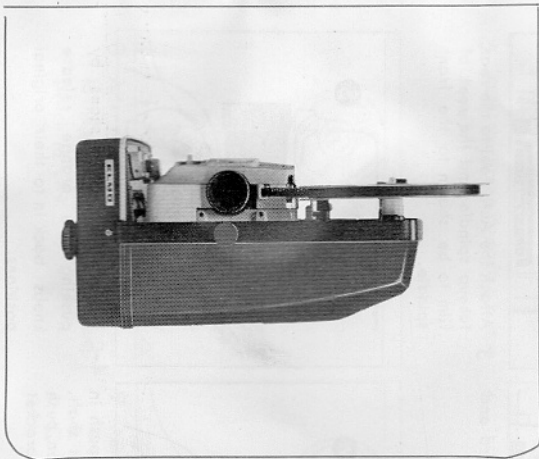
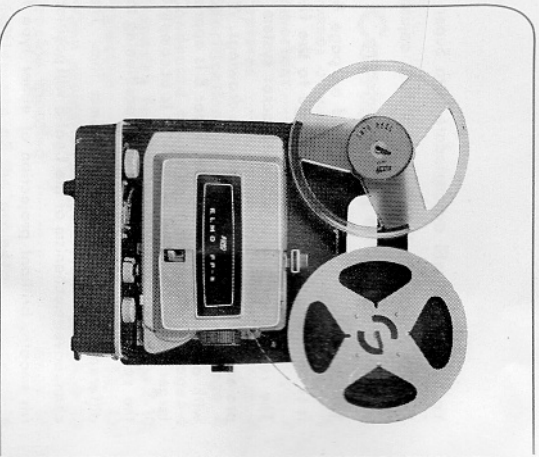
2. Fully automatic film-threading

Insert the end of the film into the threading slot, and the film will be threaded automatically and carried to the takeup reel.

3. Other advantages

- Reverse and single frame projections
- Adjusted speeds and fast rewinding
- Sharp brilliant pictures

3



Specifications

Dimensions: 10" X 13" X 7" 25 X 33 X 18.5cm

Weight: 5.8kg 12.8 pounds

Projection lamp: 120v, 150W, with built-in reflector.

Motor: DFG type Series motor

Supply voltage: 115v-120v, 50/60cycle

Projection speed: variable from 12 to 24 frames/second

Projection lens: F1.3, 20mm

Reel capacity: 400 feet

Film capability: Super 8 or regular 8mm

Threading: automatic to takeup reel

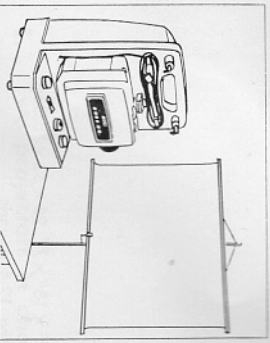
Single-frame projection: yes

Reverse projection: yes

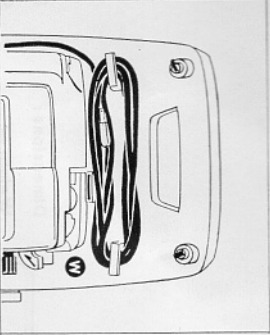
Rewind: automatic, high speed

4

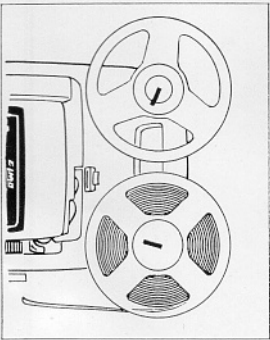
Condensed operating instructions



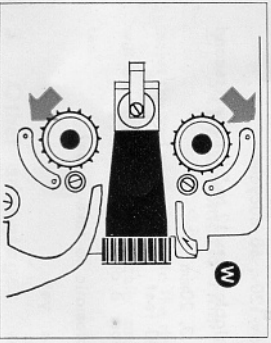
1 Place the projector on a stand or table at a suitable distance from the screen.



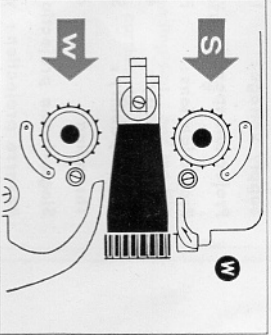
2 Take out the power cord and plug in.



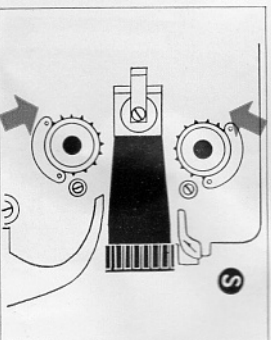
3 Attach the Auto Reel to the rear take-up spindle and the reel of film to be shown to the front spindle.



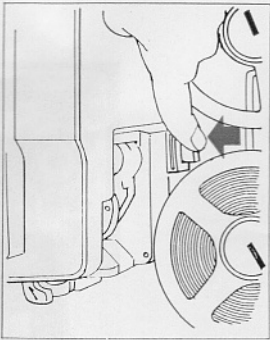
4-A Open the lamp house cover, and open both sprocket shoes by means of the orange release knobs; pull up on the upper knob and push down on the lower knob.



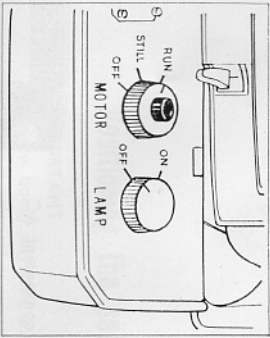
4-B For Super 8 projection, push in the upper (red) sprocket shaft. For regular 8mm projection, push in the lower (black) sprocket shaft.



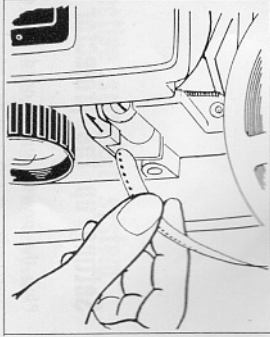
4-C Close the sprocket shoes by pushing the orange release knobs back in to their original positions.



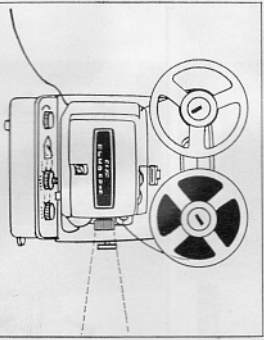
5 Push the green threading button down.



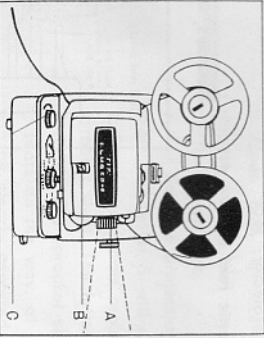
6 Turn the motor switch to RUN.



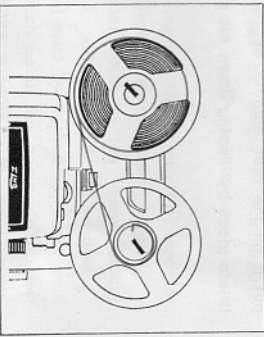
7 Trim the end of the film leader with the film cutter (see page 9) and insert the end of the film leader into the threading slot.



8 After the film has been carried to the take-up reel, turn the lamp switch to ON.



9 Adjust the following, if necessary:
A. Focus (by turning the lens)
B. Framing (with the framing lever)
C. Projection speed (with the speed control)



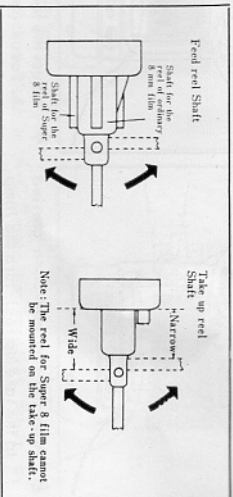
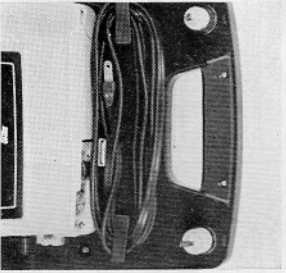
10 When the complete roll of film has been projected, rewind the film (see page 13).

Preparing for projection

Setting up the projector

Plug the power supply cord into a convenient AC outlet (the other end is permanently fitted to the projector).

Take the take-up reel from the carton case and put it on the rear spindle of the projector; lock it into place by flipping down the plastic reel latch.

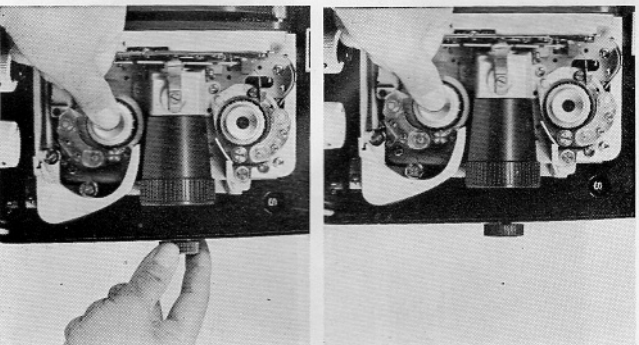


Positioning the selective sprocket system

IMPORTANT

Before doing anything else, set the selective sprocket system of the projector into the proper position for the film you will be projecting:

1. Open the lamp house cover by pulling it outward from the front (projection lens) edge.
2. Open both sprocket shoes by means of the orange release knobs; pull up on the upper knob and push down on the lower knob.
3. For Super 8 projection, push in the upper (red) sprocket shaft. The letter S will appear in the indicator window.
4. For regular 8mm projection, push in the lower (black) sprocket shaft. The letter R will appear in the window.
(NOTE: The sprocket shaft must be pushed in firmly until it seats all the way, at which point the appropriate letter will be clearly centered in the window. If the shaft resists, keep pressure on it while turning the threading knob slowly toward you, in a counter-clockwise direction.)
5. Close the sprocket shoes by pushing orange release knobs back into their original positions. The film will not thread unless this is done.



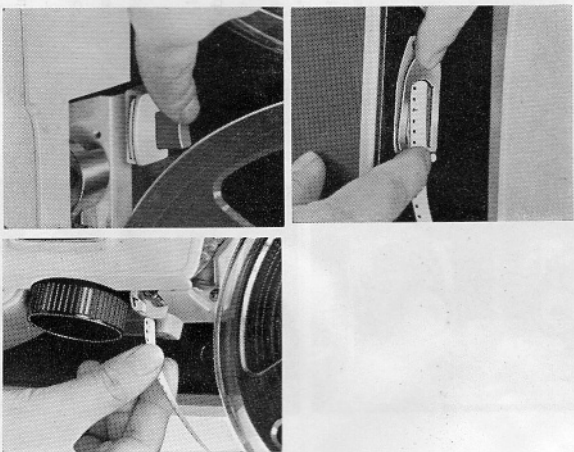
Threading the film

To insure smooth, automatic threading, the end of leader or film should be trimmed with the film cutter provided.

Push the green threading button down to position the automatic threading system.

Turn the motor switch to RUN and insert the end of the film into the threading slot identified by the red arrow above the projection lens. The film will now be threaded automatically and carried to the takeup reel.

Then turn the lamp switch to ON.



Threading button

If any one of the following cases happens, release the threading button in the below mentioned manner;

- When you depress the threading button by mistake.
- Before inserting the film into the threading slot, you want to release the threading button.

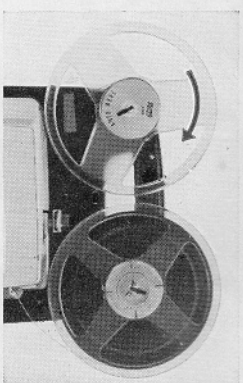
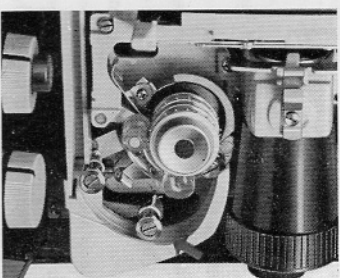
The threading button can be released in the following method:

1) When film is not threaded;

Open the lamp house cover and press the roller in the direction indicated by the arrow.

2) After the film has been threaded;

Give the film tension by rotating the takeup reel with natural force in the direction of the arrow and the threading button will be released, but it can also be done just in the same manner as the above 1).



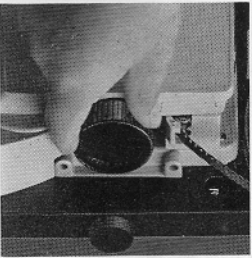
Projection

When the projected image appears on the screen, check the following points :

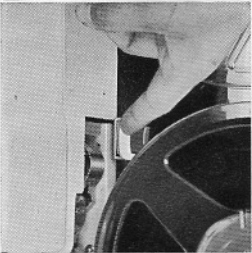
1. **Focus.** Is the image sharp? If not, bring it into focus by turning the lens.
 2. **Image Stability.** Is the picture smooth and steady, or does it flicker? If it does, adjust the speed control knob until the image is satisfactory.
- If the film loop provided by the automatic threading system is lost during projection due to an improper splice or other reason, it can be instantly restored

by pushing down on the loop setter. Loss of the loop results in a "jumpy," improperly framed picture accompanied by noisy projection.

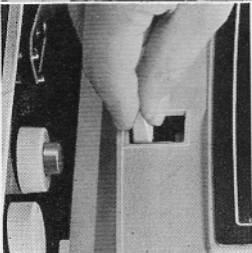
3. **Framing.** Is the entire frame properly projected, without showing a frame line? If not, move the framing lever up or down to correct.
4. **Image Alignment.** If the projected image is not centered vertically on the screen, turn the tilting knob until it is properly aligned.



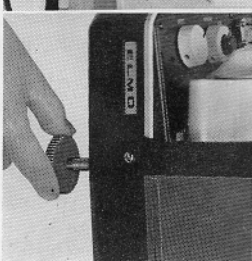
1



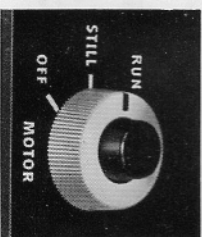
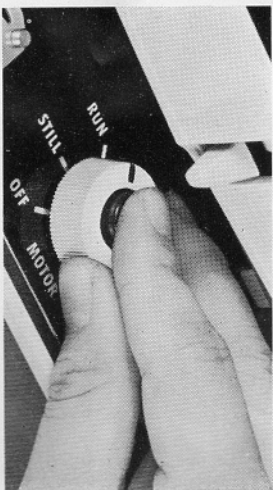
2



3



4



Reverse projection

The projector may be put into reverse operation at any time during projection by following this procedure :

1. Turn off the motor.
2. Depress the reverse button and, while holding it down, turn the motor switch knob to RUN.
3. After completing reverse projection, turn the motor switch to OFF before resuming normal forward projection.

Single frame still projection

During projection, you may wish to stop the movie to show a single frame. This may be done by turning the motor switch to STILL. Sometimes the film will stop in the middle of a frame, or even when the aperture is closed. When this happens, simply turn the threading knob until the full frame is projected on the screen. Since the Elmo FP-H projector has an excellent cooling system, prolonged still projection is possible without harming the film.

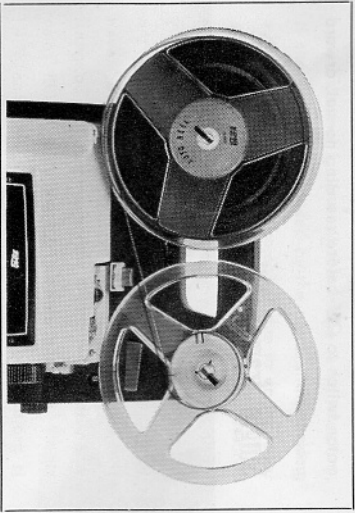
When projection is completed

After the film has been projected and wound completely on the takeup reel, turn off the lamp and motor, in that order. Because the lamp is adequately cooled during projection, there is no need to leave the motor running for a period of time after the lamp has been turned off.

Rewinding the film

To wind the film back on the supply reel:

1. Insert the end of the film into the slot of the supply reel hub.
2. Turn the speed control knob to high position.
3. Push down the reverse button in the center of the motor switch and turn the switch to RUN. The film will be rewound at high speed.



Trouble shooting

1. Projector not operate

Check-belt is not broken.

2. Film not transported

Check-sprocket shaft pushed home.
set for correct film.
end of film correctly cut.
film path is unobstructed.

3. Film not taken up automatically

Check-first film perforation is not damaged.
film is not curled.

4. No image on the screen

Check-projection lamp properly seated.
projection lamp not blown.
lamp switch is on.

5. Image jitters and unusual noises

Check-loops not lost (depress loop setter)
film properly spliced.
perforations not damaged.

Maintenance of the projector

Follow the simple procedures described on this page and page 16, to keep your projector in top operating condition. With proper care, it will give you a lifetime of trouble-free service.

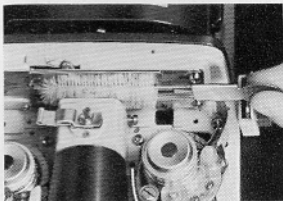
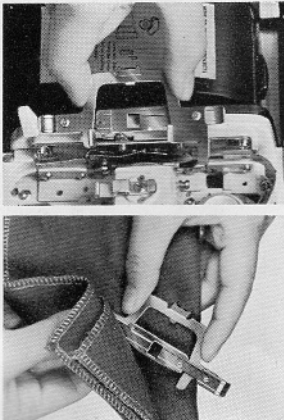
Cleaning

Pressure plate

Depress the leaf spring until it points downwards while slightly pulling the end of it. Then, pull the pressure plate holder out. Wipe it gently with a soft cloth and replace it.

Projection lens

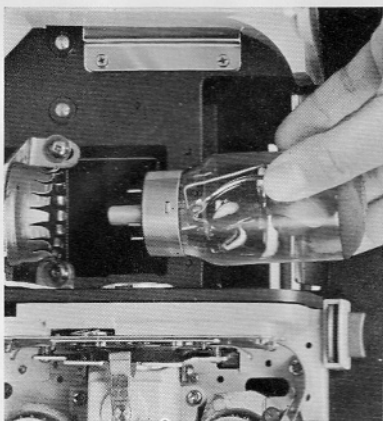
Remove the projection lens by turning it clockwise until it stops and then pulling it. Wipe front and rear surface gently with a soft cloth or soft brush. Avoid excessive rubbing of the glass and do not touch it with the fingers. Replace the projection lens in the reverse order.

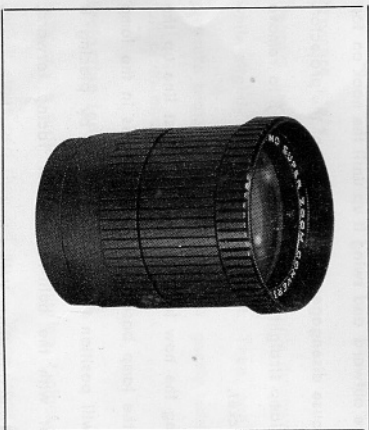


Replacing the projection lamp

First unplug the power cord. Then swing open the lamp house cover. To remove the lamp house, pull the bottom of the lamp house outward and swing it up until the hook on top of the lamp house disengages from the catch of the projector. Then pull the lamp straight up (without turning it) to remove it from its socket.

When inserting the new lamp (type DFG) first line up the four pins of the lamp base with the four holes in the lamp socket. You will position the lamp correctly by placing it in the socket with the built-in reflector facing forward, toward the projection lens. When inserting the lamp, don't use too much pressure—just enough to seat it properly.





Elmo Super Zoom Converter

× 0.8~1.25

By attaching the Zoom Converter, you may vary the size of the image of the screen without changing the projector-to-screen distance.

ELMO CO., LTD.
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