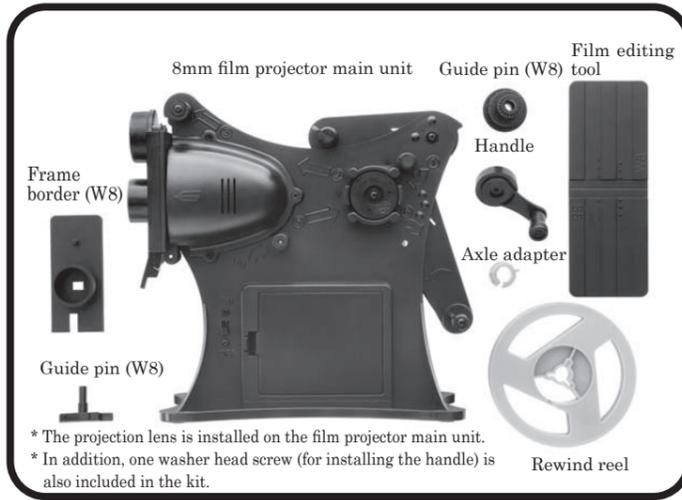
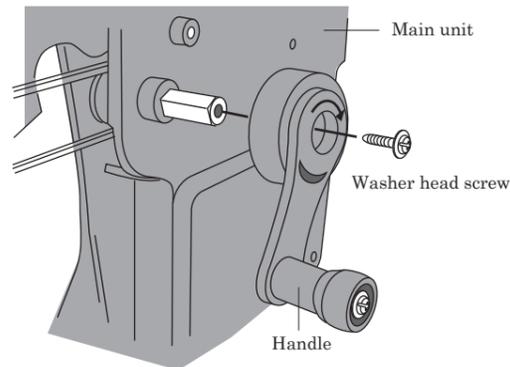


# How to Use the 8mm Film Projector

## Parts in the Kit



### How to install the handle



Things you will need: three AA alkaline dry cell batteries, a screwdriver, scissors, utility knife, tape, etc.

### CAUTION ★ Please read the following instructions before using this kit!

This kit includes screws and other small parts. Be careful not to swallow them. There is a risk of suffocation.

- Three AA alkaline batteries are used. Incorrect use of the batteries may cause the generation of heat, explosions or liquid leakage. The following precautions should be taken.
  - Do not use oxyride dry-cell batteries. It may cause a malfunction.
  - Do not use rechargeable batteries such as NiCd batteries. Film may not be projected properly.
  - Ensure that the positive and negative terminals of the batteries are aligned correctly.
  - If liquid that leaked from the batteries gets into your eyes, rinse them well with plenty of water and consult a doctor immediately. If liquid leaks onto your skin or clothes, wash it off immediately with water.
  - Remove the batteries when not using for a long time.

- Please read the instructions and cautions thoroughly before assembling the product. In addition, do not use any materials that have become damaged or deformed during use.
- Please read the instructions and cautions thoroughly before use.
- For your safety, be sure to follow the instructions in this manual. In addition, do not use any parts that have become damaged or deformed during use.
- Keep this kit out of the reach of small children when not in use.

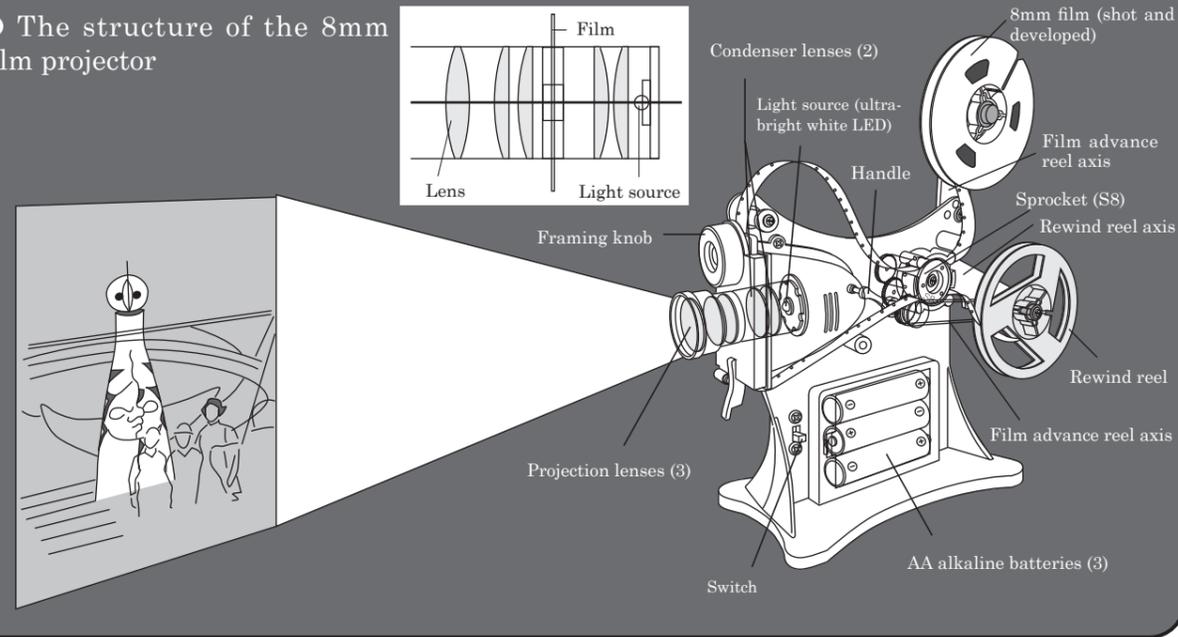
### [Plastic materials used in this kit]

Main unit (black)/film editing tool (black): ABS    Driving parts (black): POM, LED Base panel: PF    Lens (transparent): PMMA    Reel adapter (gray): PP    Small bags (clear, colorless): PE

\* Please dispose of this product in accordance with local regulations.

NOTE: The actual shapes of some parts may differ from the illustrations above.

### The structure of the 8mm film projector



### When using a Phillips screwdriver...

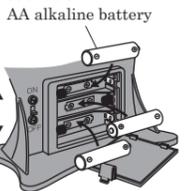
#### Notes for tightening screws

The types of screws used for the supplement are those that carve grooves into the plastic as they are inserted (self-threading). When tightening screws, firmly press the provided screwdriver straight against the screws and turn. It is said that 70 percent of the force applied is used for pushing against the screw and 30 percent for turning it. If any screws are loose, gaps may remain or the projector may operate poorly.



### How to insert the batteries

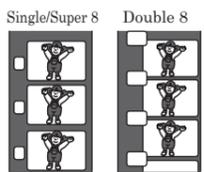
Insert three AA alkaline batteries into the battery box, turn the switch ON, and confirm that the light source lights up.



Make sure that the positive and negative terminals of the batteries are aligned correctly.

### Difference between Single/Super 8, and Double 8 films

There are two types of 8mm films: Single 8 or Super 8 (1965-1974) and Double 8 (1955-1964). The positions of the holes that are used to advance the film differ depending on the type of film. For Double 8 films, the frame border, etc. must be changed (refer to the back of this sheet for details).

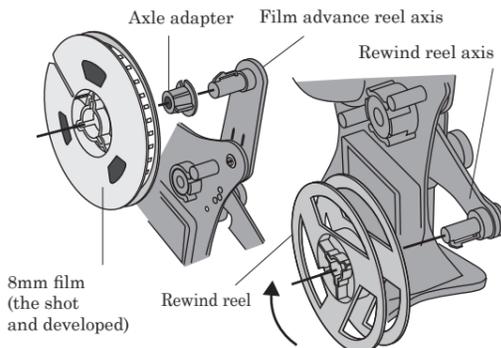


## 1 Setting 8mm Film (Single/Super)

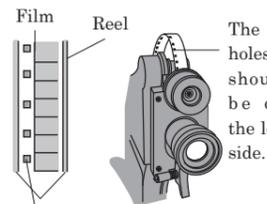
\* For how to set Double 8 film, refer to the back of this sheet.

1 Mount the shot and developed 8mm film to the film advance reel axis.

Attach the axle adapter to the film advance reel axis. Then, mount the film. At the same time, mount the rewind reel to the rewind reel axis.

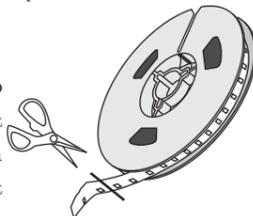


Pay attention to the position of the holes on the film (left side when viewed from the projection lens side) when mounting the film.



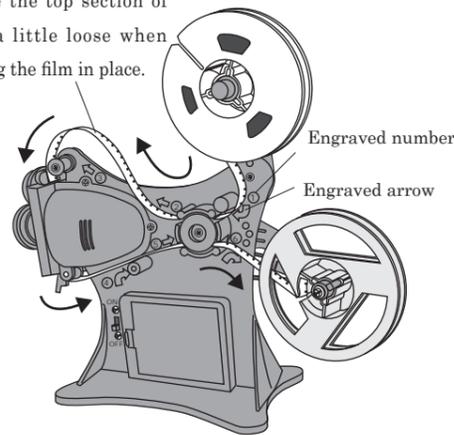
Pay attention to the position of the holes.

It is difficult to feed film that is bent at the tip. In such a case, cut it straight using scissors.



2 Check the arrows engraved on the main unit of the film projector and thread the film in order.

Leave the top section of film a little loose when setting the film in place.

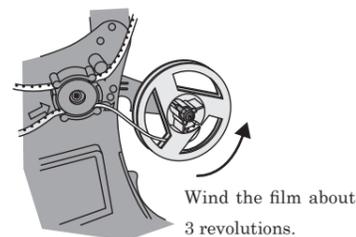


How to thread the film through the lens portion  
 Unlock the film holder and thread the film straight through the opening.

If the film is curled, try to straighten it when inserting the film.

Unlock the film holder.

3 Wind the tip of the film to the rewind reel.



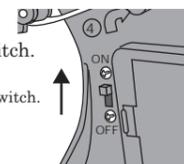
## 2 Projecting Images on a Screen

1 Prepare a dark room.

The darker the room is, the better. A commercially-available screen or white wall can be used for projecting the images. (Images cannot be projected on a colored wall.)

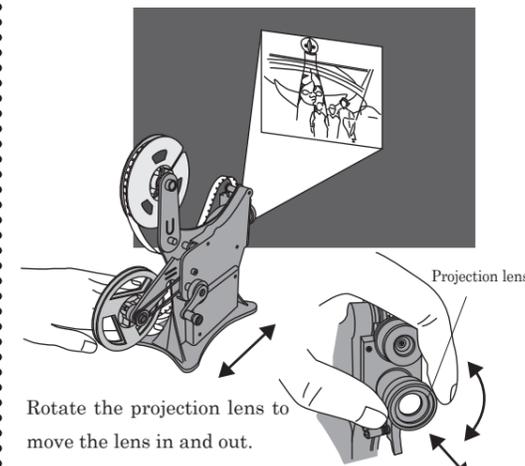
First, turn on the switch.

Turn on the switch.



2 Project the image from the film onto the screen, and bring the image into focus.

Move the projection lens in and out.



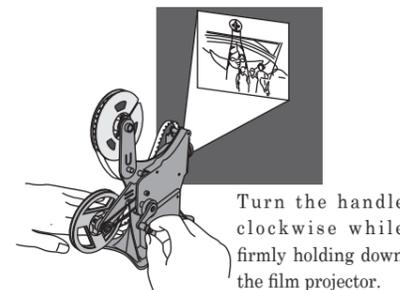
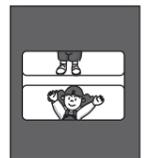
3 Set the projection size.

Adjust the distance and height of the film projector and screen according to the size and height of the image being projected.

Bring the image into focus once the position has been set.

4 Adjust the frame feed and project the image.

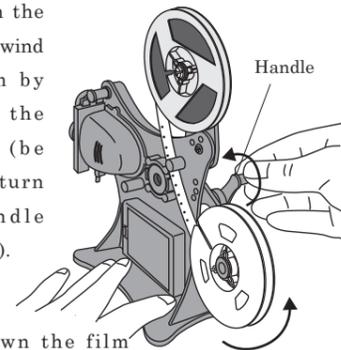
If the frame shown in the right figure can be seen, advance the film for a few frames, turn the framing knob, and adjust the position of the frame. After the position is adjusted, turn the handle to project the images. (Turn the handle slowly at first.)



5 After projecting the film, rewind the film.

Mount the wound film reel to the film advance reel axis making sure that the direction is as shown in the figure. Rewind the film by turning the handle (be sure to turn the handle clockwise).

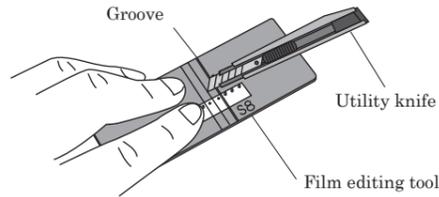
Hold down the film projector when turning the handle.



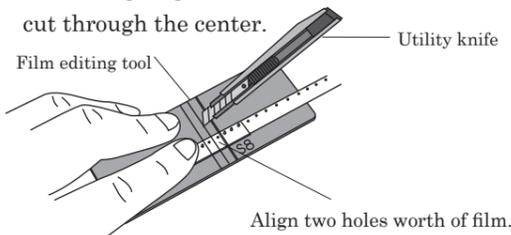
### 3 Using the Film Editing Tool

1 Find the frame to be edited and cut.

Select the S8 or W8 projection according to the type of film. Align the film to the projection and cut along the groove. Cut the other end of the film in the same manner.

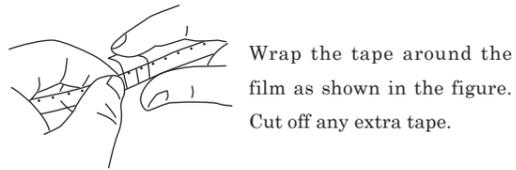


2 Lay the two ends of the film on top of each other, aligning two holes worth of film, and cut through the center.



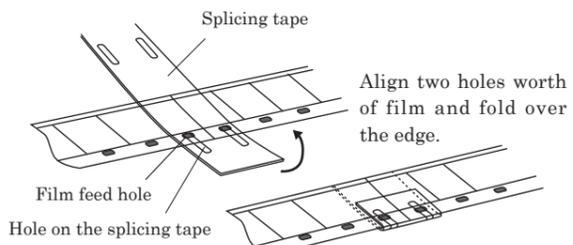
3 Join the two ends with tape.

● Joining with commercially-available cellophane tape



● Joining with splicing tape

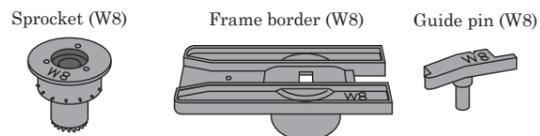
Align two feed holes on the film with the holes on the splicing tape, as shown in the figure, and fold the tape over the edge. Cut off any extra tape.



### 4 Setting 8mm Film (Double)

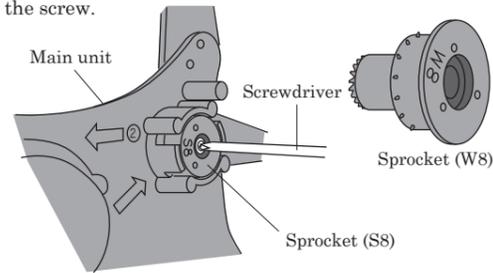
\* A screwdriver is required.

◆ Parts for 8mm film (double)



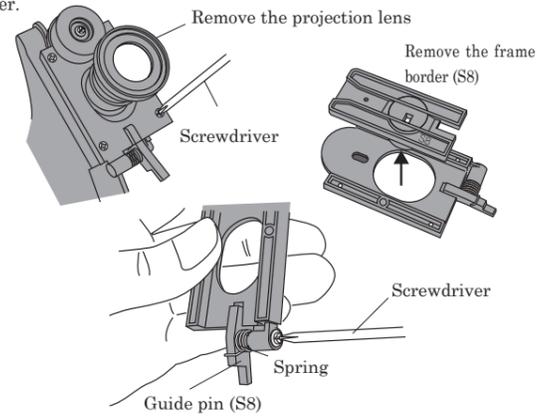
1 Replace the S8 sprocket with the W8 sprocket.

Using a screwdriver, remove the screw securing the sprocket. After replacing the sprocket, firmly secure with the screw.

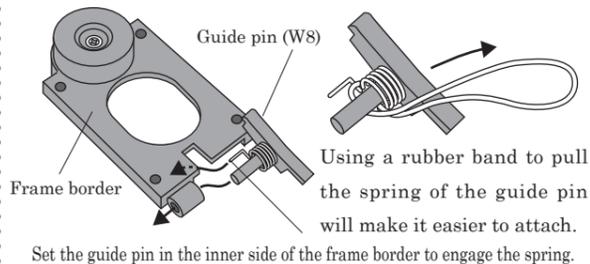


2 Remove the frame border and replace the S8 guide pin with the W8 guide pin.

Remove the projection lens and remove the four screws of the frame border. Remove the screw attaching the S8 guide pin to the frame border.

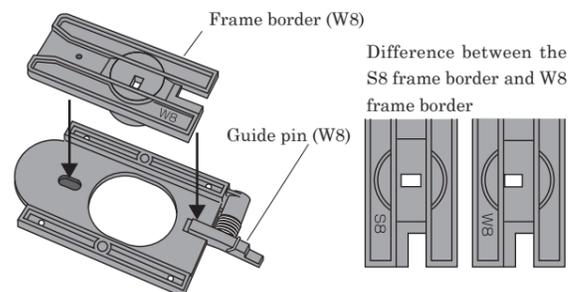


Remove only the spring from the S8 guide pin. Attach the removed spring to the W8 guide pin. Attach the W8 guide pin to the frame border with the screw.



3 Replace the S8 frame border with the W8 frame border.

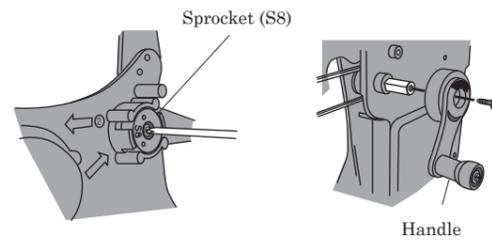
Remove the S8 frame border. Insert the pin of the W8 frame border to the framing knob, as shown in the figure below, and attach to the frame border. Reattach the frame border to the main unit with the screws.



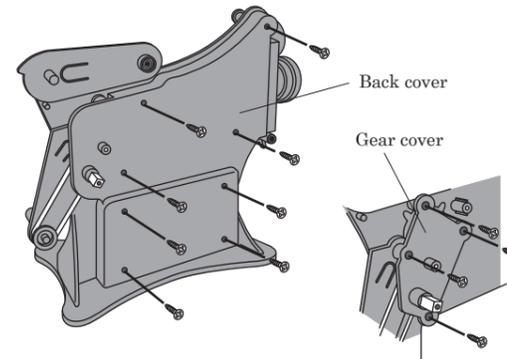
### 5 Replacing a Broken Belt

If the film advance belt is broken or becomes loose and does not properly rotate the reel, a rubber band can be used as a replacement. In such a case, replace the belt as shown in the figure below.

1 Remove the sprocket and handle.

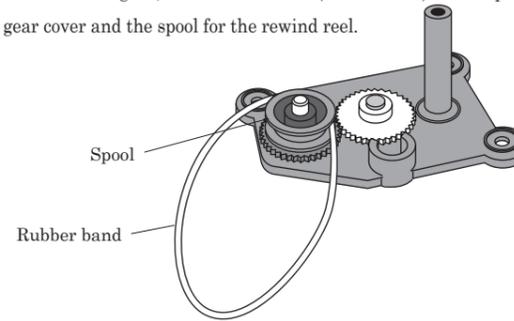


2 Remove the back cover and the gear cover inside.



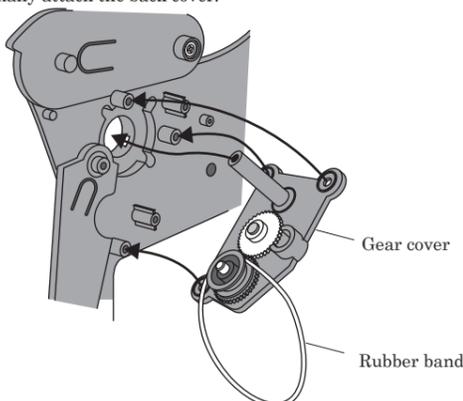
3 Replace the belt.

As shown in the figure, hook the new belt (rubber band) to the spool of the gear cover and the spool for the rewind reel.



4 Reattach the parts with the screws.

Set the gear cover and sprocket in place and first secure the sprocket side with a screw. Then secure the gear cover side with a screw and finally attach the back cover.



### Q&A

Q: The film does not go through the frame border.

A: It is difficult to feed film that is bent at the tip or bends toward the light source in. If the film is curled, try curling the tip slightly toward the front (toward the lens).

Q: Film feed is irregular.

A: Make sure there is enough play in the film between the sprockets and the lens. If the film is too tight, the frame will be unstable, creating blur.

A: Frames can also skip on film that has hardened after long years in storage.

A: The projector is shipped set up for Single 8 or Super 8. If you have Double 8 film, change out the necessary parts.

Q: Film feed is irregular at the edited part.

A: If cellophane tape is used, frames skip in an edited section. Use special splicing tape to make sure frames feed properly.

Q: Film jams at the edited part.

A: There may be wrinkles in the tape you used or bits sticking out from the sides of the film that are catching. If something like this is happening, remove the tape and redo the edits.

Q: Film does not rewind.

A: The rewind reel axis can be put at different angles depending on the reel size. Belt tension is lower at the bottom position, so put the axle at the upper position if you are using the provided rewind reel. If you are regularly using the reel at the bottom position, replace the belt with a smaller rubber band to keep it steady.

Q: I want to replace the film partway through.

A: You cannot change the film while the projector is running. Run the film to the end, then rewind it onto the rewind reel.

A: If you need to remove the film partway through due to film problems, remove the four front screws holding the frame border in place and remove the film.

Q: The light source is dim.

A: Check the orientation and type of the batteries. The LED may also stop emitting light if the voltage from rechargeable batteries, such as NiCd batteries, is too low.

Q: The film broke while projecting.

A: The adhesive on edited areas of old films can weaken and break. Align the broken ends of the film with the film editing tool and redo the splices with splicing tape.

Q: The projector is damaging the film.

A: If something is stuck somewhere on the film travel path, it can scratch the film. Remove dirt and dust before projecting films.

Q: The image is upside down.

A: The film is traveling the wrong path. Rewind it on a different reel and then project it.

Q: I want to stop the film to project a single frame.

A: The projector uses an ultra-bright white LED as its light source. Since it is not as hot as a light bulb, the film will not be damaged by the heat if you stop the film while projecting.