

## DIY Memory Lab – Converting 8mm and Super 8 (picture only)

The Wolverine Data MovieMaker PRO is a stand alone unit that you may plug into the power outlets at one of the Memory Lab work tables.

### Please Remember:

- You will need to bring an **SD Card** (no larger than 32 GB) to save your video
- This device **does not** capture sound (however, most home movies were shot without sound)
- This device creates full HD 1080p in MP4 Format at 20 fps (frames per second)
- It takes 10 minutes to scan 1 minute of film

### Getting Started

#### Preparing Your Film

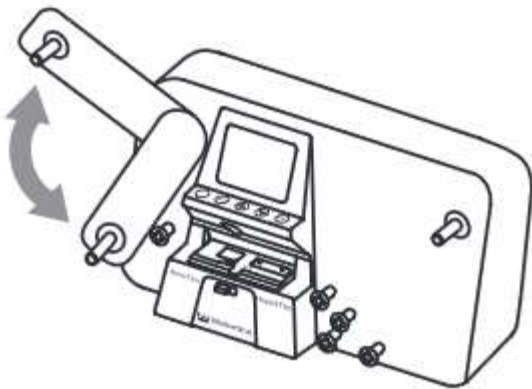
If your film is **not** in good condition (e.g. broken, sticky, smells like vinegar, has ruptured sprocket holes, misaligned, bent, etc.), [please consult with a conservator](#). Otherwise, the film will:

- stick on the film track,
- damage/jam/stop the MovieMaker PRO, or
- produce videos in poor quality

Some older films are wound too tightly. The MovieMaker PRO can be used to rewind these films back and forth to regain the proper wounding tightness before conversion. Tightly wound film may cause the film to look jittery when transferred.

It is strongly recommended before transferring your film to use a non-alcohol, lint-free cloth or an anti-static film cleaner to remove and clean any dirt particles, chemical residue, or any scattered mildew on the film to prevent damages to the MovieMaker PRO and to avoid poor quality video and stoppages in the recording process.

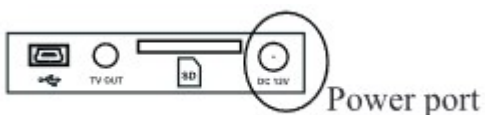
#### Swinging Arm Up/Down



Swing the arm up to mount the reel; push down on the arm for storage purposes.

#### Step 1. Attach Power Cord

- Plug in the included DC 12V power adapter.



#### Step 2. Insert SD/SDHC Memory Card, 32 GB Max

- Insert your SD/SDHC memory card before powering on the MovieMaker Pro.

**Please Remember:**

- Using a MicroSD card with adapter (SDXC card), or a memory card that is 64GB or above will lead to a **Card Error** message to appear on the screen. The MovieMaker PRO will **only** take an SD/SDHC memory card up to 32GB capacity.
- Make sure the SD/SDHC card is unlocked (white tab is in the forward position)
- Insert and push the SD/SDHC card inwards until it clicks. Improper insertion may damage your SD/SDHC card.
- To eject the card, first push the card in then release instead of pulling it out directly. The MovieMaker PRO will automatically turn off if the SD/SDHC card is being mounted/dismounted

**Step 3. Turn on/off MovieMaker PRO**

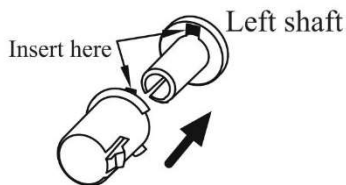
- Press the power button to turn the device on/off.

**Step 4. Clean the Light Table**

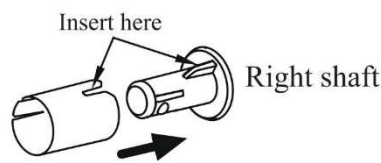
- Push the film door tab left to open the door. Use the included brush to clean the light table very gently.

**Step 5. Mount the Reels and Film**

- If your film reel has an 8mm mounting hole, mount the reel directly to the left shaft. If not, use the provided red color reel adapter. If adapters are needed, always place the red color adapter on the **LEFT** side; the gray color adapter on the **RIGHT** side.

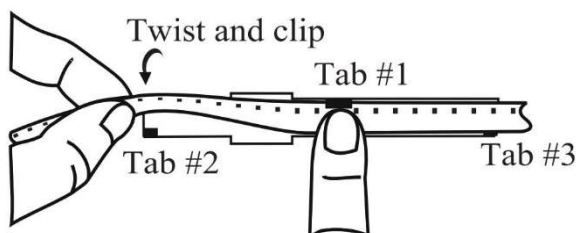


Left Reel Adapter (Red/No-Fin)

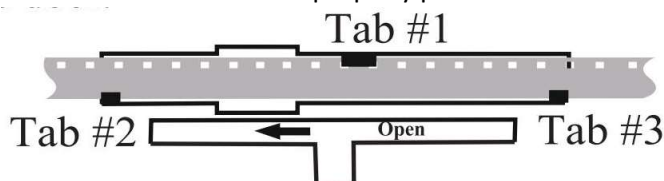


Right Reel Adapter (Gray/Finned)

- Mount empty reel onto the right shaft.
- Follow the Film Routing Diagram printed on the face of the MovieMaker PRO to route the film. It is strongly recommended to follow the winding scheme to generate better quality videos.
- Slide open the flap door, position the film sprocket holes at the top. Place film underneath the 3 white tabs or else the recorded videos will be jittery.
- Steps to place film on table:
  - Place and hold the film underneath Tab #1
  - Twist film slightly and clip film underneath Tab #2
  - Twist film slightly and clip film underneath Tab #3

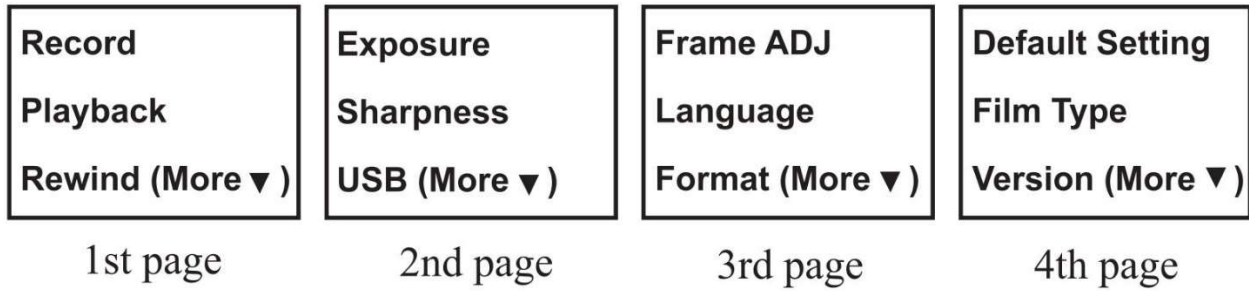


- Make sure that the film is properly placed underneath all 3 white tabs before closing the flap door.



## Step 6. Menu Selection

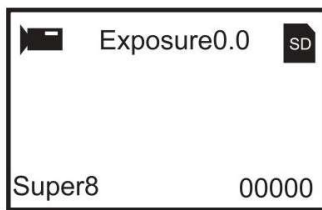
- Press the Menu button on the MovieMaker PRO. Use the **Up** or **Down** arrow buttons to highlight the Menu selection you want and then press Enter.



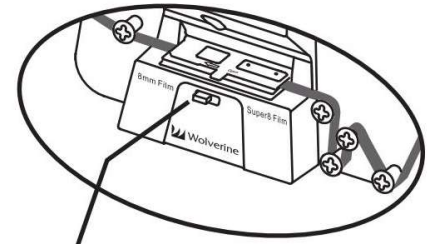
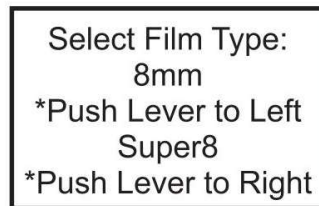
- **PLEASE NOTE:** If non-default settings are needed, any adjustments or value changes need to be done **before** commencing record/convert.

## Step 7. Record

- Slide the Film Selection Lever left (for 8 mm film) or right (Super 8 film) to select the proper film type you have. Then press the Enter button.



↑ **Film Type**      ↑ **File Counter**



**Film Type Lever**

- Press Enter/Start/Stop button to **START** recording. While recording is in process, a red dot at the upper left corner blinks.
- Press Enter/Start/Stop button to **STOP** recording.
- The film reel counter at the lower right corner will increase by one after each recording stop.

## Step 8. Plugging Into the PC

- Plug in the USB cable to upload your recorded MP4 files. Your SD/SDHC memory card is read as an external drive, called NO\_NAME Drive (G:). The stored MP4 files are located under the folder **FilmScanner/MOVIE**

## Other Settings You Can View Before You Record

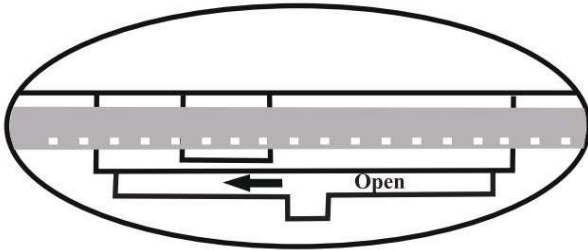
### Playback

- Press the **Menu** button, highlight the **Playback** selection then press the **Enter** button.
- Press the **Up** or **Down** button to select the film to be played back, then press the **Enter** button to start.
- Press the **Enter** button to pause playback.
- Press the **Menu** button once to enter **Edit** mode. You can highlight **Return** to go back to Playback, or you can highlight **Delete** to delete your file.
- Press the **Menu** button twice to return back to the **Record** menu or the **Main** menu.

*Note to Mac Users:* Mac computers will create and add hidden files to your SD/SDHC memory card each time you playback the recorded MP4 file. With the hidden files or modified MP4 files stored on your SD/SDHC memory card, the MovieMaker PRO will no longer “playback” movies on that SD/SDHC card. A “No File” message will be displayed on the viewer instead.

## Rewind

- Remove your film from the light table and swap reels. Place the **empty** take-up reel on the **ride side** shaft and place the sprocket holes on the outside as displayed below:



- If a reel adapter is needed, always place the gray adapter on the right side/take-up reel.
- Follow the film rewind routing diagram (the dotted lines) printed on the MovieMaker PRO and follow the instructions displayed on the screen of the device.
- Press the **Enter** button to start or stop the rewinding process.

## Exposure

The exposure/brightness of your film may need to be adjusted before recording if the default setting (0.0) is off.

- The adjustable exposure range is from 2.0 to -2.0
- Press the **Up** or **Down** buttons to change the value to your desired viewing and press the **Enter** button to save your settings.
  - Negative values provide a darker effect and Exposure 2.0 shows the brightest result/contrast.

## Sharpness

If the film needs to be adjusted for sharpness, please do this before recording.

- Default sharpness is at **Medium**. The sharpness range is from **Low** to **High**.
- Press the **Up** or **Down** buttons to change your sharpness value and press the **Enter** button to save your settings.

## Frame Adjustment

If frame adjustments to your film is needed because it is off-center, please do so **before** recording.



← 8MM or SP8

← Select X or Y or W by pressing Enter button

X = shift center to left or right

Y = shift center up or down

W = zoom-in or zoom-out

↑  
Adjust the values of X, Y, W by pressing Up or Down buttons

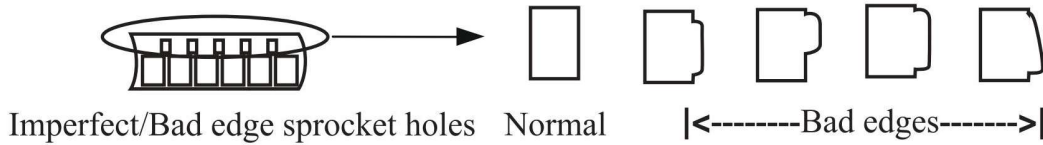
## Frequently Asked Questions

**Q:** My film has imperfect slices, the film got bent, or has broken sprocket holes and now it is stuck and won't advance through the machine.

**A:** Open the flap door while the film is stuck and let the problem frames advance and clear the track table before closing the flap door to continue to record.

**Q:** Some segments of recorded video are jittery and some are not.

**A:** Your film may have been played on a projector too many times before and the sprocket holes have become worn or damaged in the process. In cases like this, each frame of the film is anchored in slightly different spots on the Light Table of the MovieMaker PRO resulting in jittery video as a result. You can forward the film first and then record/convert the film while it is winding backwards (using the sprocket holes undamaged to advance the film and record in reverse). Then play the video backwards or in reserve mode to convert/save the video. There are many video editing programs that have a reverse feature that can be used to play your file in the correct direction.



**Q:** My film won't go through the MovieMaker.

**A:** Some older film were produced in a wider format than 8 mm at some sections due to loose manufacturing tolerance of film, causing difficulty with the device having a hard time pulling film through the track table. Keeping the flap door from closing all the way may prevent this issue.

**Q:** The speed of the video is too fast or slow. Can I change it?

**A:** You may be able to modify the default 20 fps through video editing software and save it under the speed you'd like to have your film at.