



**Film2digital
MovieMaker
User Manual**

Version 2.2

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Introduction

Your old 8mm and Super 8 films are degrading. Worse, the memories are fading and the film is becoming more brittle just sitting in the box. Convert your Film into digital now before the memories are lost forever!

Introducing the Wolverine Film2digital MovieMaker. A simple to use device that will convert your movie reels into digital movies (no sound) with few strokes. Works like a typical projector where you mount the 3 inch or 5 inch reel, insert a memory card, press few buttons and the Wolverine Film2digital MovieMaker will scan frame-by-frame to create a digital MP4 movie file that you can play on any computer. You can also edit, upload movie files to internet or burn them to DVD's.

The Wolverine Film2digital MovieMaker pays for itself taking into consideration that photo Labs are charging more than a dollar to digitize a single foot of film!

Features

- A fully automated apparatus to digitize 8 mm and Super 8 movie up to 5" reels into digital videos
- Frame-by-Frame digitizing for high-quality digital output
- Stand-alone machine, no computer, no software or Drivers are required
- Scans and directly saves digital movies into SD/SDHC cards (32GB max, not included)
- Converts 8 and Super 8 movies into MPEG-4 (MP4) digital movie files at 720P/30 fps
- Compatible with all Windows, Mac and Linux Operating Systems
- Playback the digital movies to TV using the included TV Cable

Before Using the MovieMaker

This section provides important safety information that you should read before operating the device.

- Do not drop or handle too aggressively as it may cause damage to the device.
- 8 mm or Super 8 media MUST be mounted in/with proper reel (up to 5" in diameter) and adapter, before recording/rewinding.

- Do not record/rewind the films if they are broken, ruptured, misaligned, overlapped, gapped/perforated holes, or bent. Improper operations can damage the device. Wolverine Data is not responsible for consequential damages and warranty will be void.
- Do not allow the device to come into contact with water or other liquids. In the event that water or other liquids enters the interior, immediately turn off the device. Continue using the device may result in fire or electrical shock.
- We strongly suggest using a non-alcohol lint-free clean-dry cloth to clean the light table panel and your film, to produce clear movies. Improper cleaning may damage components. Wolverine Data is not responsible for consequential damages and warranty will be void.
- Do not handle the device with wet hands. Doing so may cause electrical shock and damages to the unit.
- Do not expose the device to extreme temperatures, humidity or vibrations, which may cause damage to the device.
- Do not open the outer housing. This unit does not require or contain batteries. Under no circumstances should users try to repair the device. Doing so may cause electrical shock and void the warranty. If the device is mishandled, Wolverine Data is not responsible for consequential damages, including loss of data.
- Wolverine Data has no obligation to repair, replace or issue refunds without a Return Merchandise Authorization (RMA) number and the original purchase receipt of the defective product.
- Repairs or replacement service will not be offered to products that were misused, repaired without authorization, or other reasons beyond the range of intended use.
- Replacement products may be either new or refurbished, provided that it has functionality at least equal to that of the product being replaced.
- Wolverine Data is not responsible for any data stored on the returned product, please backup any data prior to shipping the unit.
- All out of warranty repairs maybe subject to repair fee. Please contact your dealer or Wolverine Data for current charges.

Having Difficulty Using This Product?

Please try the following options:

- Call our technical support or sales at 949-458-9888
M-F 9:00-5:00 Pacific Time
- Visit www.wolverinedata.com/support to watch the video manual or find the latest documentation and other help tips
- E-mail or write to our technical support staff at support@wolverinedata.com or
9939 Muirlands Blvd. Irvine, CA 92618

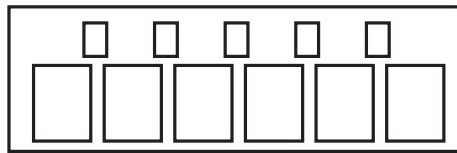
Package Contents

1. Film2digital MovieMaker x 1
2. Power Adapter x 1
3. USB Cable x 1
4. TV-OUT Cable x 1
5. 5" Reel in 8 mm Diameter Hole x 1
6. Reel Adapter (Red x1, Grey x1)
7. Brush x 1
8. User Manual x 1

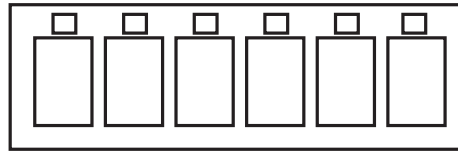


Reel Adapter
8 mm diameter inside; 13 mm outside

Film Type



8 mm



Super 8

Function of Buttons

1. Power button: To turn power on or off.
2. Up or Down arrow buttons: To highlight Menu item on LCD viewer.
3. Enter/Start/Stop button: To Start/Stop highlighted item.
4. Menu button: To go back to Menu selection; Press twice to go Menu mode or record mode.

Getting Started

Preparing the Film

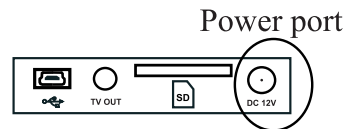
If your film is not in good condition such as broken, ruptured perforated holes, misaligned, taped overlap, bent, spliced, gluey, or thick, please check and fix the problem first. Otherwise it may damage or jam MovieMaker, or produce poor quality video.

Also some early films might have been wound too tight, which might cause jittery during recording process. You could use MovieMaker to rewind it back and forth to regain proper winding tightness.

Before you record, it is a good practice to use lint-free cloth and/or anti-static film cleaner to remove dirt particles, to clean any processing chemical residues, and to dry any scattered mildew on the film, to avoid them showing-up on recorded videos.

1. Attach Power Cord

Plug in the included DC 12V power adapter.



2. Insert SD/SDHC Memory Card (Max. 32 GB)

Insert the SD/SDHC memory card before power on the MovieMaker device.

- Using a MicroSD card with adapter, or SDXC card (64GB), which is not compatible with MovieMaker will lead to a **"Card error"** message to appear on the screen. The MovieMaker can only take a SD/SDHC memory card up to 32 GB maximum.
- Make sure the SD/SDHC card is unlocked (white tab in forward position).
- Insert and push the SD/SDHC card inward until it clicks. Improper insertion may damage the card reader or the SD/SDHC Card, which neither is covered under warranty.
- To dismount/eject the SD/SDHC card by pushing the card in then release, instead of pulling it out. MovieMaker will power off automatically when the SD/SDHC card is mounded/dismounted.

3. Turn on/off MovieMaker

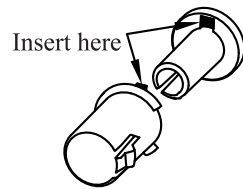
Press power button to turn MovieMaker on/off.

4. Clean the Light Table

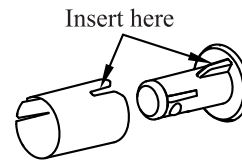
Push the film door tab left to flip open the door. Use included brush to clean the light table very gently.

5. Mount the Reels and Film

- a. If your film reel has 8 mm (small) mounting hole, mount the reel directly to the left shaft, otherwise use the provided red color reel adapter. If adapters are needed, always place Red color adapter on the LEFT side; GREY color adapter on the RIGHT side.

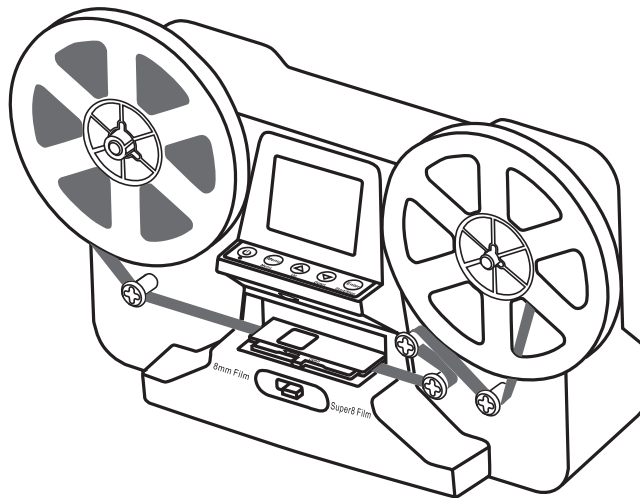


Left Reel Adapter (Red/No-Fin)

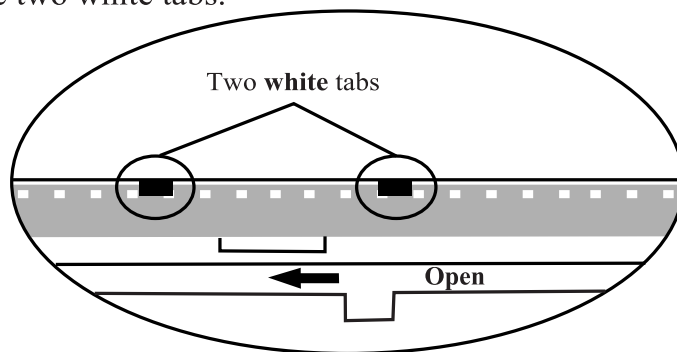


Right Reel Adapter Grey/Finned)

- b. Mount the included 5" reel on to the right shaft.
c. Follow the Film Routing Diagram printed on the face of MovieMaker to route the film.

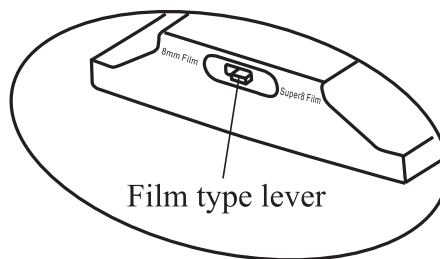


d. Push open the flap door, place film perforation holes at top but under the two white tabs.



e. Close the film flap door after the film is properly placed.

f. Select film type by pushing the film type lever to either left or right.



6. Menu Selections

Use Up or Down arrow button to highlight the Menu selection and then press Enter.

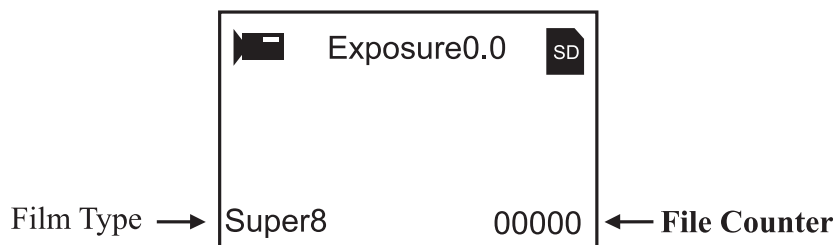
Record Playback Rewind (More ▼)	Exposure Sharpness USB (More ▼)	Frame ADJ Language Format (More ▼)	Default Setting Version (More ▼)
1st page	2nd page	3rd page	4th page

Record

1. Move the Film Selection Lever left (8 mm) or right (Super 8) to select the film type, then press Enter/Start button.
2. Press Enter/Start to start recording. While recording is in process, a red dot at upper left corner will blink.
3. The MovieMaker will stop recording 2 seconds after user pressed Enter/Stop button.
4. The file counter at lower right corner will increase by one after each recording stop. The number of the counter also represents the file name of recorded film.

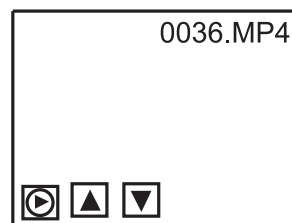
Note:

The adjustment of **Exposure**, **Sharpness**, **Frame Adjustment/Movie Register** are available, please make the adjustment before recording.



Playback

1. Press Menu button, highlight the Playback selection, then press Enter.
2. Press Up/Down arrow button to select the film file to be Playback, then press Enter/Start.
3. Press Enter/Stop to pause the playback.
4. Press Menu button one time to the enter Edit mode. Highlight Return (go back to Playback) or Delete (delete the current file).
5. Press Menu button twice to go back to the Record mode or Main menu.

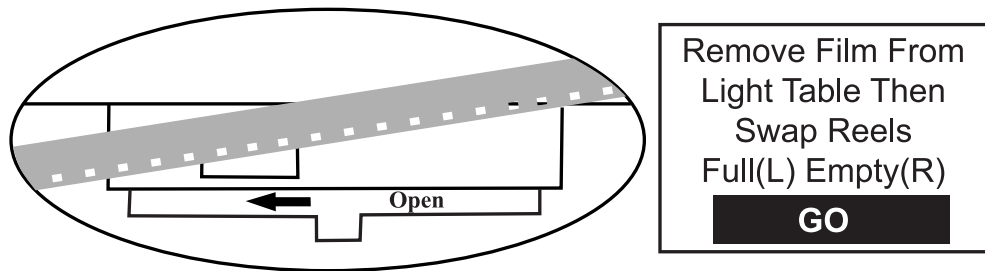


Note: **Mac computer** will create and add hidden files to SD/SDHC

memory card each time user playbacks the recorded MP4 movie files on Mac. With the hidden files or modified MP4 files stored on the SD/SDHC memory card, MovieMaker can no longer "Playback" movies on the MovieMaker. A "**No File**" message will be displayed on the Viewer instead.

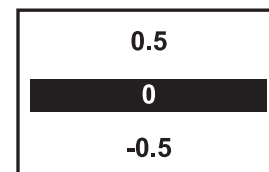
Rewind

1. Open the flap door and remove film, then close the flap door. Check and confirm the flap door is closed and not in the way of rewinding process to prevent film from being scratched.
2. Swap reels. Place an empty reel on the **right** side shaft and place film perforation holes on the outside (as shown). If any reel adapter is needed, always place grey adapter on the right side reel.
3. Follow the film routing diagram printed on the MovieMaker (the dotted line) and follow the instructions on the screen.
4. Press Enter button to Start/Stop the rewinding process.



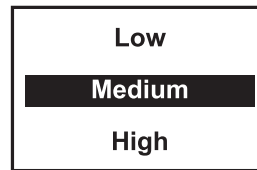
Exposure

1. Exposure range is from 2.0 to -2.0.
2. Press Up/Down to change the value and press Enter to complete the change selection.
3. The default setting is 0.0. Negative value provides a darker effect and Exposure 2.0 shows the brightest result.
4. Adjust the needed Exposure **before** recoding.



Sharpness

1. Sharpness range is from Low to High. The default setting is Medium.
2. Press Up/Down to change the value and press Enter to complete the change selection.
3. Adjust the needed Sharpness **before** recoding.



USB

Plug in the included USB cable to upload recorded MP4 files. The SD/SDHC memory card is read as an External Drive, called NO_NAME drive (G:)*. The stored MP4 files are located under the directory of **FilmScanner/MOVIE**.

*Note: (G:) may vary from computer to computer.

Frame ADJ

You can make the adjustment of Movie Register (the film center X and Y). It needs to be adjusted before recording if default setting is off.

Film type:
X adjust, Enter
X:
Y:
W:

← 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

Language

English and Japanese are available on the MovieMaker.

Format

Highlight Yes or No to erase all files on the inserted SD/SDHC memory card.

Default Setting

Reset all values to 0.0 or medium.

Connect to a TV set

You can use your TV screen as the default screen.

1. Turn on MovieMaker and TV.
2. Set TV input to A (or TV, TV) mode.
3. Connect MovieMaker "TV OUT" port to TV's Video-In port (yellow) with the included TV-Out cable.
4. The LCD screen on MovieMaker will turn dark and everything shows on your TV instead.

Specifications

Image sensor: 3.53 Mega pixels (2304H x 1536V) 1/3" CMOS sensor

Display: Color 2.4" TFT LCD

Exposure control: Auto/Manual (-2.0 to 2.0)

White balance: Auto

Resolution 720P

Playback frame rate: 30 frames per second*

Scan method: Video

Film type: 8 mm and Super 8 roll film in 3" or 5" reel

Picture effects: Positive

File format: MP4

TV-OUT type: NTSC/PAL

Built-in memory: None

External memory: **SD/SDHC** memory card up to **32 GB (Max.)****

Power Supply: DC 12V

Interface: USB 2.0

Language: English and Japanese

Support system: Window XP/Vista/Windows 7,8,10/Mac 10.7.3

Dimension: L269xW166xH114 mm/10.6x6.5x4.5 in

Weight: 1410 g/3.1 lb

Note:

*Users who wish to modify playback speed to 18 or 24 fps, could download "VLC", a free software from VLC.org, not supported by Wolverine Data.

**Each 50 ft film takes about 125 MB memory and about 30 minutes to record.

Caution: This device complies with part 15 of the FCC Rules. Changes of modifications not expressly approved by Wolverine Data could void the user's authority to operate the equipment.

Limited Warranty (United States Only)

Wolverine Data warrants that the hardware products it manufactures will be free from defects in materials and workmanship. The limited warranty term is one year beginning on the date of invoice, or less than 200 reels converted (Counter#), whichever occurs first. Also this product is not intended for commercial use or rental. Should this unit be used at any time for commercial purposes or as a rental unit, the limited warranty period for parts and labor shall be 90 days from the date of original purchase at retail. The opinion of Wolverine Data with respect to this matter shall be final.

Damage due to shipping the product to you is covered under this limited warranty. Otherwise, this limited warranty does not cover damage due to external causes, including accident, abuse, misuse, problems with electrical power, servicing not authorized by Wolverine Data, usage not in accordance with product instructions, failure to perform required preventive maintenance, and problems caused by use of parts and components not supplied by Wolverine Data.

The warranty extends only to the first consumer purchaser, and is not transferable. This limited warranty does not cover any items that are in one or more of the following categories: software; external devices (except as specifically noted); accessories or parts added to a Wolverine Data system after the system is shipped from Wolverine Data or its resellers; accessories or parts that are not installed in the Wolverine Data factory.

During the warranty period, beginning on the invoice date, Wolverine Data will repair or replace products returned to Wolverine Data's facility.

This limited warranty is valid only in United States.

To request limited warranty service, you must contact Wolverine Data's Technical Support Services within the limited warranty period. Refer to the section titled TECHNICAL SUPPORT to find the appropriate telephone number for obtaining customer assistance. If limited warranty service is required, Wolverine Data will issue a RMA (Return Material Authorization) Number.

You must ship the products back to Wolverine Data in their original or equivalent packaging, prepay shipping charges, and insure the shipment or accept the risk of loss or damage during shipment. Wolverine Data will ship the repaired or replacement products to you freight prepaid if you use an address in the continental United States, where applicable. Shipments to other locations will be made freight collect.

To obtain service, you must include: (a) a copy of your receipt or other comparable proof of purchase; (b) a written description of the problem; (c) your address and telephone number and Email address; (d) Write the RMA number on the outside shipping packaging.

NOTE: Wolverine Data uses new and reconditioned parts made by various manufacturers in performing limited warranty repairs and building replacement products. If Wolverine Data repairs or replaces a product, its limited warranty term is not extended.

Warranty Exclusions:

Normal Wear and Tear: Periodic maintenance, repair and replacement of parts due to normal wear and tear are excluded from coverage.

Abuse and Misuse: Defects or damage that result from: (a) improper operation, storage, misuse or abuse, accident or neglect, such as physical damage (cracks, scratches, etc.) to the surface of the product resulting from misuse; (b) contact with liquid, water, rain, extreme humidity or heavy perspiration, sand, dirt or the like, extreme heat, or food; (c) use of the products or accessories for commercial purposes or subjecting the product or accessory to abnormal usage or conditions; or (d) other acts which are not the fault of Wolverine Data, are excluded from coverage.

Use of Non-Film2digital MovieMaker Converters accessories: Defects or damage that results from the use of Non-Film2digital MovieMaker's accessories or other peripheral equipment are excluded from coverage.

Unauthorized Service or Modification: Defects or damages resulting from service, testing, adjustment, instillation, maintenance, alteration, or modification in any way by someone other than Wolverine Data are excluded from coverage.

Altered Products: Product or accessories with (a) serial numbers or date tags that have been removed, altered or obliterated; (b) broken seals or that show evidence of tampering; (c) mismatched board serial numbers; or (d) nonconforming or non-Wolverine Data parts or accessories, are excluded from coverage.

Other Limitations

Any implied warranties, including without limitation the implied warranties of merchantability and fitness for a particular purpose, shall be limited to the duration of this limited warranty, otherwise the repair, replacement or refund as provided under this express limited warranty is the exclusive remedy of the consumer, and is provided in lieu of all other warranties, express or implied. In no event shall wolverine data be liable, whether in contract or tort (including negligence) for damages in excess of the purchase price of the product, accessory or software, or for any indirect, incidental, special or consequential

Thank you for choosing Wolverine

Having difficulty using this product?

Please try the following options:

- Call us at 949-458-9888 M-F 9:00-5:00 Pacific Time
- E-mail our technical support staff at support@wolverinedata.com

Technical Support

For technical support, warranty service, or repair service, please contact Wolverine Data at Support@wolverinedata.com or call 949-458-9888 M-F 9:00 - 5:00 at Pacific Time