

35mm Film to Digital Converter

User Manual

v1.1

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Introduction

Thank you for purchasing Wolverine Film to Digital Converter. The Wolverine Converter features a LCD screen, internal memory and memory card reader to convert negatives or slides into digital images without a computer. Simply place film into appropriate holder tray, insert it into the Converter, with a push of a button your media will be converted into a 20 MP (20MP-ORANGE Model) or 14 MP (14MP-GREEN Model) JPEG digital image. The Wolverine Converter can be connected with your Windows PCs (ME/XP/Vista/7) or Mac computer systems to upload saved digital images through USB ports.

Before Using the Converter

This section provides important safety information that you should read before using your Converter.

- Do not drop or handle too aggressively as it may cause damage to the device.
- Do not allow the device to come into contact with water or other liquids.

- In the event that water or other liquids enter the interior, immediately turn off the device. Continued use of the device may result in fire or electric shock.
- Do not handle the device with wet hands. Doing so may cause electric shock and damages to the unit.
- Do not place the device close to any equipment generating strong electromagnetic fields. Exposure to strong magnetic fields may cause malfunction or data corruption.
- Do not expose the device to extreme temperatures, humidity or vibrations, which may cause damages to the device.
- Do not open the outer casing. This unit does not require batteries or contain user serviceable parts.
- Do not move or disconnect the device from the computer while the device is reading/writing data. This may cause damages to the data and/or the device.
- Under no circumstances should user try to repair the device. Doing so may cause electric shock and void the warranty.
- Slides and negatives MUST be placed in their proper holder tray before inserting them into the Converter.

- Inserting media without using proper holder tray may result in losing media inside the unit, where removal is NOT covered under warranty and VOID the product WARRANTY.
- Warranty will be voided if the device is mishandled. Please take care in handling the Converter. Wolverine Data is NOT responsible for consequential damages, including loss of data. Always back up all data. For full warranty statement see the end of this manual.
- 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, scratched, repaired without authorization, or any other reasons beyond the range of intended use.
- Replacement product may be either new or refurbished, provided that its functions are 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 ship back the unit.

Having Difficulty Using This Product?

Please try the following options:

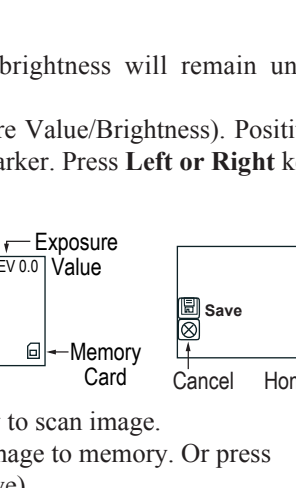
- Call us at 949-458-9888 M-F 9:00-5:00 Pacific Time
- Visit www.wolverinedata.com for the latest documentation and other help tips
- E-mail or write to our technical support staff at support@wolverinedata.com or our address: 9939 Muirlands Blvd. Irvine, CA 92618

Contents Description

Converter, negative holder tray, slide holder tray, USB cable, power adapter, cleaning stick, and user manual.
 Please call us at **949-458-9888** or visit www.wolverinedata.com to order extra trays or optional accessories, SD memory card, negative roll film adapter, TV-out cable.
 Go to www.wolverinedata.com to join our **Mailing List** to receive our exclusive **coupon** offers.

Functions of Keys

Press the corner of the button plate to activate the functions.



- **Power:**
Power on/off
- **Left/Mirror and Right/Flip:**
1. Highlight the selection left/up or right/down
2. Mirror/flip image in "Capture" mode
- **Convert/Mode:**
1. Convert film to digital image in "Capture" mode
2. Back to Home menu to change mode
- **OK/Enter key:**
Confirm or execute the highlighted selection

Connect Converter to TV

Use video-out cable (not included) to connect Converter to TV to display images on TV screen.

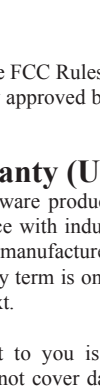
1. Power on Converter and TV.
2. After **Home** menu shows up, connect Converter to TV with the video-out cable.
3. When Converter is connected to TV, Converter's screen will turn dark, all menu and images will appear on TV screen only.

Getting Started

1. **Attach Power**
Plug the small end of the USB cable into Converter, and the big end into the included power adapter or directly to a computer USB port. Plug the power adapter into a power outlet.

2. **Use Built-in Memory**
Converter includes built-in memory that can store up to 12 ~ 15 digital images. A "No card" icon will appear on the LCD screen for 3 seconds if memory card is not inserted.

3. **Use OPTIONAL SD/SDHC Memory Card**
To save images directly onto SD/SDHC memory card, insert the memory card before powering on Converter. Each 1 Gigabyte of SD/SDHC memory holds between 500-700 digital images. Check the card is unlocked (white tab in upward position) or you'll see a "Card Locked" icon on the screen. Ensure the card is oriented with gold contacts facing up. When inserting the memory card, do not force the card as it may damage the card reader or the card, which neither is covered under warranty.



4. **Turn Converter On/Off - Press Power key**
5. **Mode Selection**
Converter has 6 modes (listed below). The selected mode is shown on the screen in text and icon. Press **Left/Right** arrow key to change/highlight the mode, then press **OK/Enter** key to confirm and execute the selection. You can always press **Mode** key to bring back the mode selection menu.

- **Film Type** - Sets film type in Negatives, Slides, or B&W
- **Format** - Formats internal memory or the inserted SD/SDHC card

- **Capture** - Converts film to digital image
- **Playback** - Reviews all converted images stored in memory
- **USB MSDC** - Communicates with PC or Mac to upload converted images files to a computer
- **Language** - Set menu in English or Japanese

6. Format Internal Memory or the Inserted SD/SDHC Card

This function formats or deletes all files in the internal memory or the inserted SD/SDHC memory card.

1. Power on the Converter and press **Mode**.
2. Press **Right** arrow then press **OK/Enter** key.
3. Press **Left** arrow to highlight **YES** then press **OK/Enter** key.

7. Prepare Film Tray - Negative Tray or Slide Tray

1. Use a fine cloth or compressed air (not included) to clean the plastic film before putting them in the holder tray.
2. Open film tray and place film (shiny side up) into proper holder tray. Close tray cover properly to avoid jamming at inside Converter.

Warning: Place non-standard size film in tray will result partial image or black areas on image.

3. For best results, use included cleaning stick with felt side down to wipe dust off the light table before use.
4. Insert film tray into Converter and push tray from **right to left only**. Inserting or pushing tray from left to right may damage Converter.



8. Set Film Type - Negatives, Slides, B&W

1. At **Film Type** menu, press **OK/Enter** key.
2. Press **Left** or **Right** arrow key to highlight Negative Film, Slides, or B&W then press **Enter** key. Ensure the **Film Type** setting is correct, or you will see X-ray-like image on the screen. The film type setting will remain until changed.



9. Edit Image Orientation:

Use **Left/Mirror** key to mirror the image left to right, or use **Right/Flip** key to flip the image upside down. If rotate is needed, complete the **Convert** and **Save** first then go to **Playback** mode to rotate image later.

10. **Edit Image Brightness:**
This is an optional step. The edited brightness will remain until changed. Press **Enter** key to change EV (Exposure Value/Brightness). Positive (+) means brighter; negative (-) means darker. Press **Left** or **Right** key to adjust the EV value then press **Enter** key.



11. Convert Film to Image File

1. At **Capture Mode**, press **Convert** key to scan image.
2. Press **OK/Enter** key to save the converted image to memory. Or press **Left** or **Right** key to **Cancel** (don't save).
3. Press **Left** film tray to left to continue the next film.

*Note: "FULL" icon on screen means the memory is full. Upload the image files to a computer then format the memory.

12. **Playback and Edit Image Files**
1. Press **Mode** key to go to Home menu.
2. Press **Left** or **Right** key to highlight "Playback".
3. Press **OK/Enter** key to playback saved images on the screen at 2 second interval.
4. Press **OK/Enter** key to pause slide show.
5. Press **OK/Enter** key one more time to go to **Edit** menu or backward manually.
6. Press **Left/Right** key to advance image forward or backward manually.
7. In the **Edit** menu, highlight **Exit**, then press **OK/Enter** key to resume **Playback**.
8. After editing the image, select **Save** icon to save edited image. The edited image will be replaced the stored image in memory.
9. Highlight **Home** icon, press **OK/Enter** key to exit **Playback** mode, or press **Convert** key.



13. **Connect Converter to Computer to Upload Image Files**
Steps to connect Converter to a computer:
1. Plug small end of the USB cable to Converter and the big end to USB port on the computer.
2. Insert SD/SDHC memory card if not using Converter's internal memory.
3. Turn Converter on.
4. Press **Left/Right** key to select "USB MSDC".
5. Press **OK/Enter** key.



14. **Upload Image Files to PC and Delete the Files**
After the USB mode is activated, your computer will recognize the Converter as a **Removable Disk**. The converted image files are located at **Removable Disk** under the folder **DCIM/100COACH** with sequential alpha-numerical file names, PICT0001.JPG, PICT0002.JPG, PICT0003.JPG etc. Copy and paste image files to a different folder each time to avoid files superseding onto your computer's hard drive.
You can delete the image files from Converter's internal memory or SD/SDHC memory card by drag and drop the **DCIM** folder to the **Recycle Bin** or use the **Format** function on **Converter** to delete the image files.

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

Specifications

- Lens: f/3.5, f=5.12 (20-MP-ORANGE Model); f/3.5, f=5.12 (14-MP-GREEN Model)
- LCD: 2.4 inch LTPS LCD Display
- External memory: SD/SDHC card
- Exposure: Auto
- Color balance: Auto
- Resolution: 20 MP (20-MP-ORANGE Model); 14 MP (14-MP-GREEN Model)
- Data conversion: 24 bits per color channel
- Convert method: Single pass
- Light source: backlight
- Power: Powered from USB/5V adapter
- Interface: USB 2.0
- Dimension: 103 x 90.5 x 104 mm
- Weight: 215 g
- Language: English and Japanese

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.

One-Year Limited Warranty (United States Only)

Wolverine Data manufactures its hardware products from parts and components that are new or equivalent to new in accordance with industry-standard practices. 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, as further described in the following text.

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

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; (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-Wolverine Converter's Accessories

Defects or damage that results from the use of Non-Wolverine Converter's accessories or other peripheral equipment are excluded from coverage.

Unauthorized Service or Modification

Defects or damages resulting from service, testing, adjustment, installation, 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 damages of any kind, or loss of revenue or profits, loss of business, loss of information or data, software or application with the ability or inability to use the product, accessories or software to the full extent these damages may be disclaimed by law. Some states (or jurisdictions) do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

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

Quick Start

1. Attach power cord
2. Insert SD/SDHC memory card - **Optional** step
3. Turn on Converter
4. Press **Left** or **Right** keys to select film (Negative, Slide, B&W)
5. Press **OK** to confirm the selection
6. Place film into proper tray, insert tray into right side slot
7. Edit image orientation and brightness if required - **Optional** step
8. Press **Convert** key to scan film
9. Press **OK** key to save image
10. Push film tray to left for next scan and repeat steps from 7

Go to www.wolverinedata.com to join our **Mailing List** to receive our exclusive **coupon** offers