



## **SNaP-20MP**

**20 Megapixels  
Slide Negative and Photo  
Digital Converter**

## **User Manual**

**Version 1.00**

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## **Introduction**

Thank you for purchasing the Wolverine 20 Megapixels Slides, Negatives and Photo (SNaP-20MP) digital image converter. The Wolverine SNaP features a built-in color screen, internal memory and memory card reader to convert 35mm film and photos into digital images without a computer. Place film or photo into the appropriate holder/guide, mount the holder/guide to the SNaP. Press Convert button, your media is converted into a 20-megapixel (interpolated) JPEG digital image. The Wolverine SNaP can be connected via USB port to Windows PCs (ME/XP/Vista/7/8) or Mac computer systems to upload saved images without installing any driver or software (plug-and-play).

## **Before Using the SNaP Converter**

This section provides important safety information that you should read before operating your SNaP-20MP Converter.

- Do not drop or handle too aggressively as it may cause damage to the device.
- Photos, Slides and Negatives media **MUST** be placed in/with proper holder /guide before inserting them into the SNaP digital converter. Inserting media without using proper holder will result in losing media inside the unit where removal is **NOT** covered under warranty and may **VOID** product **WARRANTY**.
- 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. Continued use of the device may result in fire or electrical shock.
- We strongly suggest using a non-alcohol lint-free clean and dry cloth to clean the glass surface and your film/photo to produce clear images. Improper cleaning may damage components. 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 cause fire or electrical shock.
- Do not handle the device with wet hands. Doing so may cause electrical 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 damage to the device.
- Do not open the outer housing. This unit does not require or have batteries. Under no circumstances should the user 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 by other reasons beyond the range of intended use.
- Products replacement 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 us at 949-458-9888 M-F 9:00-5:00 Pacific Time .
- Visit [www.wolverinedata.com/support](http://www.wolverinedata.com/support) to watch the video or find the latest documentation and other help tips
- E-mail or write to our technical support staff at [support@wolverinedata.com](mailto:support@wolverinedata.com) or 9939 Muirlands Blvd. Irvine, CA 92618

## Contents Description

1. SNaP-20MP Converter
2. Photo guide for 5" x 7" photo
3. Photo guide for 4" x 6" photo
4. Photo guide for 3" x 5" photo
5. Negative Holder Tray
6. Slide Holder Tray
7. USB Cable
8. Power Adapter
9. Felt cleaning brush
10. Cleaning cloth
11. User Manual

Please call us at 949-458-9888 or visit [www.wolverinedata.com](http://www.wolverinedata.com) to order additional or optional accessory parts.

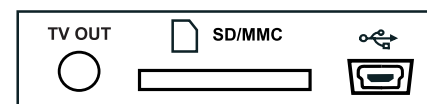
## Function of Keys

1. Power key: to turn power on or off
2. Left or Right arrow keys: to change the menu on LCD viewer  
to flip or mirror images in Convert mode
3. OK key: to activate each menu and make selection
4. MENU key: to go back to the HOME menu to change mode
5. CONVERT key: to convert film or photo into digital image

## Getting Started

### 1. Attach Power Cord

Plug USB cable to the included power adapter to a wall outlet or directly to a USB port on your computer.



### 2. Use Built-in MB Memory

A reminding icon "No Card" will flash on Viewer for about 5 seconds when the SNaP is powered on. The SNaP Converter includes a 109 MB built-in memory that can store up to about 30 digital images.

### 3. Use Optional SD/SDHC Memory Card

To save images directly onto the SD/SDHC card, insert the SD card before power on the SNaP.

- Make sure the SD/SDHC card is unlocked (white tab in upward position) or you'll see a yellow Card Locked icon on the Viewer.
- Ensure SD/SDHC card is oriented with gold fingers facing down.
- 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.
- Always insert the SD/SDHC card before you power on SNaP unit.
- To remove the SD/SDHC card by pushing in then release the card, instead of pulling it out. SNaP will power itself off if you remove or dismount the SD/SDHC card.
- Always power SNaP off before you eject the memory card.
- SNaP is compatible with any capacity SD/SDHC memory cards. Each one Gigabyte of SD/SDHC memory holds 300 digital images.
- Improper insert or remove memory cards may damage the card reader or the memory card, which neither is covered under Warranty.

### 4. Turn SNaP Converter On/Off

Press and hold power button for 1-2 seconds to turn SNaP on/off. SNaP will shut off automatically after 10 min of no activities.

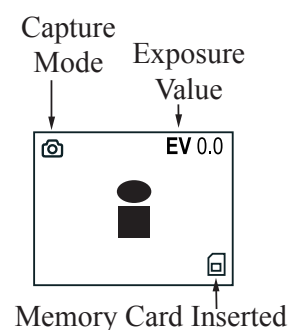
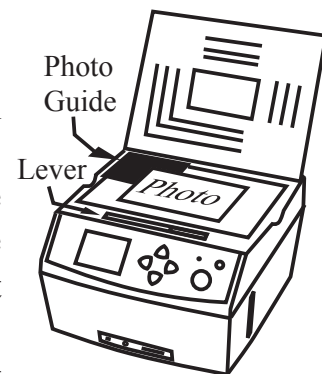
### 5. Home Menu Displayed in Photo Mode

- **Photo Size:** to select photo size in 5"x7", 4"x6", 3"x5"
- **Effect:** to select Multicolor (default) or B&W (black and white)
- **Delete All:** to delete images stored in the internal memory or SD/SDHC memory card if inserted
- **Convert:** to start the photo converting mode
- **Playback:** to review all converted images
- **USB Upload:** to communicate and upload image files to a computer
- **Language:** to select the menu in English or Japanese

### 6. Convert Photo to Digital Images

Move top lever to "Photo" side and the "Photo" LED will light up. It is recommended to use a clean lint free cloth or compressed air (not included) to remove any dust particles on photos.

- Make sure the top lever is on the **Photo** side.
- Press **OK** key to enter the photo size selection.
- Press **Left/Right arrow** key to select photo size then press **OK** key to confirm the selection.
- Open top lid and place appropriate size Photo Guide at upper left dimple holes. Clean dust particles on the photo and the glass. Place photo facing down against the Photo Guide then close the lid.
- Converting non-standard size photos might result black areas on images.
- If orientation editing is needed, press **Left arrow** key to **mirror** the image left to right; press **Right arrow** key to **flip** the image upside down.
- If **EV (Exposure Value/brightness)** adjustment is needed, press **OK** key. A chart will show on the LCD screen. Use either the **Left/Right arrow** key to move the red color indicator to "+" or "-". "+" value will brighten the images; "-" value will darken the images. Press **OK** key to confirm your selection.
- If any of the color adjustment is needed, use either the **Left/Right arrow** key to move the indicator to "+" or "-". "+" value will increase the color in the images, "-" value will reduce the color in the images. Press **OK** key to confirm your selection.
- If the image on the LCD screen looked good, press **CONVERT** button to convert the photo.
- When 3 icons appeared on the LCD screen, press **OK** key to save the converted image to memory.
- Open top lid to replace photo and repeat above steps.
- If you need to change the photo size, press **MENU** key or highlight home menu icon at low right corner to go back to Home Menu.



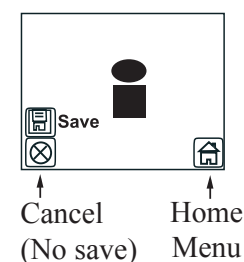
EV	-2	-1	0	1	2
R	-2	-1	0	1	2
G	-2	-1	0	1	2
B	-2	-1	0	1	2

EV=Exposure Value  
(brightness)

R = Red

G = Green

B = Blue



If **FULL** icon appears on the LCD screen, it means the memory is full. Press **MENU** key to clear **FULL** icon and upload images to a computer.

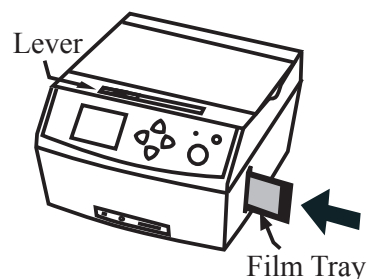
## 7. Home Menu Displayed in Film Mode

- **Film Type:** to select the type of film you wish to convert, color negative, slide, or black and white
- **Delete All:** to delete images stored in the internal memory or SD/SDHC memory card if inserted
- **Convert:** to start the photo converting mode
- **Playback:** to review all converted images
- **USB Upload:** to communicate and upload image files to a computer
- **Language:** to select the menu in English or Japanese

## 8. Convert Film to Digital Images

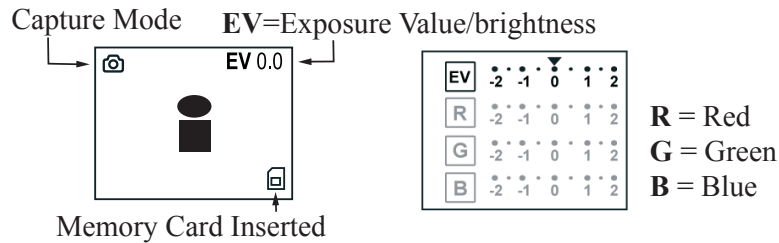
Move top lever to "Film" side and the "Film" LED will light up. It is recommended to use a clean lint free cloth or compressed air (not included) to remove any dust particles on the film.

- Make sure the top lever is on the "Film" side.
- Press **OK** key to enter the film type selection.
- Press **Left/Right arrow** key to select the type of film then press **OK** key to confirm the selection.
- Select appropriate Film Holder Tray. Before placing the film in to the tray, clean dust particles on the film. Place film shiny side facing up in to the tray. Insert the tray from **right side slot and push left**, one direction only. Inserting or pushing the tray from the wrong (left) side may damage the film or the unit.



- If **Film Type** setting was incorrect, you will see X-ray-like image on the LCD screen.
- Converting non-standard size films may result black areas on images. Placing non-standard size film in tray may result losing film inside the SNaP housing.
- If orientation editing is needed, press **Left arrow** key to **mirror** the image left to right; press **Right arrow** key to **flip** the image upside down.
- If **EV (Exposure Value/brightness)** adjustment is needed, press **OK** key.





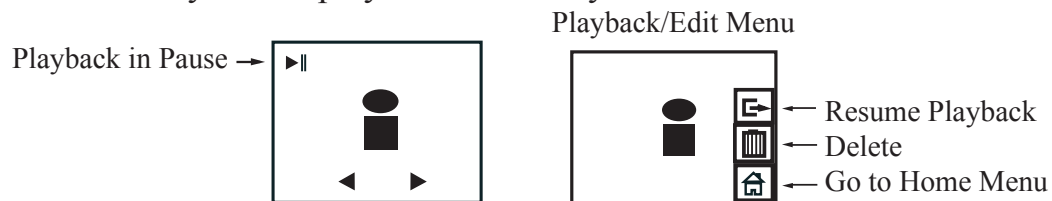
A chart will show on the LCD screen. Use either the **Left** or **Right arrow** key to move the indicator to "+" or "-". "+" value will brighten the images, "-" value will darken the images. Press **OK** key to confirm your selection.

- If any of the color adjustment is needed, use either the **Left** or **Right arrow** key to move the indicator to "+" or "-". "+" value will increase the color in the images, "-" value will reduce the color in the images. Press **OK** key to confirm your selection.
- If the image on the LCD screen looked good, press **CONVERT** button to scan the photo.
- When 3 icons appeared on the LCD screen, press **OK** key to save the converted image to memory.
- Push Film Tray left and repeat above steps.
- If you need to change the film type, press **MENU** key to go back to Home Menu.

If **FULL** icon appears on the LCD screen, it means the memory is full. Press **MENU** key to clear **FULL** icon and upload images to a computer.

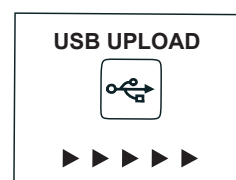
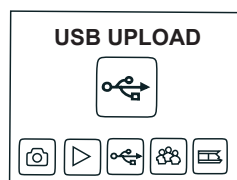
## 9. Playback and Edit Images

- Press **MENU** key to go to Home Menu.
- Press **Left** or **Right Arrow** key to highlight **Playback**.
- Press **OK** key to start the playback and auto slide show on Viewer.
- Press **OK** key again to pause slide show when the image you wish to edit appears. Press **Left/Right arrow** key to advance image forward/backward manually.
- Press **OK** key one more time to go to Edit menu. Use **Left/Right Arrow** key to highlight the Edit command icon then press **OK** key.
- Press **MENU** key to exit playback mode any time.



## 10. Connect SNaP to Computer to Upload Images

- Plug the small end of the USB cable to the SNaP and the larger end to a USB port on the computer.
- Insert SD/SDHC card if not using internal memory.
- Turn SNaP on.
- Use **Left/Right Arrow** key to select "**USB UPLOAD**".
- Press **OK** key to execute the command, you will see 5 little arrows on the bottom of the LCD screen, which means your computer is communicating with the SNaP.



## 11. Upload Images to Windows (ME/XP/Vista/7/8) PC

Once the USB Upload command is activated, the computer will recognize SNaP's internal memory, or SD/SDHC card, as a Removable Disk. Follow the computer Autoplay options to import or copy the images to a folder. Or, you can access the Removable Disk from under "My Computer" or "Computer" icon. Images on the SNaP are saved under the folder DCIM/100COACH with sequential alpha numerical file names of PICT0001.JPG, PICT0002.JPG etc. Copy and paste or drag and drop image files to a file location on your computer's hard drive.

## 12. Upload Images to an Apple Computer

Once the USB Upload command is activated, the SNaP's internal memory or SD/SDHC card will show up as a new Drive on the Desktop or defaults to importing images into iPhoto. Images on the SNaP are saved under the folder DCIM/100COACH with sequential alpha numerical file names of PICT0001.JPG, PICT0002.JPG etc. Copy and paste or drag and drop image files to a file location on your computer's hard drive.

### **13. Delete Images from the Internal Memory or the SD/SDHC Card from a PC**

Access the Removable Disk from under "My Computer" or "Computer" and delete the individual images from the folder DCIM/100COACH or delete the entire folder DCIM to delete all images at once. Drag and drop the DCIM folder in the Recycle Bin. Reformatting the Removable Disk is another option that can be used to empty the entire content of the internal memory or SD/SDHC card.

### **14. Delete Images from the internal memory or the SD/SDHC card from an Apple Computer**

Double click on the new Drive on the Desktop to access SNaP. To delete individual images by drag-and-drop images from DCIM/100COACH folder to the Trash Bin or drag and drop the DCIM folder in the Trash Bin to delete all contents at once.

### **Connect SNaP to a TV set**

You can browse images on a TV set.

- Turn on SNaP and TV.
- Set TV input to AV (or TV1, TV2) mode.
- Connect SNaP "TV OUT" port to TV's Video-In port (yellow) with the optional TV-Out cable.
- The LCD screen on SNaP will turn dark and your TV will replace the LCD screen for the SNaP.

### **Technical Support**

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

## Specifications

Lens: F/3.6, f=4.83

LCD: 2.4 inch LTPS LCD Display

External memory: SD/SDHC card

Exposure: Auto

Color balance: Auto

Image resolution: 20MP

Data conversion: 24 bits per color channel

Convert method: Single pass

Light source: white LED/backlight

Power: Powered from USB/5V adapter

Interface: USB 2.0

Dimension: 220 x 208 x 147 mm

Weight: 1200 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-SNaP Converters accessories:** Defects or damage that results from the use of Non-SNaP Converter'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 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](mailto:support@wolverinedata.com)

## Quick Start

1. Attach power cord.
2. Insert optional SD/SDHC memory card.
3. Turn SNaP Converter on.
4. Convert photos:
  1. Move lever to **Photo** side then press **OK**.
  2. Press **Left/Right Arrow** key to select photo size, then press **OK**.
  3. Open top lid and place proper **Photo Guide**.
  4. Place photo against Photo Guide and close lid.
  5. Edit image brightness or orientation - optional steps.
  6. Press **CONVERT** key to convert photo.
  7. Press **OK** key to save image.
  8. Open lid, replace photo, repeat steps.
5. Convert film:
  1. Move lever to **Film** then press **OK**.
  2. Press **Left/Right Arrow** key to select film type, then press **OK**.
  3. Place film into proper tray.
  4. Insert tray into SNaP from right side slot.
  4. Edit image brightness or orientation - optional steps.
  5. Press **CONVERT** key to convert film.
  6. Press **OK** key to save image.
  7. Push film tray to left (one direction) for new film, repeat steps.