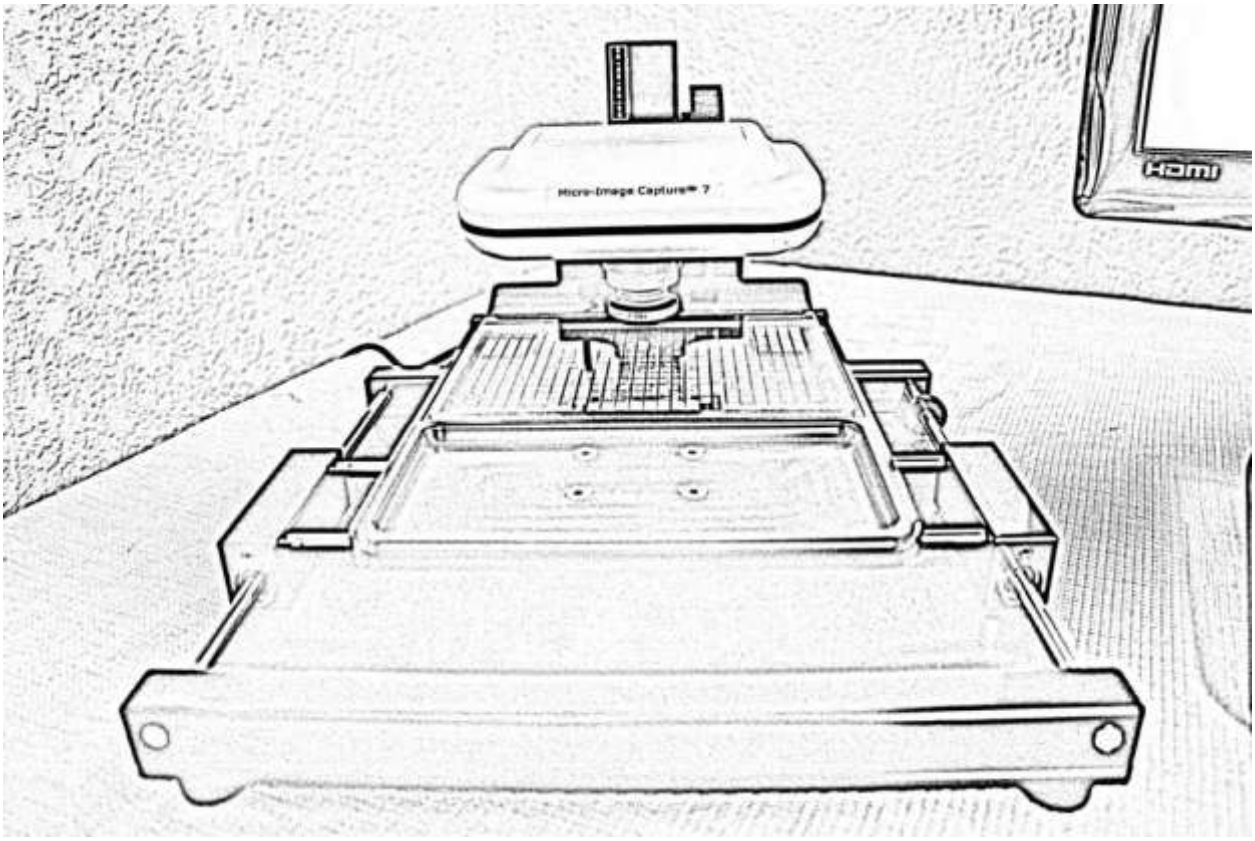
MICROIMAGE CAPTURE




# Installation & User Manual

## *Micro-Image Capture 7*

Ver1.2016

# Product Warranty

## Quality Assurance

Every Micro-Image Capture system passes quality assurance tests including focus, resolution quality and mechanical build and fitment.

Both negative and positive films in low and high magnification ranges are scanned to insure the unit meets quality standards prior to packaging for shipment. A print sample from a scanned test microfilm captured with your MIC device is included in the box and contains the unit serial # and the calibration settings used to achieve that particular scan/print.

## Warranty

Every Micro-Image Capture unit comes with a one year manufacturers repair or replace warranty. Customers that experience problems with the device should call the dealer they purchased the unit from for assistance, technical support and to obtain warranty service.

## Safety Precautions

Observe the following guidelines to ensure that your Micro-Image Capture unit will provide high quality performance, operates safely and to prevent future defects.

• Do not use this device in environments outside the following range: Temperature: 0°C to 40°C (32 to 104 degrees Fahrenheit) Relative humidity: 25% ~ 85%.

• Do not use this device under:
– direct sunlight exposure or bright ambient light that falls on the image capture / imaging head area
– very humid or dusty environments
– near any kind of heat or **vibration sources**

• Do NOT attempt to disassemble or repair your Micro-Image Capture device. Do not open the imaging camera housing as this will **void the warranty**.

• Protect the device from oil, vapors, steam, moisture, and dust.

• Please turn off the illumination pad after use.

## Specifications

- The Micro-Image Capture 7 is a low energy usage USB port powered device. (USB 2.0 required for full speed imager video refresh rate)
- Assembled Fiche System Weight: (Head & Base) is 12 Lbs. / Dimensions: 14”L x 10”W x 7” H

# Host PC Requirements (minimum)

• Processor: Pentium P4 2.4GHz or equivalent AMD Athlon (Duo Core is best)

• 140 MB free HD space for view and capture programs

• Operating System: Microsoft Windows XP, Vista, W7/W8 or MAC O/S X V10.3 or higher. USB 2.0 (enhanced USB) is required for optimum performance

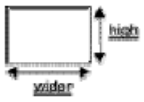
• RAM memory: 512 MB RAM – Recommend 1GB or more & USB 2.0 or 3.0

• 16-bit color display w/ DirectX 3D support (works with 32 and 64 bit as well)

• DirectX 9.0 or above

- A High Resolution LCD Monitor capable of 1024 x 768 at a minimum (higher is better) is require.
- **The monitor must have sufficient vertical and horizontal display height and width to accommodate the microfilm image at its original size.**

- To view and capture Portrait and Landscape microfilm images at optimum resolution, **your monitor view area must be at least** 8.5" high and 11" wide for landscape images




Landscape

- and 11" high minimum for portrait (letter size originals on film).


Portrait

- 35mm Newspaper Microfilm or Engineering size images on fiche, jackets, AP cards or roll-film (11x17" originals up to C, D and E size) require a 27" wide screen monitor for proper viewing, capture and printing. We actually recommend the Micro image Capture 8 scanner with 18MP of resolution for 35mm images.

## Snagit Capture Software System Requirements

• Microsoft Windows 7, or Windows 8 (32-bit and 64-bit) installed and configured on your system
• Internet Explorer 8.0 or later required
• .NET 4.0 or later required for video
• 2.4 GHz single core processor (2.4 GHz dual core required for video)
• 1 GB of RAM (2 GB required for video)
• 125 MB of free hard disk space
• Video capture on Windows 7 requires Windows 7 supported video and audio hardware

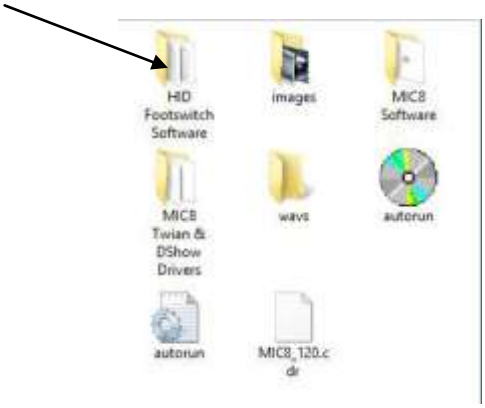
# Footswitch Installation

## "Scythe" branded *USB Single Footswitch II*

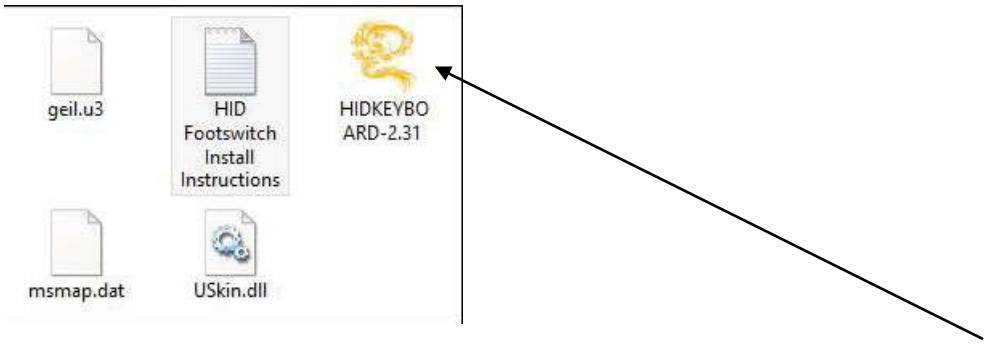
The HID Footswitch included with your MIC system simulates a keyboard stroke when depressed.

This switch can be used with your MIC7 or MIC8 system to activate the capture of an image on screen for hands-free operation. The foot-switch is not required for operation of the MIC7 or MIC8; it is simply a tool that can help when scanning many images by allowing capture to be via footswitch instead of keyboard entry. Keyboard capture is still active when footswitch is installed so both methods can be used interchangeably.

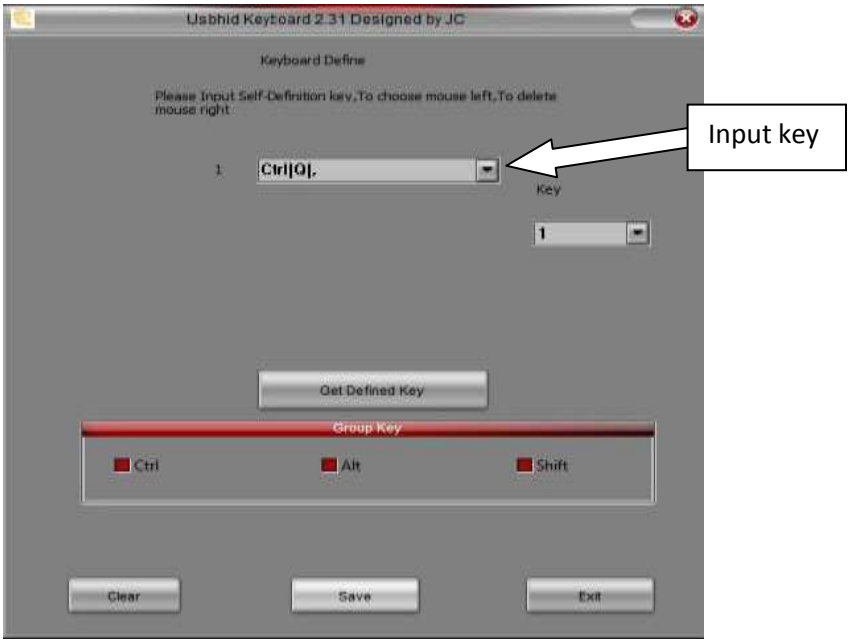
1. Browse Installation CD and copy "HID Footswitch Software" folder. Paste this folder onto the host computer's "Program Files" or "Documents" folder.




2. Follow illustration instructions below:




3. Open the HID Footswitch software folder and double click on the HIDKEYBOARD-2.31 application. The following GUI will pop up:




4. **If you are installing the footswitch on a Micro-Image Capture 8**, the "Input Self Definition Key" box should already contain the correct hot key combination for that system which is "Ctrl/Q". Click save and exit. The switch has been programmed. You are done and need not read step 5.

5. **If you are installing this footswitch on a Micro-Image Capture 7**, then you will clear the "Input Self Definition Key" box and key in the desired hotkey. Example: F9, F10 or F11. The MIC7 comes with Snagit Software which can capture an image to a folder, send directly to printer, email application or to other applications.

The footswitch can only generate one command when depressed, so decide which function you will use most of the time, and program the footswitch accordingly. When configuring Snagit after installing footswitch, you will assign the Snagit profile you will use most to the same hotkey your footswitch will generate when depressed.

For example: If want the MIC7 to capture and send the image directly to a network printer, you can choose F10 for that capture profile.
You may also want to create a profile using Snagit to capture the image and drop it into a file folder on your PC, you can choose F11 for that capture profile. In this case you would have two capture profiles set up, one for "capture to print" (F10) and the other for "capture to a folder" (F11). So your footswitch programmed hotkey should match the Snagit hotkey for the Snagit profile you intend to use the most. Keep in mind you can always just depress the hotkey on your keyboard and not use the footswitch at all.

Once you have entered the desired data into the "Input Self Definition Key" box, save and exit the program. Now when you depress the footswitch, the programmed keystroke will activate the Snagit profile designated by that hotkey (F10 or F11).

You can now connect the HID Footswitch to an available USB port on the host PC.

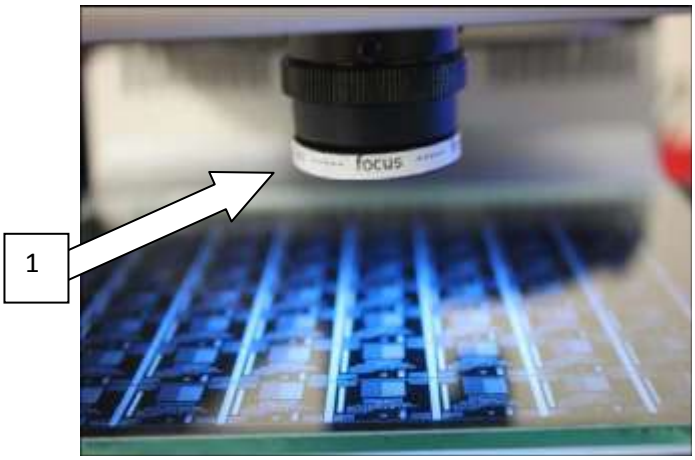
# Snagit Software Installation

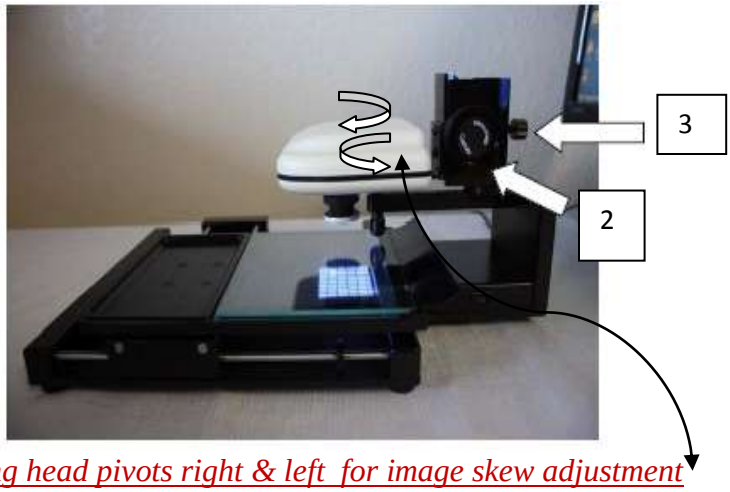
Install Snagit software disc that came with the Micro-Image Capture 7 and follow onscreen instructions. License key is imprinted on the disc label. Snagit is continually updating versions so GUI may vary.

- To create a Snagit profile that will capture microfilm images displayed by the MIC7 and send the images to a file folder, please watch this YouTube video: https://www.youtube.com/watch?v=akeQVjNmJcI


- To create a Snagit profile that will capture microfilm images displayed by the MIC7 and send them directly to a network printer, please watch this YouTube video: https://www.youtube.com/watch?v=1tfR4hTA38w

# Micro-Image Capture 7 Hardware

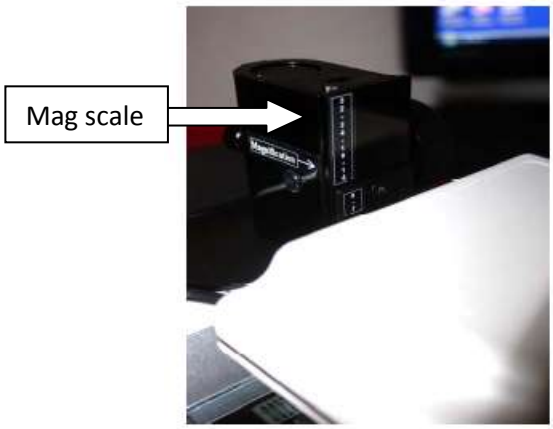



*The imaging head pivots right & left for image skew adjustment*

1. The 7-54X lens is adjusted by turning lower part of lens. This is the "rough focus" to bring image into initial focus.
2. Once image is somewhat focused using the lens, achieve "fine focus" by adjusting large black dial on side of MIC7.
3. Fixing knob on the back of the MIC7 is designed to secure imaging mechanism to post.

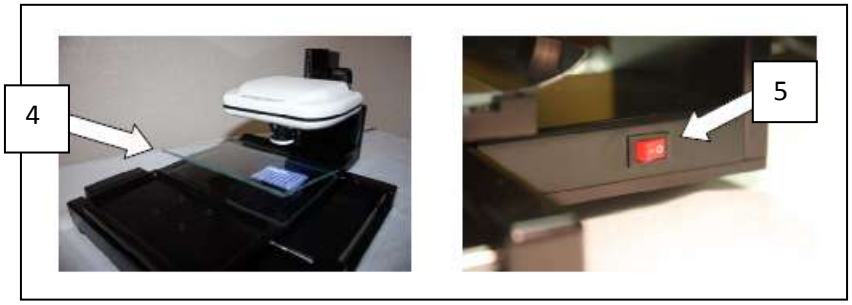
   *Zoom is achieved by mechanically moving the imaging head closer or further from the microfilm.




The MIC7 comes with a 7-54x magnification scale, (longer mast than pictured) and requires the head lift mechanism to be secured at the very top of the mast to achieve magnifications from 7X to 32X and at lower mast to achieve magnifications from 32X to 54X.

The mast on MIC7 is scribed for easy visual indication of correct upper and lower mechanism positions.

4. The upper fiche glass will mechanically lift for fiche insertion when you pull the fiche carrier all the way forward.




5. The on/off switch for the illumination pad is on the side of the MIC7, turn off when done.

# Graphical User Interface & Initial Adjustments

We recommend watching the GUI tutorial on YouTube for initial adjustments:
https://www.youtube.com/watch?v=gM0KlhAJ9XA


## Full Screen Mode - Viewing and Capture

It is recommended that microfilm images displayed on the MIC7 GUI be in the "Full Screen mode.

The initial "Video Tab" mode on the MIC7 GUI is only for adjusting image quality, orientation and image type. Once initial adjustments are completed, click the Full Screen Mode to begin viewing and capturing images.

The Full Screen Mode allows for a much larger image to be displayed since the user interface tool bars are not in view. You can capture images by activating the Snagit hot key.

Zoom and focus the image in the Full Screen Mode so that the displayed microfilm image is as close to its full original size as possible. In order to view and capture images at optimum resolution, it is important that you have a quality LCD monitor with sufficient vertical and horizontal area to allow the image to be zoomed to its original letter (8.5x11") or legal size (8.5x14"). (35mm Newspaper and Engineering applications should use a 27" monitor minimum). Hold any 8.5 x 11" document to the screen and try and make the image that size. If you monitor does not have sufficient view area, you may need to replace it with a larger monitor.

Click the keyboard escape key or click bottom "Exit Full Screen" popup to revert back to the "Video Tab" mode for further image adjustments.

# *Optional – Using MIC7 Native GUI to capture instead of Snagit

There are three main tabs in the MIC user interface; **Video**, **Image** and **OCR**. The Video tab is where you will adjust images prior to **view and capture in full screen mode**.

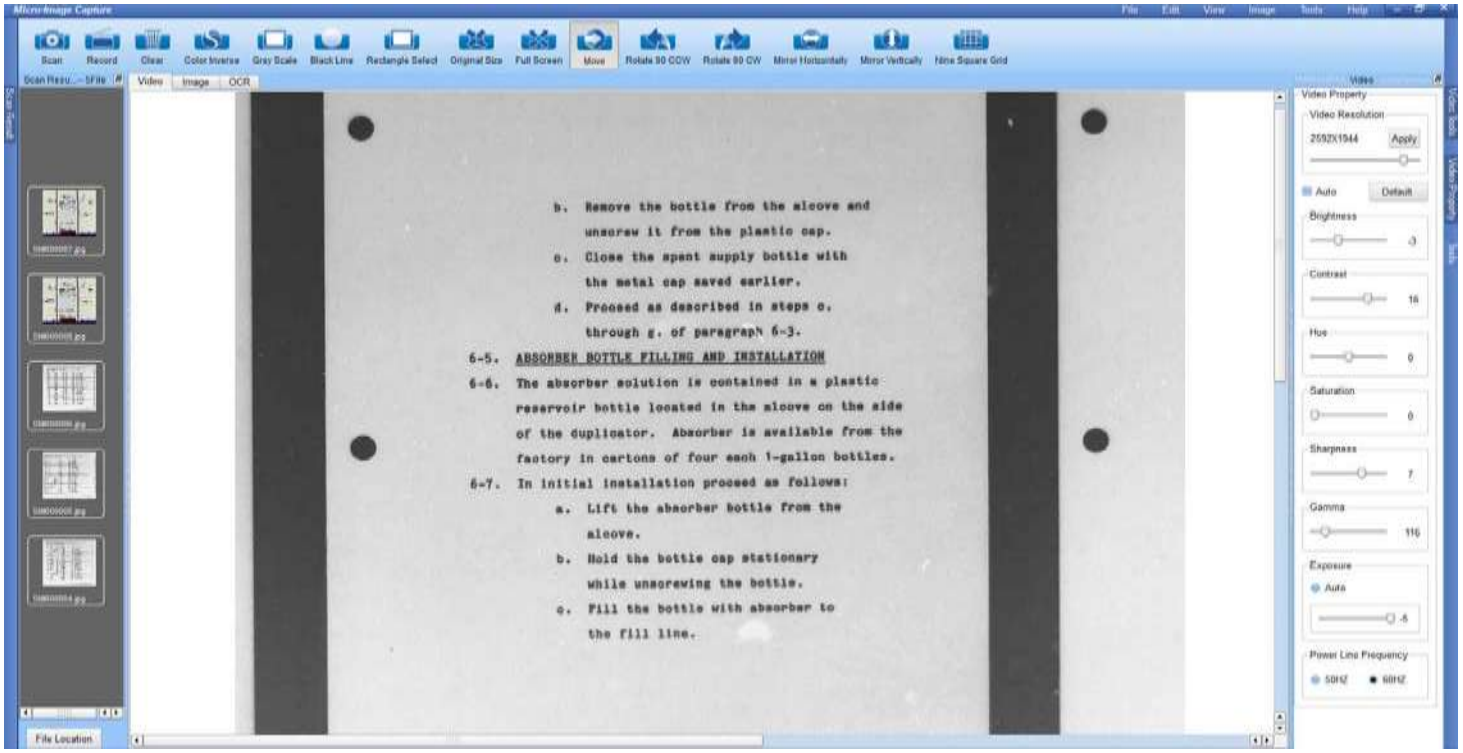
**You may use the Micro-Image Capture native GUI to capture images but we strongly recommend using Snagit instead, as it offers increased functionality, speed, ease of use and is activated by the MIC7 footswitch.**

If you do capture images with the MIC User Interface instead of Snagit, the Image tab is where post scan images can be adjusted, printed, faxed, e-mailed and OCR'd if desired. The OCR tab will open up the OCR'd document(s) when complete, for review and saving. A mouse with a scroll wheel provides optimum usability when using the MIC user interface.

1 Load the Micro-Image Capture software; plug in the USB cable to an available USB 2.0 or 3.0 port, then click the Micro-Image Capture launch icon.
2 Click on the Video tab to activate the Micro-Image Capture unit and display a video image of your microfilm.
3 The default mode is color, but Grey Scale, Black Line and Color Inverse modes are more suitable for viewing and capturing microfilm images on most film media. Now click the Grey Scale option to remove color from the image. * You may need to slide the "saturation" slider up and down to fully remove the color *
4 The image will probably be out of focus initially, so raise or lower the MIC head unit using the large black knob on the side of the unit until you see some sort of image, even if out of focus. We will first concentrate on getting image settings correct, and then focus.
5 Adjust the image quality by **un-selecting the auto exposure box** and manually adjust the exposure to provide a viewable base line exposure **with brightness set at zero**.
6 Adjust the brightness and contrast in order to achieve the most legible image in the grey scale mode. Dark portions of your image should be as black as possible while light portions should be white, not gray. **Contrast normally is best set at 20**.
7 Adjust Gamma to remove excess gray in the background of the image in order to achieve a best possible contrast. **Gamma seems to provide best results at 100**.
8 If you are viewing negative film, you may now try the**"Inverse mode"** in order to see the image with a more natural white background and grey/black text (aka positive mode)
9 When switching from "Grayscale" to "Inverse mode", you may need to re-adjust the brightness setting in order to achieve the best view and scan result in that mode.
10 If you have high quality film with very good film density and contrast, the "Black Line" mode will provide an excellent negative image to view and print with, but you will have to program Snagit to invert the output color by choosing "Color Substitution", then "Invert Colors" so that your output print and scan will be positive. More on this in the Snagit adjustment section.
11 Using the scroll wheel on your mouse will enlarge and reduce the onscreen image of your microfilm while in the user interface mode only.

**Use the camera lift mechanism while in the "Full Screen Mode" to optically zoom the image on host PC screen so that it is as large on your monitor as the original document was for the best viewing, scanning and print results. See hardware section. Moving imger closer and further from microfilm affects will zoom the image up and down. Focus the image after zoom by turning lens.**

# MIC7 GUI - Video Tool Bar Icons & Descriptions





Clicking the scan button will capture the complete viewable screen. (Use the “rectangle select” to designate a smaller capture area)


Clicking the record button will record a video file of the movements made with the microform until you click again to end the video. This option can be used to create a presentation of microform content.


Clicking this icon will activate the color inverse mode changing a negative grayscale image into a standard black on white image which may be easier to view for most users and saves on toner use if printing.

Clicking this icon will activate the grey scale mode removing color from the image and displaying in shades of grey only.

Clicking this icon activates the black line mode with can provide excellent contrast on some microfilmed images.

**Click this icon and use your mouse to drag an "active capture box" onto the PC image display. This active capture box will be brighter than the non capture areas. Move images into the capture box area and click Scan to save the image.**

Full screen mode allows for optimal image size and removes the user interface tools. **This is the correct mode to view, capture and print images using when Snagit or MIC GUI.**

Click to bring image back to original size after zooming or reducing with mouse wheel. Zooming of image should be done mechanically by moving head and not with mouse scroll.

The clear button will clear the previous change made and continuing to clear will revert back one step at a time.

Click the move button to use the mouse to position or nudge the image onscreen.


Rotates the image 90 degrees clockwise

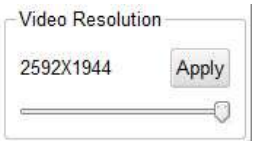

Rotates the image 90 degrees counter clockwise


Vertically flips or mirrors the image


Horizontally flips or mirrors the image

If you are using the MIC native GUI to scan and capture images instead of the "Snagit" software, thumbnails of images scanned will appear on the left side scan result area. Clicking on an image thumbnail will open the image in the Image Tab and clicking on "File Location" at the bottom will open the image destination folder for review or selection of images for printing or other actions.

The MIC user interface will recall the adjustment settings last used when the system is closed and re-opened, but you may have several formats of microfilm that require different settings for optimal performance. Once you have achieved an acceptable image adjustment for viewing, scanning and printing, take note of the video property settings (brightness, contrast, hue, saturation, sharpness, gamma and exposure) so that you have a future reference that will allow for quick and easy adjustment should the setting be changed.




Video resolution is optimum at 2592x1944 (5MP). **Adjusting to the next setting down 2048x1536 (3MP) will provide a faster refresh rate (less image latency) but with lower resolution. Please be sure the MIC7 unit is connected to a USB 2.0 or 3.0 port and not USB 1.1! USB 1.1 will cause the MIC7's video stream to host PC work much slower than normal.**

**Digital video streaming microform viewers/scanners have some noticeable image latency (image lag) which can take a little getting used to when one has been using traditional reader printers that bounce the microfilm image off mirrors onto a projection screen. Once the user is accustomed to the MIC7 it will feel very natural.* Call for tech support >> 866-754-8885