

# Glass Plate Negative Scanning Instructions: Epson Expression 10000XL & SilverFast Ai v6.6.0r1

## GETTING STARTED

1. Turn on the scanner.
2. Make sure the Transparency Unit is on the scanner. If the document unit is on the scanner, remove it by:
  - a. Turning off the scanner,
  - b. Unplugging the transparency unit from the options plug,
  - c. Ensuring the white mat is in place covering the top glass surface,
  - d. Pulling the unit out of the peg holes,
  - e. Placing the unit on the desktop, white mat side up, and cover with plastic,
  - f. Placing the document unit into the peg holes,
  - g. Turning the scanner back on. (see p. 46 of the Epson Expression 10000XL User's Guide for more info)
3. Open the Hughes metadata Excel file: **I:\SpecColl\CDM\_Metadata\Hughes\Hughes\_Final.xls**
4. Open Photoshop by double-clicking on the alias on the desktop, or by going to:
  - a. On the PC: Start>Programs>Adobe>Photoshop>Adobe Photoshop
5. On the PHOTOSHOP menu bar, select FILE>IMPORT>SilverFast (EPSONIT8) to open the scanning software application. You may close out the Welcome screen. If you see the densitometer dialog box open, close that out as well.
6. Put on nitrile gloves (NOT the white cotton gloves).

## SCANNING THE NEGATIVE

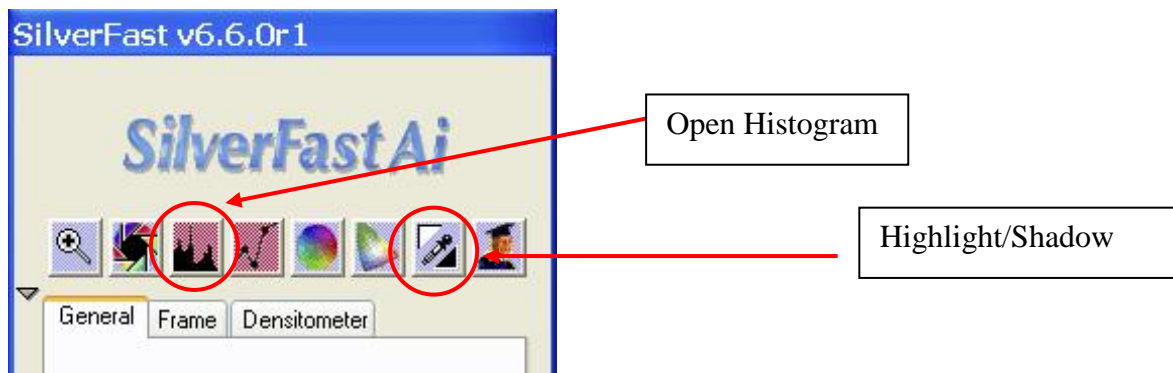
1. Clean the scanner bed with a blast of canned air. Use an optical cloth to remove any persistent debris.
2. Inspect the glass negative. Notice the physical condition of the glass plate and the emulsion, including chips and cracks in the glass, scratches and flaking in the emulsion, and discoloration of the emulsion. Note the condition of the negative in the Metadata file within the "Condition" field. See the METADATA section for more details.
3. Clean the surface of the glass plate with a blast of canned air. Make sure to only use short bursts of air to prevent propellant release (if propellant hits the negative, wait for the area to warm and evaporate. If residue is observed after the area evaporates, use a clean optical cloth to gently wipe off this residue).
4. Select the first negative in the "HUGHES TO SCAN" box (they are in order by accession number).
5. Place the glass negative, emulsion side up, onto the platen glass of the scanner. (EMULSION side is the duller side, NOT the glossy glass side).
6. Click on the "General" tab in the SilverFast dialog box.
7. Set to the following parameters:
  - A. Scan Mode: Normal
  - B. Original: Transparency
  - C. Pos/Neg: Negative
  - D. Frame-Set: Save



8. Click on the "Frame" tab in the SilverFast dialog box. **PICTURE.**
9. choose "16 Bit Grayscale."
10. Remove any filters by choosing "None" from the filter drop-down menu
11. Choose the "standard" image type from the drop-down menu
12. Change the RESOLUTION by using the slider / text box.
  - a. Set to 800 ppi
13. Press the ALT key. Notice that Silverfast's Option key switches to say "Reset." Hold down the ALT key and click on the "Reset" button. This resets any manipulations made for previous scans.

#### PRESCAN

1. Click "Pre-scan"
2. Set the HIGHLIGHT & SHADOW point
  - a. Find the highlight/shadow button in the SILVERFAST AI panel (The button looks like an eye dropper with a white triangle above and black triangle below). Click on the white triangle. The cursor will change to a white triangle.
  - b. Click on the area of the image that looks the whitest. Now go back to the highlight/shadow button and click on the black triangle. Click the cursor on the area of the image that looks the blackest. You should notice that two "Fixed Pipette" windows will open, which correspond to highlight and shadow points. In each of these windows you will see two sets of Black and White values in two columns. The values to the left are the original and to the right are the adjusted values. When you change settings on the histogram in the next step, you will see the numbers in the right column change.
  - c. Open the Histogram Adjustment tool by pressing the button.



- d. Adjust the histogram for the white and black points individually until the aimpoints are reached (see below). This adjustment should be done by using the sliders underneath all the histogram. Note that the right slider controls for white, and the left for black.

<b>Aimpoints for the darkest level:</b>	<b>8-16 (12 preferred)</b>
<b>Aimpoints for the gray level:</b>	<b>100-108 (104 preferred)</b>
<b>Aimpoints for the whitest level:</b>	<b>239-247 (242 preferred)</b>

- e. When the highlight and shadow levels in the right column of the densitometer for both levels are within the aimpoint range and within 3 levels of each other, close the Histogram Adjustment tool.

#### SCANNING THE NEGATIVE

1. Move the selection marquee until it is just outside of the entire image. This will NOT change the highlight/shadow adjustments you just performed. Make sure that the edges of the negative are still visible. Crop in as close to the edges as possible so that they can be seen, but that there is not too much space outside of them.
2. Scan the image by clicking "Scan."

#### METADATA

1. While waiting for the scan to open in Photoshop, maximize the metadata Excel spreadsheet. [I:\SpecColl\CDM\\_Metadata\Hughes\Hughes\\_Final.xls](I:\SpecColl\CDM_Metadata\Hughes\Hughes_Final.xls)


2. Enter the **Accession Number** (found on the envelope.) Please place a “P” in front of the number. (Ex: P75-54-0027g)
3. In the **Date – Created** field, put the date the actual negative was made. This is usually on the envelope. Enter the date as yyyy-mm-dd. Ex: 1925-10-21. If it is just a year, simply put in the year. Sometimes the dates are approximate, so please put the circa date. Ex: c. 1921. **If there is no date, please put c. 1905-1940.**
4. **Date – Sort:**
5. **Caption** field: write the information on that is on the envelope. This is a sentence or two on the envelope describing the image. Always precede these notes with **From sleeve: \_\_\_\_\_**. Please do not include the single words that are sometimes at the top. Please include if there is a Hughes No. Also put the date that is on the envelope. Ex: “From sleeve: Employees and Families attending Yellow Cab Company Christmas Party. Hughes #23845. c. 1921”
6. **Condition:** Describe the condition of the actual negative: e.g. Emulsion peeling on left side, glass is cracked, negative is masked.
7. **Print(s):** If there are related prints, please put yes. Otherwise, fill in with “no.”
8. Enter the **Date – Digitized**. This should be today’s date in the following format: yyyy-mm-dd
9. **Digital – File Creator:** Put in your name in the order of Last Name, First Name
10. **Digital – File Name:** This is the accession number.tif Ex: P75-54-0112g.tif
11. Double check your work for spelling errors or missing information.
12. Save the file.

#### WHEN THE SCAN OPENS IN PHOTOSHOP

1. CLOSE the scanning windows to switch to PhotoShop.
2. Check the image quickly for any noise, distortion, or channel misalignment. Zoom in to at least 500% and check several areas of the image.
3. If image needs to be adjusted or cropped, refer to the PhotoShop editing guidelines below to make changes before saving. Save the image first (as in the next step), and then re-save (using FILE>SAVE AS when the adjustment is finished.)
4. Click FILE>SAVE. The SAVE dialog box will appear. In the FILE NAME field, enter the name for the image. Following naming convention: AccessionNumber. Save the image as a TIFF and save it to the E:/External Hard Drive>Photograph Collections>Hughes

#### ROTATING AND CROPPING THE IMAGE IN PHOTOSHOP

You may want to make some minor adjustments to your images once they are opened in PhotoShop.

1. In the top left hand section of the PhotoShop window, be sure the magnification is set to 100%. If it’s not, go to VIEW on the toolbar and choose PRINT SIZE. Now the image is full size.
2. **ROTATE (re-orient)** — If you image is upside down or sideways, you should correct the orientation before you save it
  - a. Choose Image -> Rotate Canvas
  - b. Choose to rotate the image 90 degrees for a sideways move (CW = clockwise, CCW = counter-clockwise), or 180 degrees for an upside down image.
  - c. You may also choose an arbitrary number (e.g. 1 point CW) to make smaller adjustments to straighten the image
3. **CROPPING** — Open the crop tool (  ) from the tool palette. This tool will allow you to make adjustments to the selection you make before you crop the image. It will also preview the cropped image for you by graying out the unselected areas.



4. With the **crop** tool, click and drag on your image to select the portion you want.
5. Once you are satisfied with the selection to be cropped hit enter. The image has now been cropped. If you cropped too much, click EDIT>UNDO CROP. (NOTE: You can only undo the task you just performed. If you need to undo more than one step, click WINDOW>HISTORY to open the history palette which shows every action you have taken since opening the file, you can click backward and forward on different steps to undo and redo actions. But remember that if you undo an action then introduce a new action, you will have lost all of the subsequent actions you had performed)



Properly cropped image

#### AFTER SCANNING AND SAVING THE IMAGE

1. Make sure you are wearing the nitrile gloves
2. Open the scanner and carefully pick up the glass plate negative.
3. Gently place the negative back into its envelope, ensuring that you do not scrape off any emulsion while doing so. It is easiest to put the envelope face down on the table, holding the flap open with your left hand. Carefully hold the glass negative in your right hand and gently glide it back into its envelope.
4. Put the envelope with negative into the "HUGHES – SCANNED" document box.
5. If all of the negatives from the "HUGHES TO SCAN" box have been scanned and placed in the "HUGHES – SCANNED" box, place the boxes onto the book cart and go to room 103. Return the scanned negatives to their proper location in the Hughes filing cabinet.
6. Retrieve the next negatives (in order by accession number) and place them into the "HUGHES TO SCAN" box and return to the scanning room to proceed with scanning.

WHEN FINISHED SCANNING ALL THE NEGATIVES YOU WILL DO IN A SITTING, TURN OFF THE SCANNER.