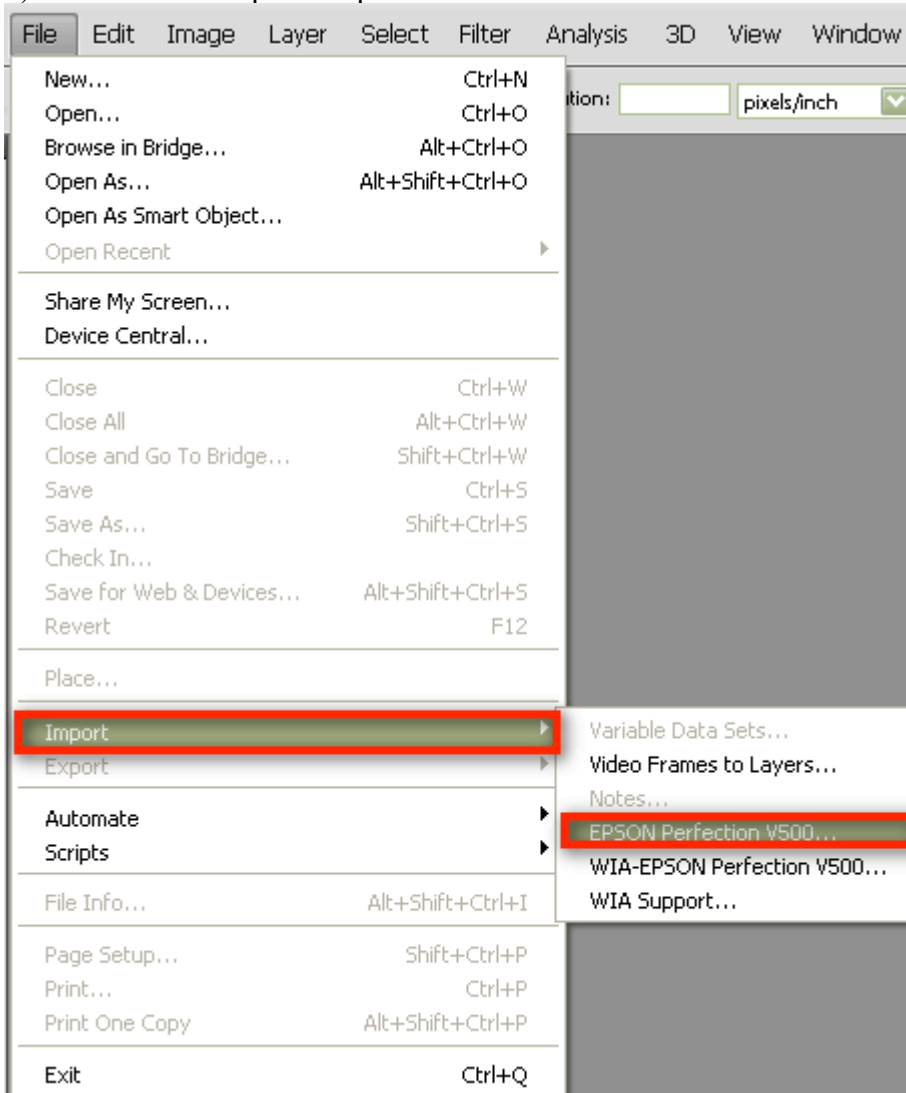# SCANNING METHODS

## REPRESENTING ORIGINAL IMAGE CONDITION - 2 SCANS

1) Open Adobe Photoshop.

2) Go to File > Import > Epson Perfection V500.

3) Place item on scanner. Align the item in the upper left corner of the scanner. Include black-and-white Kodak patches and color patches (optional).

4) Uncheck "Unsharp Mask" and change "Image Type" to 48-bit color (assuming color scanning is desired). Change "Resolution" to an appropriate setting based on the project and item characteristics (usually to achieve 4000 pixels on long edge).

5) Click the Preview button to do a Preview scan.

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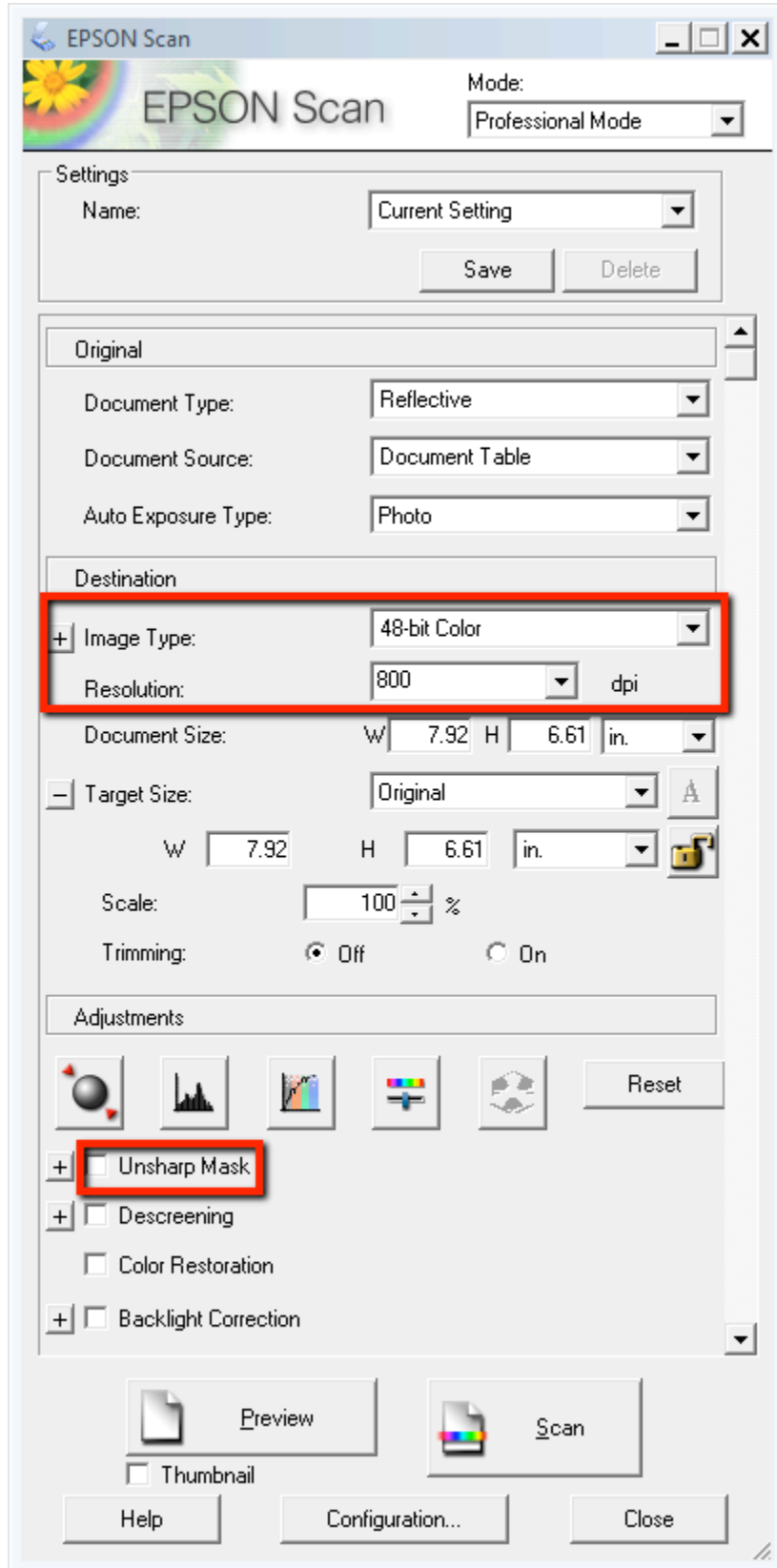
6) Fit the scanning marquee ( ) around the image and color patches only. Note that you may need to verify the size of the image generated in pixels by first selecting the image without the patches. This will help you verify that you have scanned at the correct resolution.

7) Turn "Trimming" Off.
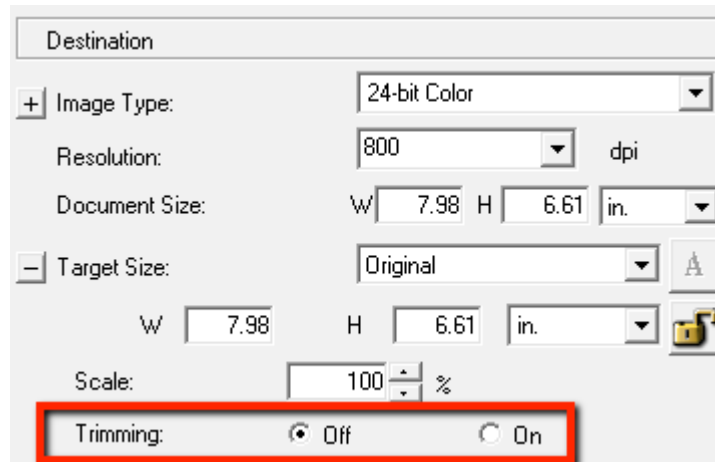
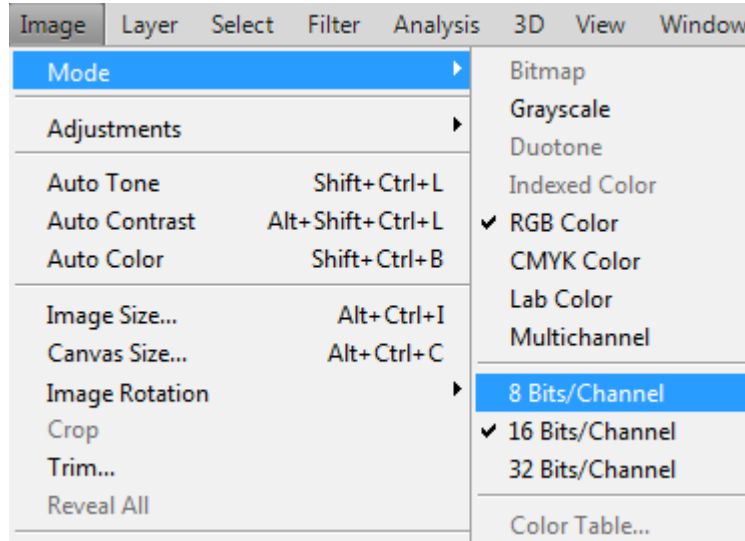8) In the Epson Scan window, scroll down to the Adjustments section and click on the Histogram Button.
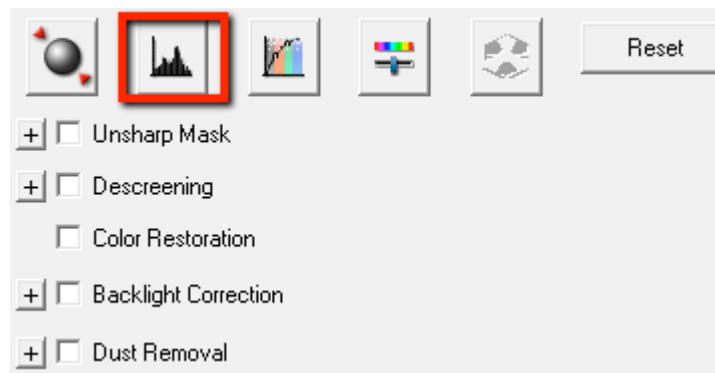
9) In the Histogram window, adjust the white and black Output arrows so that the black arrow is at 8 and the white is at 247. The Input arrows should be adjusted so that the black and white arrows are set at the end of the end points of the curve.

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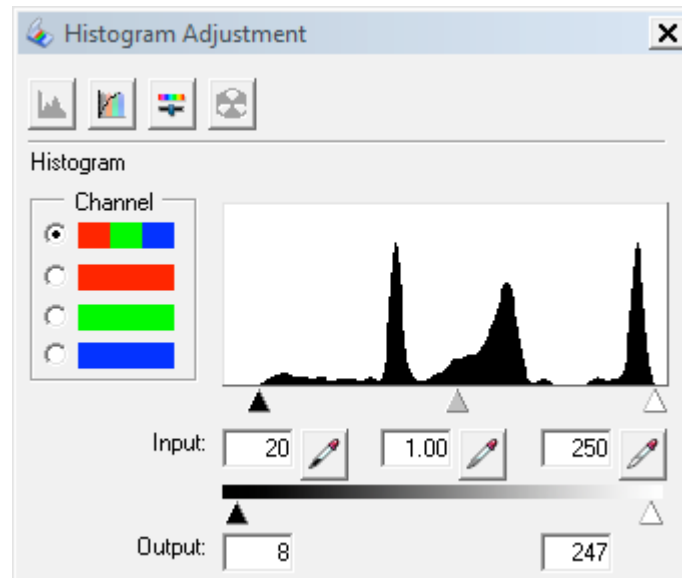
10) With the Histogram window still open, click on the Densitometer button ( ) in the Preview window to open the Densitometer.

11) Mouse over the black, mid-tone, and white patches on the Kodak Q-13 Gray Scale (19, M, and A, respectively). Check to see that the "After" values next to R, G, and B for each patch are within accepted ranges. Black (19) values should be 8-16, mid-tone (M) values should be 100-108, and white (A) values should be 239-247).

If the values are off, adjust the histogram once more. Try to avoid moving the black and white input arrows to points that lie within the curve. It will likely be necessary to adjust levels in individual color channels (Red, Green, or Blue).

12) Click Close on the Histogram window and then click Scan.

13) In Photoshop, view the histogram to make sure no tones have been clipped.

14) If the image is acceptable, go to Image > Mode and select 8 bits/channel to convert the image to 24-bit.

15) Save the image using the determined filenaming scheme for archival master files. Note that all master files should be saved as TIFF files and should have the embedded ICC profile Adobe RGB 1998.
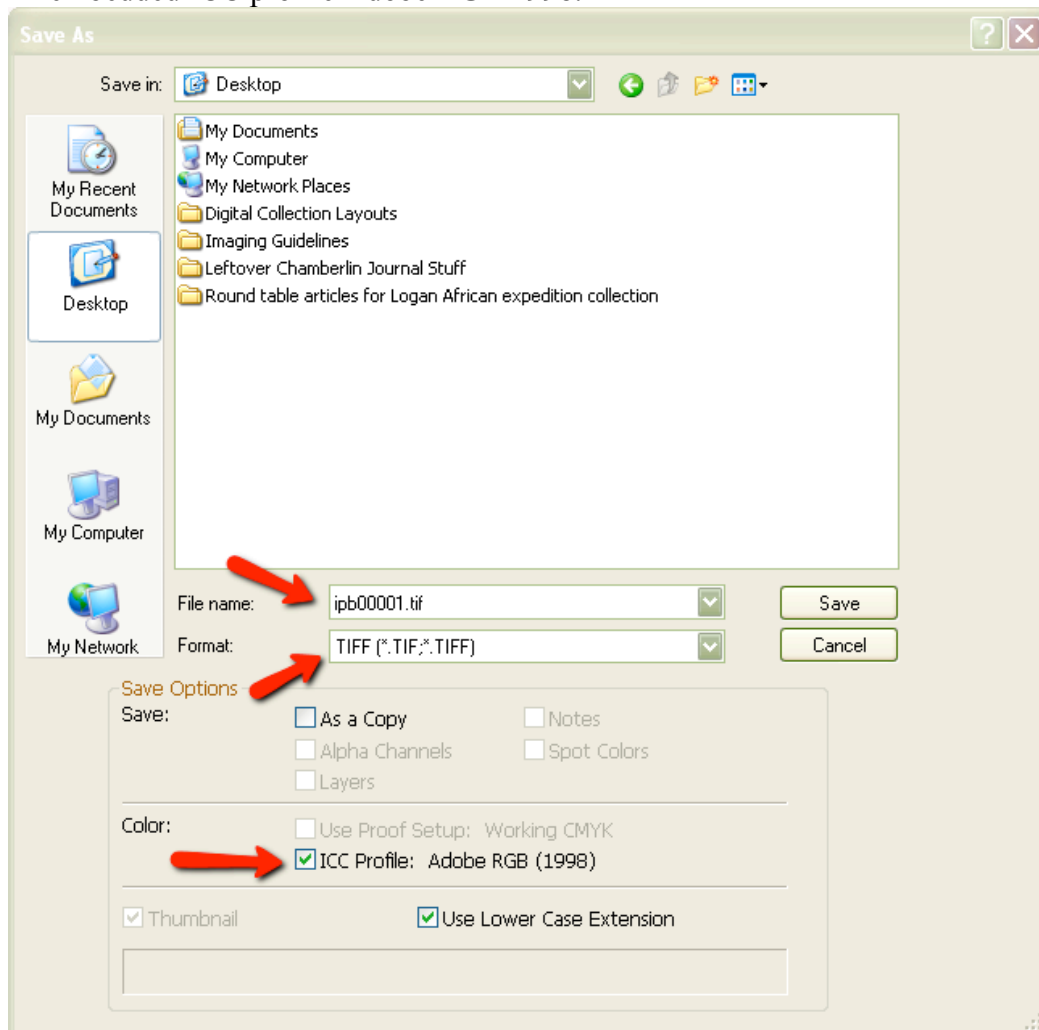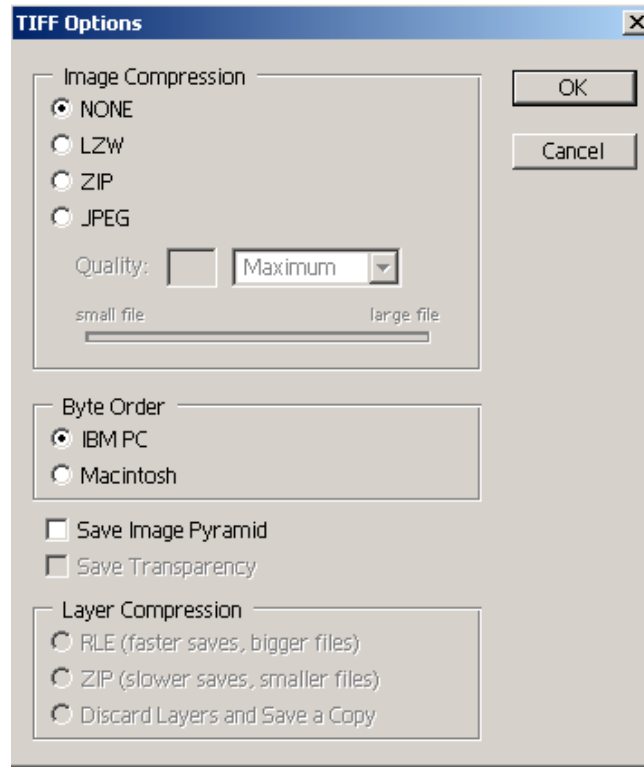
16) Repeat step 2 to return to Epson scan.

17) Adjust the scanning marquee to include only the image without the gray scale or color patches.

18) Open the Histogram. In the Histogram window, adjust the white and black Output arrows so that the black arrow is at 8 and the white is at 247. The Input arrows should be adjusted so that the black and white arrows are set at the end of the end points of the curve. Adjust the mid-tone arrow to improve tone.

19) Click scan.

20) In Photoshop, open the Histogram window and verify that no tones have been clipped. If the Histogram is unacceptable, you may need to go back to Epson, readjust the histogram and rescan the image.

21) Repeat step 14 to convert the image to 24-bit.

22) Save the image using the determined filenaming scheme for service master files. Be sure to save the image as a TIFF file with an embedded ICC profile (Adobe RGB 1998).

REPRESENTING ORIGINAL IMAGE CONDITION – 1 SCAN WITH ADJUSTMENTS IN PHOTOSHOP

1) Follow steps 1-13 above.

2) Save the image using the determined filenaming scheme for archival master files.

3) In Photoshop, crop out the gray scale and color patches.

4) Go to Layer > New Adjustment Layer > Levels. You can now use the histogram to create similar adjustments as in step 18 above. Note that you can hold down the alt key while moving the input arrows to view clipping as you make the adjustment.

5) When you are finished, go to Layer > Flatten image unless you plan to save your adjustment layers.

6) Go to Image > Mode and select 8 bits/channel to convert the image to 24-bit. Then, go to Save As… and rename the file using the determined filenaming scheme for service master files (do NOT click Save as this will overwrite your archival master file).

7) You may now convert the archival master file to 24-bit. Note that doing this will prevent future extensive editing without creating artifacts in the resulting image.

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ADJUSTING FOR FADING AND EXPOSURE

1) Follow steps 16-22 from the first procedure. It is not necessary to include the Kodak gray scale or color patches.