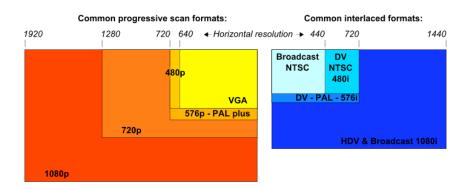
## **Topic: How to Scan Photos (via Macintosh)**

Tags: scan, still, high resolution, hd, final cut, photo, shop, fcp, mac, os, x

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1. When using Final Cut Pro or AVID to edit projects you will find the mediums available for import (all types of images, graphics, & audio files are accepted) can be extremely convenient. However, these items will be conformed and rendered to your project/sequence settings. Therefore, when applying Transform operations on images, like pushing or pulling in/out (also referred as the "Ken Burns Effect"), it is imperative your images have proper resolutions to prevent unnecessary artifacting.

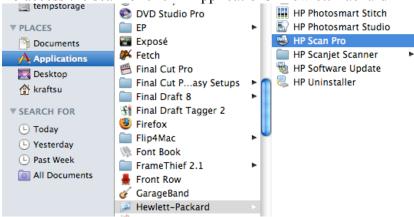
2. Before we begin, let's take a brief moment to understand some terminology on resolution. **DPI**, used primarily by the printing industry, refers to Dots Per Inch which is the method of describing the resolution of an image. The more dots the higher resolution (ex. 72dpi = Web quality, 150dpi = Draft quality, 300dpi = Print quality). With video resolution, quality is measured by the total amount of pixels within a **frame size (the width x the height)**. Therefore, the bigger the frame size the better quality of an image (ex. 320x240 = Web quality, 720x480 = DV NTSC quality, 1920x1080 = High Definition quality). Refer to the following chart to understand how frame size increases amount of pixel information.



3. To acquire and import materials, such as scanned images, into a video project we must *overshoot* our current frame size to account for any operations we may want to apply to the image. My frame size for my project and all of its accompanying footage is 1920x1080.

**Note:** Overshooting an image size (same as frame size) is a precautionary measure. Imagine the digital realm as a big palette of pixels; you can always discard pixels (decreasing frame size) and still maintain best quality. The same is not true in reverse - you cannot easily add pixels (increasing frame size) without serious mathematical estimation(s). The end result is artifacting and the overall quality suffers pretty terribly.

4. To access the scanner click > Applications > Hewlett-Packard > HP Scan Pro

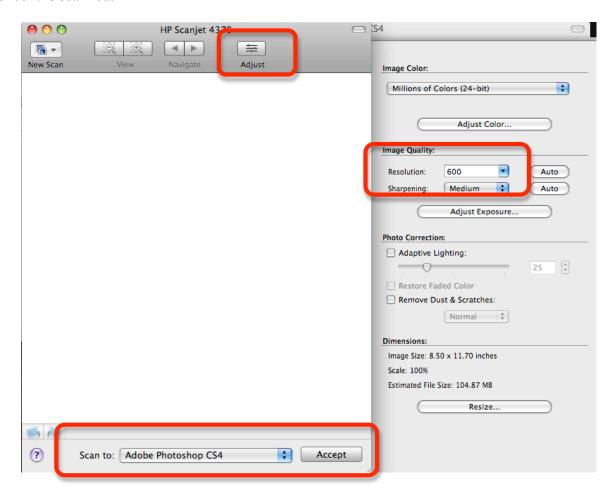


- 5. If a new window did not pop up or you received an error message double-check that your scanner's power cable <u>and</u> USB cable are both firmly plugged in. Open the lid to the scanner and place your photo face-down on the glass flush against one of the corners.
- 6. Click on the Adjust button and set the following settings

Image Color-Millions of Colors (24-bit)

Image Quality-Resolution 600

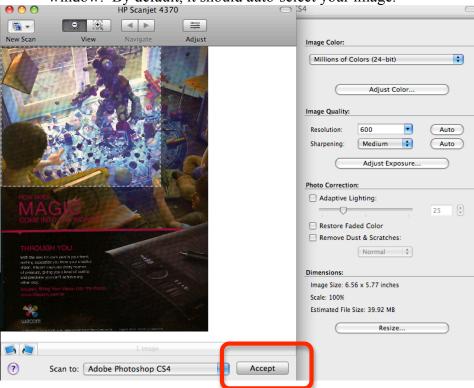
Choose to scan the image to Adobe Photoshop CS4-This will open the file in photoshop once it is scanned.



7. Choose New Scan to start the scanning process-Choose "Let me make a selection area" so the scanning area can be decided unless the image takes up the whole glass area of the scanner.



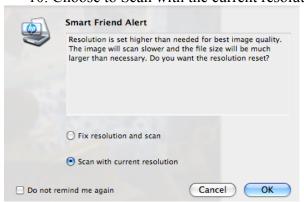
8. In a few moments you will see your photo appear in the preview area of the window. By default, it should auto-select your image.



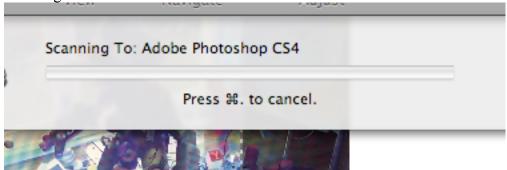
If you prefer to adjust your dimensions in the scanner utility you may use the mouse to adjust the edges of the image (also know as cropping).

9. Click the Accept button to finalize the scan.

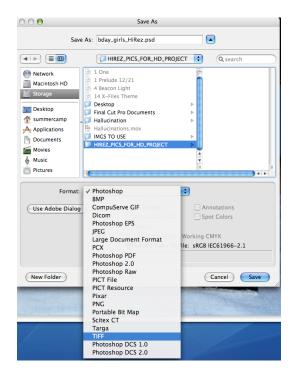
10. Choose to Scan with the current resolution



11. This might take a few minutes.



- 12. The pop-up scanner utility window should close and the image should open in Photoshop. At this point, you can use Photoshop's tools to brush out scratches, adjust color ranges and tones, and much much more. Consult the User Guide for Photoshop to learn more about the various tools the package has to offer.
- 13. When ready to export your file to the editing application click File⇒Save As. A new window will pop-up. Save files in a separate folder to make organization easier. Name the file in the space provided and change the format to TIFF by using the pull down menu.



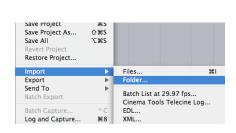
14. The TIFF format (Tagged Image File Format) is a lossless image format which is superior in quality to other more commonly used formats such as JPG, GIF, and PNG. They can get pretty large...so to save them efficiently, select the following when the TIFF Options window pops up and click OK:

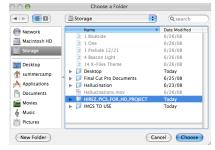
\*Compression = LZW, Pixel Order = Interleaved, Byte Order = Macintosh



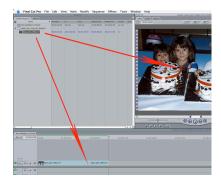
## FINAL CUT PRO WORKFLOW

15. Open up your HD project in FCP by double-clicking on it. Be sure to always check your Scratch Disks and Autosave Vault (click Final Cut Pro⇒System Settings) to ensure they're saving to the proper location. To import a file click File⇒Import⇒Files. If you have multiple images to import and you've been saving them to a specific folder you can choose File⇒Import⇒Folder. Navigate to the folder containing your images and click Choose.





16. The folder appears in your project window and you can just drag & drop the image into your timeline. By default, Final Cut Pro makes all still images 10secs in duration. To shorten/lengthen the duration you can drag & drop the image into the viewer, adjust the In and Out Points to meet your desired duration, and then drop into the timeline. See the FCP User Guide for several other ways to adjust clip/image duration.



17. Your image should appear in the Canvas window. To make operations more apparent in Final Cut I usually click on the wire frame icon in Canvas window and select: • Image+Wireframe •Show Overlays •Show Title Safe These options will show how big your picture really is and will allow you to physically grab and drag your picture to your desire in the Canvas window.



18. Double-click your image in the timeline and your image appears in both the Viewer and Canvas windows. If you click the Motion tab in the Viewer window you can view all sorts of parameters you can animate via keyframes. If you are unfamiliar with keyframing please consult the User Guide for Final Cut Pro for more information.

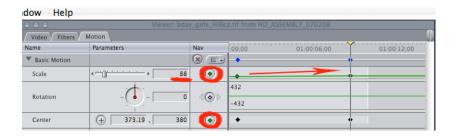


Here we can see our Scale (total frame size) has been automatically reduced to 57% (because we overshot in the scanning process) to accommodate our HD timeline. The Center (X,Y) position has also been adjusted to fit our timeline. To the right of the parameters is a green line for each variable. This is the keyframe editor.

19. By pressing the Insert key frame button I can mark my first scale position at 57.



20. We can increase the size of the image by moving our cursor to the end point of our clip, setting the Scale value to 88, and pressing the Insert key frame button. This will create a "zoom-in" motion effect between the two endpoints. Likewise, we can control the Center (X,Y) position(s) of the image by setting starting and ending keyframes as well.



21. The more you use keyframing and the Motion tab the faster you will become at transforming image properties over duration. The final step to see the "Push-In" effect playback in real time in our time line is to render the effect. You can select Sequence⇒Render All⇒Both to render all effects (be sure to make sure all of the following check marks are selected). Ta-da! Your image zooms-in oh so smoothly! For more information on rendering options consult the Final Cut Pro User Guide.

