15 Photo Tips You'll Love: Scanning Identification, and Metadata
5 Photo Scanning Tips

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Do you have photographs that you want to digitize for either online access or long-term preservation? Learn five tips to help you scan your family's photos and uncover the mysteries of things such as resolution, bit depth, file formats, and more.

1. What type of scanning equipment should I use to digitize my photographs?
    a. Good = phone cameras/apps
        i. Newer smartphones generally have a high end camera that can be used to take a photo of a photo
        ii. These images will usually be good enough quality to share on the web, but often do not include enough high quality to reprint or to consider them archival quality
    b. Better = low end scanners
        i. Scanners can be purchased at a relatively low cost at any store that sales electronics.
        ii. Before purchasing one, make sure that it has the features you will need (e.g. can it only scan print photographs, or also negatives?; does it only include a few settings options or do you have full control of the scan settings?)
    c. Best = high end scanners
        i. High end scanners can cost anywhere for several hundred to several thousand dollars. Are the additional features and quality worth the extra cost for your particular projects?
        ii. You can often access high end scanners at places such as family history centers, public or academic libraries, etc.

2. What is resolution and why does it matter?
    a. DPI vs. PPI
        i. DPI = dots per inch; used to describe the number of dots per inch of a printed document
        ii. PPI = pixels per inch; used to describe the number of square pixels per inch on a digital screen or of a scanned image
    b. For high quality scans, use a minimum of 300 PPI, with 600 PPI being ideal when possible
    c. For images to share on the web, 72 PPI is generally sufficient

3. What is bit depth and how does this affect the quality of the image?
    a. The number of bits used to represent the color of a single pixel of an image
    b. 1-bit = bitonal; only black and white
    c. 8-bit = generally grayscale; 256 shades of gray between black and white
    d. 24-bit = true color; 16,777,216 colors; 8 bits each of red, green, and blue (RGB)
    e. 30/36/48-bit = deep color; billions/trillions of colors (the human eye can only detect around 10 million colors)

4. How should I name my files when scanning?
    a. Use file names that will help you in the future to know what the photos are.
        i. Do not use spaces since not all electronic devices will recognize spaces or treat them the same.
        ii. Use only alphanumeric characters and a few special characters such as a hyphen - or underscore _
        iii. Use dates at the beginning of the filename so they sort in order, using year, month, day format (e.g., 2019-03-01)
        iv. Use some descriptive text to help describe the photo (e.g., YvonneOlsonScrapbook)
        v. Use a zero-padded sequential number at the end when scanning many photographs that could have the same description (e.g., 1950-07-19_YvonneOlsonScrapbook_0001.tif)

5. What file format should I use to scan my photographs?

	TIFF	JPEG
Pros	● Standard format that can work with all imaging programs ● No compression ● Quality doesn't change when editing	● Smaller file size ● Easy to share ● Most cameras/phones use this format
Cons	● Large file size ● Slow to open on devices ● Not easy to share online	● Lossy compression ● Quality loss when editing
Size of 300 dpi 4x6 photo	6.2 MB	1-2 MB
Size of 600 dpi 8x10 photo	82.4 MB	9-15 MB