

Marriott Library: Digitization Best Practices: Digitizing Film (Slides, transparencies, positives and negatives)

STANDARD 35MM SLIDES AND NEGATIVES

We recommend using a Nikon Super Coolscan 5000 to scan standard size 35mm slide and negative film. The optical resolution for this scanner is 4000 ppi. This hardware also allows for direct scanning of the film without glass interference. Nikon has ceased manufacturing these scanners, however, they can be purchased used. If a Nikon cannot be purchased, a secondary option is to use an Epson Perfection V700 Photo Scanner which allows for scanning up to 6400 ppi in their provided film holders, although with glass interference the scans may pick up scratches and dust from the scanner bed.

- **Software** - When scanning with our Nikon Super Coolscan 5000, we use VueScan software, but Silverfast software may be used as well. (Nikon Scan is no longer supported by newer computer operating systems.) Epson Scan software is used when scanning with our Epson Perfection V700 Photo scanner.
- **Settings** – We recommend scanning between 5,000 and 6,000 pixels on the long side of the image which is based on the Smithsonian standard practices. Scan using 24-bit RGB regardless of whether the image was photographed in color or black and white. More gray values will be captured when using 24-bit RGB. We use Digital ICE software set on its lowest level during the scanning process to remove dust and scratches. It is important to note that for best resolution, the ppi setting should always be an integer of the maximum scanning capability or optical resolution of the scanner. For example, if the maximum optical resolution of your scanner is 6400 ppi, the resolution setting should be 6400, 3200, 1600, 1280, 800, 400 ppi and so on. Jagged edges may occur if you use other resolutions.
- **Format** – We recommend saving all scans as uncompressed TIFFs for long-term storage. The uncompressed TIFF format is the current accepted standard within the digital preservation community due to its well-supported and documented lifespan as well as the fact that it is not a proprietary format. JPEG and PDF derivatives can be created from the TIFFs for optimal web viewing.

SLIDE, TRANSPARENCY, POSITIVE AND NEGATIVE FILM LARGER THAN 35MM

We recommend using the Epson Perfection V700 Photo Scanner which has a maximum scan area of 8.5 x 11.7 inches for any film larger than 35mm. If possible, use the provided film holders to get a maximum resolution of 6400 ppi. If the holders are not used, the maximum resolution is 4800 ppi.

- **Settings** – We recommend scanning between 5,000 and 6,000 pixels on the long side of the image which is based on the Smithsonian standard practices. Scan using 24-bit RGB regardless of whether the image was photographed in color or black and white. More gray

values will be captured when using 24-bit RGB. Digital ICE software is not available for film larger than 35mm. We use Photoshop CS6 to post process images if needed.

- Format - We recommend saving all scans as uncompressed TIFFs for long-term storage. The uncompressed TIFF format is the current accepted standard within the digital preservation community due to its well-supported and documented lifespan as well as the fact that it is not a proprietary format. JPEG and PDF derivatives can be created from the TIFFs for optimal web viewing.