

Marriott Library: Digitization Best Practices: Digitizing reflective images (Photographs, small maps, paper documents, etc.)

AVERAGE SIZED REFLECTIVE MEDIA

We recommend using an Epson Expression 10000XL Photo/Graphics Scanner to scan average sized reflective media such as photographs, small maps, paper documents, etc. The optical resolution for this scanner is 2400 ppi. It provides a maximum scan area of 12.2 x 17.2 inches. The software allows for selection and scanning of multiple images simultaneously. The newest version of this scanner is the Epson Expression 11000XL Photo Scanner.

- Settings – For long-term preservation, our recommendation is to scan at a minimum of 600 ppi based on the Smithsonian Institution’s digitization standard. Higher settings are used on smaller and detailed originals, depending on the importance of the original and future printing resolution requirements.
- 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.

LARGE SIZED AND LOOSE SHEET REFLECTIVE MEDIA

We recommend using the Colortrac SmartLf GxT 42 for scanning large-sized and loose sheet reflective media. This scanner provides fast, high-quality scans of large-format photographs, maps, posters and other documents that require a wide color gamut and high dynamic range. It has a 42 inch maximum image width and 96 inch image length with a 1200 maximum dpi and 48-bit RGB. The software will process at a natural 600 ppi, but can interpolate up to 2400 ppi.

- Settings - For long-term preservation, our recommendation is to scan at a minimum of 600 ppi based on the Smithsonian Institution’s digitization standard.
- 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.

LARGE SIZED BOUND VOLUMES (OVER 11 X 14 INCHES)

We recommend using a Hasselblad H2D Digital Camera for scanning large-sized bound volumes (over 11 x 14 inches). This high-end camera has Hasselblad HC lenses with integral leaf shutter,

F2.8 aperture, 32s-1/800s shutter speed, built-in flash, 90-degree reflex viewfinder with diopter adjustment, 4080 x 5440 pixel image size, and 50-400 ISO ratings.

- Settings – We typically set the aperture at F-16 for a wide depth of field. The ISO is set at 200, and the shutter speed between 1/4s and 1/15s. We use Adobe Lightroom software to capture and process the images. We scan at 400 ppi which saves file space while also allowing a direct one to one printing aspect ratio quality of 300 dpi 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.

AVERAGE SIZED BOUND VOLUMES (UNDER 11 X 14 INCHES)

We recommend using a Kabis III Book Scanner for average sized bound volumes (under 11 x 14 inches). The 110 degree cradle capability is optimal for low stress, gentle book positioning including fragile and rare books. The system includes two 21.1 megapixel Canon Cameras capable of 325, 400, 500 or 600 ppi (book size and lens dependent). It can handle up to a 4 inch binding. Minimum page size 4.5 x 7 inches and a maximum of 11 x 14 inches.

- Settings – We capture using a fluorescent white balance, 1/80s shutter speed, a F-9 aperture, and an ISO of 200. We scan at 400 ppi which saves file space while also allowing a direct one to one printing aspect ratio quality of 300 dpi if needed. Limb software is used to process the images and output multiple file formats.
- Format - We recommend saving all scans to 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.