

New York Heritage (Newyorkheritage.org)
Scanning Equipment Guide

The goal for scanned images of historical material is to clearly and accurately represent a physical object in digital form. In other words, it is more important to achieve the contrast and color of the object as it currently is than to perform extensive color correction in an attempt to show the object as it may have been.

Equipment (hardware) you may need for this project includes:

- **Monitor** – Ideally you will have a dedicated monitor designed for working with images. This monitor should be color calibrated on a regular basis. You can either use online monitor calibration test patterns to adjust brightness, contrast and color, or you may choose to invest in special calibration software and hardware.
- **Internet Connectivity** – In order to use the CONTENTdm software to upload your images, you must have an Internet connection. The speed of your connection will greatly affect how fast you are able to work.
- **Flatbed Scanner or Book Scanner** -- If your collection is comprised of letters, newspaper clippings and small photographs, a flatbed scanner may be the best option. Flatbed scanners provide quality scans of two-dimensional objects that fit on the surface of the scanner; they require no external studio lighting; most fit on a table top; and they can easily be used by someone with only a basic understanding of the digitization process. If you are scanning complete books, a dedicated book scanner may be a better choice. Book scanners are generally faster than flatbed scanners and are specially equipped to deal with book binding issues.
- **Digital Camera and Copystand**-- If you have a collection that includes oversized materials, detailed maps, original art, or 3-D items, you will need a digital camera and a copystand. Digital cameras can be used to capture any object, two- or three-dimensional, small or large. Keep in mind that as image capture equipment becomes more complex and sophisticated, a higher skill level may be required. Overhead digital camera setups usually include a camera, a copystand for holding the camera (adjustable table mounted tripod – can be purchased or home-made), a grey card to set white balance, a flat working surface, some small beanbags for holding paper objects flat, and two tabletop work lights (one on each side for even lighting). It is best to select a digital SLR with a good macro setting and a built-in timer (to reduce blur that can result from manually pressing the capture button).

We recommend purchasing scanners and cameras with a high optical density. For scanners, this high optical density is sometimes called dMax. Equipment with a higher dMax is able to capture deeper shadows. A higher dMax is particularly critical for quality capture of transparencies, negatives and slides that require an external light source to be captured. To reduce the amount of time that scanned materials are exposed to light and to work efficiently, make sure your equipment can transmit data at a reasonable speed. High speed data transfer standards typically use Universal Serial Bus (USB) 2.0, 2.1 or 3.0; Small Computer Serial Interface (SCSI) cards and cables; or IEEE 1394 Firewire. Avoid equipment that uses slower methods such as parallel or serial ports or USB 1.0.