

These slides use resources from *Remote Capture: Digitising Documentary Heritage in Challenging Locations*. This book was created by the Endangered Archives Programme to act as a practical guide for those about to start on a digitisation project.

www.eap.bl.uk/Remote-Capture

[Free to download]

REMOTE CAPTURE

Digitising Documentary Heritage
in Challenging Locations



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Digital Appendices

Available online at <https://doi.org/10.11647/OBP.0138.11>

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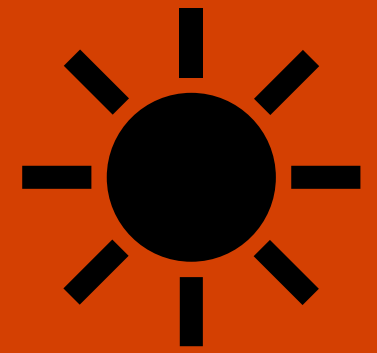


The importance of preparation

Whatever equipment you choose to purchase, it is absolutely essential that you get to know your copy set-up and are fully conversant with the technology prior to any field trip. This is true whether you are using a scanner or a digital camera with lenses, and whether you are using available light, supplementary lighting or flash. With camera technology and with flash, this learning process may take several days, especially if you have not used a sophisticated digital camera before. You also need to be fully conversant with your data management system. Digital cameras and scanners are complex technologies and operating processes need to be learned well in advance of undertaking digitisation. This is especially true for projects in remote locations.

Remote Capture, p.42

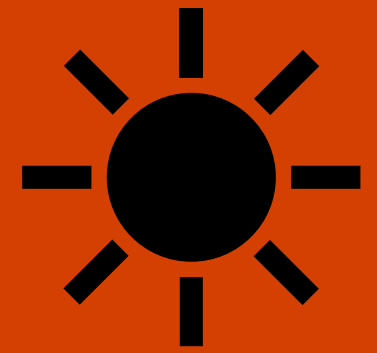
Which light source?



Advantages of available light

- Daylight offers a free light source independent of electricity.
- Available light sources offer continuous light that is always visible (unlike flash), so surface reflections can be seen through the camera and controlled.

Which light source?



Disadvantages of available light

- The colour temperature of available light varies significantly.
- Care has to be taken with possible mixed lighting sources.
- Working outdoors potentially exposes archive material to dust, rain, wind and sunlight.

Which light source?



Advantages of electric lights

- A continuous light source that is always visible (unlike flash), so surface reflections can be seen through the camera and controlled.
- Dedicated LED lighting kits are available for some copy stands.

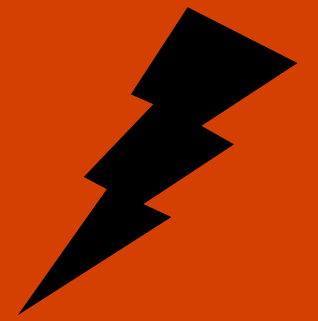
Which light source?



Disadvantages of electric lights

- Care has to be taken with possible mixed lighting sources.
- Lights are dependent on an electricity supply.
- Bright non-LED lights can get very hot.

Which light source?



Advantages of flash

Once mastered, a twin flash copy set-up offers:

- A very bright light source.
- Very sharp images with less risk of visible camera shake.
- A relatively portable lighting kit.
- No dependency on electricity (unless using rechargeable batteries).
- Flash overrides available light and eliminates most colour temperature problems from mixed lighting sources.

Which light source?



Disadvantages of flash

- Complex to set up and master.
- Expensive technology.
- Dependent on batteries.

Copy stand or tripod?



Advantages of copy stands

- Designed specifically for copying.
- Easy to set up with the camera properly squared up.
- More stable and rigid than a tripod.

Disadvantages of copy stands

- Most copy stands are not very portable. camera pointing downwards.

Copy stand or tripod?



Advantages of tripods

- A portable camera support that is easily transported and can be set up to photograph small and large items.
- Good for projects copying in multiple remote locations.

Disadvantages of tripods

- Harder to set up with the camera square.
- Awkward to use or unstable when copying with the camera pointing downwards.

Gloves or no gloves?



- Hands should be clean, dry & free from grease. Oils from balm can cause stains if transferred to items.
- Wearing gloves, especially cotton ones, reduces manual dexterity and the sense of touch, increasing the tendency to 'grab' items, thus increasing the risk of damage. Gloves can pick up dirt and transfer it to other items and to imaging devices, which often makes washing hands more effective.
- Gloves should be used when handling certain materials, like lead seals and metal objects, or when touching varnished surfaces, as in the case of globes. Gloves (nitrile gloves are advisable) are sometimes used when viewing photographs that, whenever possible, should be housed in protective sleeves or mounts to avoid direct contact with the fingers. Nitrile gloves are also recommended when handling negatives and glass plates.
- The British Library's Medieval manuscripts blog hosts a useful post that discusses this more fully and includes links to a video and further advice:
<http://blogs.bl.uk/digitisedmanuscripts/2011/08/white-gloves-or-not-whitegloves.html>



Key things to remember when using a camera

- Always shoot in RAW at the maximum size. Do not shoot only in JPEG format.
- Set the camera to Av or Manual.
- ISO 100–200 is the ideal. Do not exceed ISO 400.
- Use a greyscale/colour checker

Setting up the camera



Settings

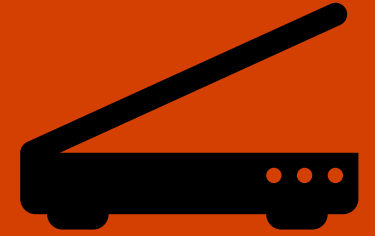
- Set the camera to shoot in RAW format (NOT sRAW, mRAW or JPEG).
- Set the colour space to sRGB.
- Set picture style to Neutral.
- Switch on the highlight alert feature to indicate any overexposed areas.
- Switch on the electronic grid to aid composition and squaring up the image (or replace the focussing screen with a grid screen).

Camera or scanner?

Both cameras and scanners have particular advantages and disadvantages.

It is therefore essential to get a clear sense of the nature of the material you wish to copy, particularly its physical dimensions and character, together with the environment in which the copying will take place, before you make this choice and purchase equipment.

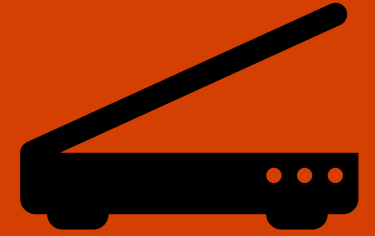
Camera or scanner?



Advantages of scanners

- Flatbed scanners keep simple documents completely flat and illuminate them internally. They therefore avoid the problems of aligning documents and the potential distortion from using wide-angle lenses with cameras. Used correctly, the scanner produces images that are accurate facsimiles of the originals.
- Scanners can save files direct to TIFF format and can easily be set up to save files using the final EAP file names, thereby reducing the post-production workload.

Camera or scanner?



Disadvantages of scanners

- Scanners have limitations on the maximum size of document they can copy.
- Scanners that will work with documents larger than A3 (29.7 x 42.0cm) are extremely expensive, very large and are not portable.
- Scanners are only appropriate in situations with a reliable electricity supply.
- Using scanners involves handling documents, as well as contact between the page and scanning platen. This is not always appropriate from a conservation standpoint, above all with bound materials.

Camera or scanner?



Advantages of digital cameras

- Cameras are much faster to use than scanners when copying large numbers of documents of a similar size (pages of an unbound book or photographs of a standard size, for example).
- Cameras run off rechargeable batteries and are not directly dependent on electricity or connection to a computer, so are better suited to working in situations where electricity supplies are unpredictable. (Batteries need to be recharged, however, so some access to an electricity supply is essential.)

Camera or scanner?



Disadvantages of digital cameras

- Digital cameras are significantly more complex to use than most scanners, so the learning curve is much steeper.
- Many cameras do not record in TIFF format, so files need to be exported from RAW to TIFF. Files will also need to be renamed during this process (see Chapter 6).
- Cameras have to be set up carefully to ensure that the camera back is parallel to the copying surface, so that the documents being copied are squared up and not distorted in the process. This is particularly true when using wideangle lenses.