



HomePLACE DigiKit

User Guide

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Preparing for a Scanning Project

Planning before you scan

Before you begin scanning, consider what kinds of materials you want to digitize. The following list of questions is not exhaustive, but answering them thoughtfully and thoroughly will help you plan your project and anticipate problems before they happen.

- What kinds of originals do you want to digitize?
- What resources (people, expertise, materials, and equipment) are available for this project?
- How should you care for them during the process?
 - Will you need any special equipment to safely handle the items you need to digitize, such as nitrile gloves for handling photographic prints or negatives? See *Care and Handling of Materials for Digitization* for more information.
- Is there any conservation work or rehousing that needs to be done on the items you are working with?
 - Digitization can be a good opportunity for conservation work, since materials must be taken out of storage and handled. Think about the time and resources that might be needed if you decide to take any actions to stabilize materials and plan your digitization timeline accordingly.
- What equipment do you want to use?
 - Most flat paper materials and some bound materials can be safely captured using the included Epson 11000XL flatbed scanner, but oversized materials and those with fragile or tight bindings that cannot be opened flat will need to be digitized using some other method, such as a planetary (overhead) scanner or a digital camera. Contact HomePLACE for more information regarding the availability of this type of equipment at the GPLS offices.
 - Transmissive materials such as film strips or sheets (negative or positive) and slides can be digitized using a flatbed scanner with a transparency adapter/lighting unit and film holders. Three-dimensional artifacts, memorabilia, and works of art will need to be photographed with a digital camera of sufficient resolution to get a high quality image.
- At what resolution will you capture your images? Will you capture in color, grayscale, or bitonal? What bit depth will you use?
- What kind of files will you create?
 - In most cases you should create a high resolution, uncompressed master file and then use this file to create any other files you need for presentation.
- How will you name the files created?
- How will you safely store the files created during the conversion project and after digitization is completed?



Resources

There are many good resources for comprehensive digital project planning available online. Some that you may want to consult include the LYRISIS guide, *Getting Started with Digital Projects*, available at: <https://www.lyrasis.org/LYRISIS%20Digital/Pages/Preservation%20Services/Resources%20and%20Publications/Digital%20Toolbox/Getting-Started.aspx>



Care and Handling of Materials for Digitization

Assessing the materials in the collection you plan to digitize

- What kinds of items does the collection contain?
- Are they basically the same type or do they vary?

Determining how to digitize each type of material

- Given the nature and condition of the materials, is it possible to scan them safely using the equipment you have?
- Do they require special care or handling procedures?
- Will you capture fronts and backs of all materials?
- Will you scan covers, endpapers, or blank pages in bound material?

Flatbed scanners are the most commonly used method of digital conversion for relatively small digital projects. They are best suited for digitizing unbound flat paper materials and photographs. They may also be used to capture slides and film if the scanner has a transparency adapter and is capable of scanning at a high enough resolution to make a good digital surrogate.

Use of a flatbed scanner can damage fragile bound materials or any bound items that cannot open flat. If you are working with fragile or tightly bound volumes, it will be safer for the materials to use an overhead camera or planetary scanner.

Most importantly, keep a written record of these decisions so that the same questions do not have to be considered repeatedly and so that your images will be consistent.

Evaluating your work area

1. It should be clean and clutter free. You need a stable surface large enough to safely hold the materials you will be working with. Your scanner and materials should be close enough that you can move comfortably between the two.
2. All precautions for handling archival collections should be observed, including but not limited to keeping your hands clean and dry and keeping food and drink away from your workspace while handling documents.
3. Remove only one folder of items from a box at a time, and mark your place using a strip of acid-free paper. Return the folders to their containers if you need to step away from scanning. Use pencils and acid-free paper strips to mark progress in boxes or folders; never use pens, markers



or adhesive notes inside archival folders or boxes because ink and adhesive can migrate over time and damage materials.

4. If you are scanning any photographic prints or other materials that are fingerprint-sensitive, you will need to use clean, disposable nitrile gloves for safe handling.



Resources

For more guidance on safe handling of materials and selection of methods for digitization, consult these sources:

Library of Congress National Digital Library Program and the Conservation Division Session on Care and Handling of Library Materials for Digital Scanning In-House Course Handout

<http://memory.loc.gov/ammem/techdocs/conserv83199b.html>

National Archives Preservation Guidelines for Vendors Handling Records and Historical Materials

<https://www.archives.gov/preservation/technical/vendor-training.html>

Library of Congress Collections Care

<https://www.loc.gov/preservation/care/index.html>

Library of Congress Preservation Guidelines for Digitizing Library Materials

<https://www.loc.gov/preservation/care/scan.html>

Library of Congress Care, Handling and Storage of Photographs

<https://www.loc.gov/preservation/care/photo.html>



Setting Up a Scanning Workstation

Preparing your workspace

Prior to beginning a scanning project, create a working space that will allow you to handle materials safely. Make sure there is no unnecessary clutter in your working area, as this can make it more difficult to handle materials safely. You should always keep food and drinks away from the work area.

You will need a table large enough to accommodate the following DigiKit contents:

- The Epson 11000XL scanner (25.8" W x 18" D x 6.2" H)
- HP laptop
- External hard drive
- Materials to be digitized

Alternately, you can also use one table to accommodate the scanner and workstation, and a separate table for holding the items to be scanned.

Suggested supplies for your work area

- Kimwipes
- Glass cleaner
- Microfiber dusting cloth
- Acid-free paper to use as markers within folders
- Pencils for writing notes on acid-free paper strips

Additional items for scanning film or slides

- Disposable nitrile gloves
- Soft, non-scratch anti-static dust cloth
- Photographic dust brush
- Manual air blower for dust removal (not canned air!)



Unboxing the DigiKit equipment

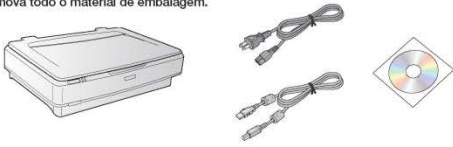
1. Enter the code to open the combination lock. You should have received the lock code upon confirmation of equipment receipt with HomePLACE. If you have not received the lock code, contact the HomePLACE Director.
2. Unlock the Pelican case. There are six latches securing the lid: two latches on each of three sides. Pull the latch up until it releases with a 'pop.'
3. Lift the lid open and remove the top layer of protective black foam.
4. You will need two people to remove the scanner from the Pelican case. Gently reach your fingers down between the protective black foam and the narrow end of the scanner. The second person should repeat on their end. Carefully lift the scanner up and out of the Pelican case and gently rest it on your work surface.
 - ! **CAUTION:** At 29lbs, the scanner is unexpectedly heavy. Use care when removing the scanner from the Pelican case.
5. Reach inside the Pelican case and remove the bottom layer of black protective foam (on which the scanner was sitting) to reveal the HP laptop. Carefully remove the laptop from the case and gently rest it on your work surface.
6. Remove the laptop power adapter.
7. Remove the scanner power adapter, connecting cable, and
8. Remove the external hard drive, power adapter, and connecting cable.

Setting up the DigiKit equipment

NOTE: The Epson scanning software is already installed on the laptop, so you may skip the first part of Step 2 in the diagram below.

1 Unpack • Desembale el escáner • Desembale o scanner

Remove all packing materials.
Retire todo el material de embalaje.
Remova todo o material de embalagem.



If you have the Photo version of the scanner, the following items are also included.
Si tiene el modelo Photo del escáner, los siguientes artículos también están incluidos.
Se você tiver a versão Photo deste scanner, os itens a seguir também vêm incluídos.



2 Install software • Instale el software • Instale o software



Do not connect the USB cable yet.
No conecte el cable USB todavía.
Ainda não conecte o cabo USB.



English



Español



Português

Select English, then select your product and follow the on-screen instructions. Then connect the USB cable.

Seleccione Español, luego seleccione su producto y siga las instrucciones que aparezcan en pantalla. Después conecte el cable USB.

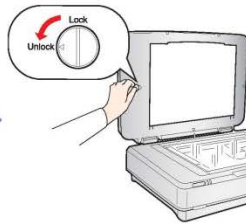
Selecione Português e depois seleccione o seu produto e siga as instruções na tela. Depois conecte o cabo USB.

3 Install cover • Instale la tapa • Instale a tampa

Graphic Arts model
Modelo Graphic Arts
Versão Graphic Arts



Photo model
Modelo Photo
Versão Photo



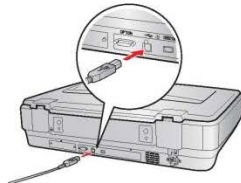
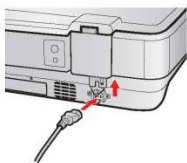
Use a coin to turn the transportation lock to the **Unlock** position.

Utilice una moneda para girar el bloqueo de transporte a la posición desbloqueada (**Unlock**).

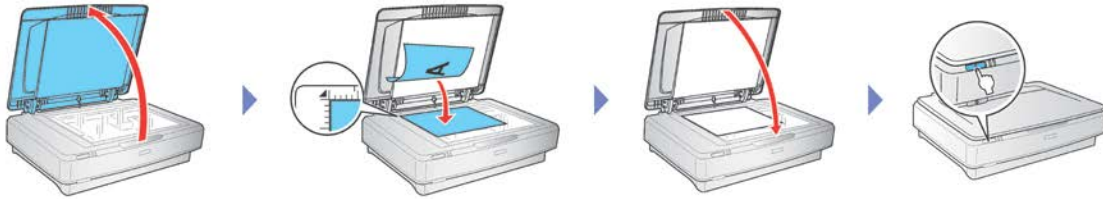
Use uma moeda para girar a trava de transporte para a posição desbloqueada (**Unlock**).



4 Turn on scanner • Encienda el escáner • Ligue o scanner



5 Scan a document • Escanee un documento • Escaneie um documento



English

Español

Português

? Help • Ayuda • Ajuda

Scanner software help • Utilidad de ayuda del software del escáner • Ajuda do software do scanner

Click the **Help** button on your scanner software screen.

Haga clic en el botón **Ayuda** en la pantalla del software del escáner.

Clique no botão **Ajuda** na tela do software do scanner.

User's Guide • Manual del usuario • Manual do usuário

Double-click the icon on your desktop.

Haga doble clic en el icono situado en el escritorio de su computadora.

Clique duas vezes no ícone na sua área de trabalho.



English



Español



Português

Epson technical support • Soporte técnico de Epson • Suporte técnico da Epson

Internet Support

Visit epson.com/support (US) or epson.ca/support (Canada) where you can download drivers, view manuals, get FAQs, or e-mail Epson.

Speak to a support representative

(562) 276-4382 (US) or (905) 709-3839 (Canada), 6 AM to 8 PM, Pacific Time, Monday through Friday, and 7 AM to 4 PM Saturday.

Days and hours of support are subject to change without prior notice. Toll or long distance charges may apply.

Internet

global.latin.epson.com/Soporte (Español) o/ou global.latin.epson.com/Suporte (Português)

Hable con un representante de soporte técnico

Argentina	(54 11) 5167-0300 800-288-37766	México	01-800-087-1080 (52 55) 1323-2052
Bolivia*	800-100-116	México, D.F.	(52 55) 1323-2052
Chile	(56 2) 2484-3400	Nicaragua*	00-1-800-226-0368
Colombia	018000-915235	Panamá*	00-800-052-1376
Bogotá	(57 1) 523-5000	Paraguay	009-800-521-0019
Costa Rica	800-377-6627	Perú	0800-10 226
Ecuador*	1-800-000-044	Lima	(51 1) 418-0210
El Salvador*	800-6570	República Dominicana*	1-888-760-0068
Guatemala*	1-800-835-0358	Uruguay	00040-5210067
Honduras**	800-0122 Código NIP: 8320	Venezuela	(58 212) 240-1111

*Para llamar desde teléfonos móviles a estos números gratuitos, póngase en contacto con su operador telefónico local.

**Marque los primeros 7 dígitos, espere el mensaje de respuesta y luego ingrese el código NIP.

Si su país no figura en la lista, comuníquese con la oficina de ventas de Epson más cercana. Puede incurrir en costos de llamada interurbana o de larga distancia.

Fale com um representante de suporte técnico

Brasil	
Capitais e regiões metropolitanas	4003-0376
Demais regiões	0800-880-0094

Tarifas de longa distância ou outras taxas podem incidir sobre a chamada.



Configuring Your Scanner

This walk-through references the Epson 10000XL included in the HomePLACE DigiKits, but the process is similar on most Epson flatbed scanners.

Determine your capture specifications, scanner settings, and master file type before you begin scanning and be sure to document these choices to ensure consistency throughout the project.

When considering the question of resolution there is no one right answer, but for most paper materials between 300 and 400 pixels per inch will create a good digital image that can be reused in many contexts. For small or highly detailed objects, or for small format film, you will need to scan at a higher resolution.

Whatever resolution you choose for your project, stay within the scanner’s capacity for optical resolution. This means the amount of information the scanner can capture using its hardware, not the higher number of pixels it can create using software adjustments. This software enabled resolution is known as “interpolated resolution” and is often a dramatically higher number than the scanner’s optical resolution. You may need to use the descreening setting on your scanner to prevent moiré patterns on halftone images used to reproduce art or photographs in printed documents, but be aware this may lead to a loss of sharpness.

Consult the [scanner manual](#) to learn the technical specifications of your equipment.

Master files should be saved using an uncompressed format (such as .tif) to prevent compression artifacts. Smaller files for online presentation such as JPEGs (.jpg or .jpeg) can be created from these master files.

Digital Library of Georgia baseline scanning specifications

- 400 ppi
- 24 bit color
- uncompressed Tagged Image File Format with .tif extension

Scanning and ‘Save’ settings

1. Create a working folder where you will save your scans.
2. Open the Epson Scan software.
3. Select Professional Mode from the dropdown menu at the top of the window. Configure your chosen settings for document type, resolution, color and file format.
 - a. In this example, we will be using the following settings:
 - i. Reflective document
 - ii. 400 ppi
 - iii. 24 bit color
 - iv. uncompressed Tagged Image File Format with .tif extension



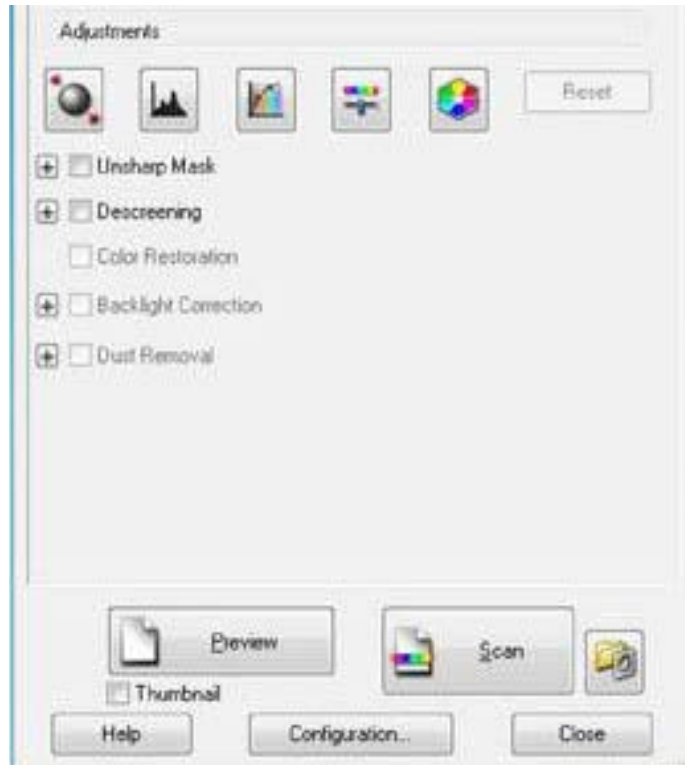
4. Turn off the auto exposure control. In the Epson Scan software this is indicated in the main control window by the circle and arrow icon under *Adjustments*.
 - a. When the arrows are close to the circle, auto-exposure is on. When they are away from the circle, it is off. Note that it is turned on by default.
 - b. If you are scanning materials that are not on a white background (like older manuscript materials) use of the automatic exposure setting can lead to overly bright highlights and a loss of detail. Make sure sharpening and descreening are not checked unless you have made a choice to use these settings.



Select **Professional Mode** to see all options.

For historical document scanning, make sure **Auto Exposure Control** is off (red arrows away from the circle). Instructions on how to change the default setting are in the Configuration section of this document.

5. Click the 'File' settings button (folder icon).

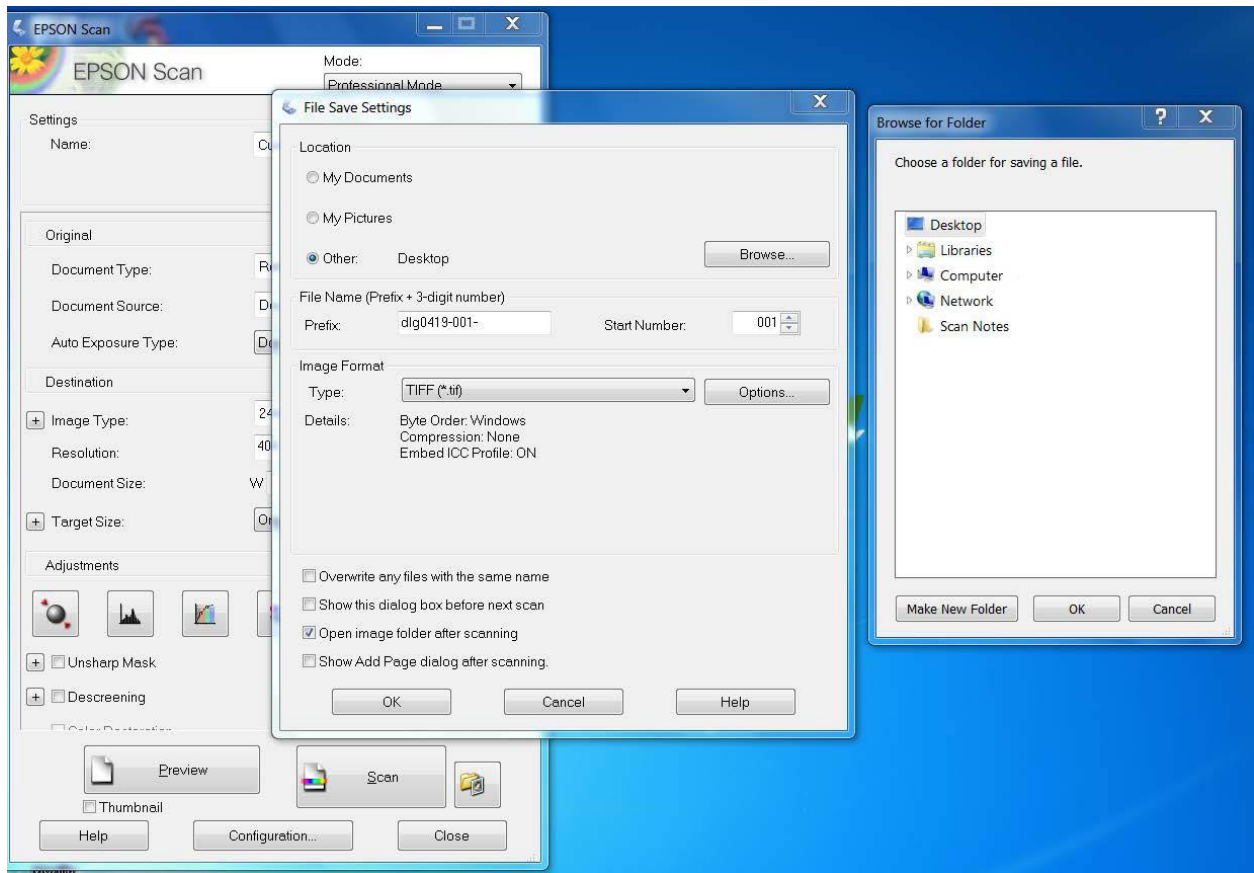


Click to select **File Save Settings**, including save location, file settings, and file naming rules.

6. Set the Location to 'Other.' Click the 'Browse' button to browse for the folder where you want to save your scans.
 - a. Under 'File Name,' type the prefix you wish to use for your filenames. The last number (Start Number) will increment as you scan. When you need to change the file name, open this screen to edit the base name and reset the scan counter.
 - b. **NOTE:** Make sure that everyone creating scans understands the naming convention in use and that they have a clear idea of how it relates to the organization of the collection being worked with. If identifiers are pre-assigned, be sure the resulting files are named correctly to correspond. Proper application of naming allows images and metadata to be associated correctly. In a large collection, improperly named files can be as good as lost.
7. Make sure 'Image Format' is set to TIFF (*.tif).
8. Click the 'Options' button to check that details are set to:
 - a. Byte Order: Windows
 - b. Compression: None
 - c. Embed ICC Profile: ON.
9. To prevent accidentally saving over an image, uncheck "Overwrite any files with the same name" unless you are sure you want to overwrite files.

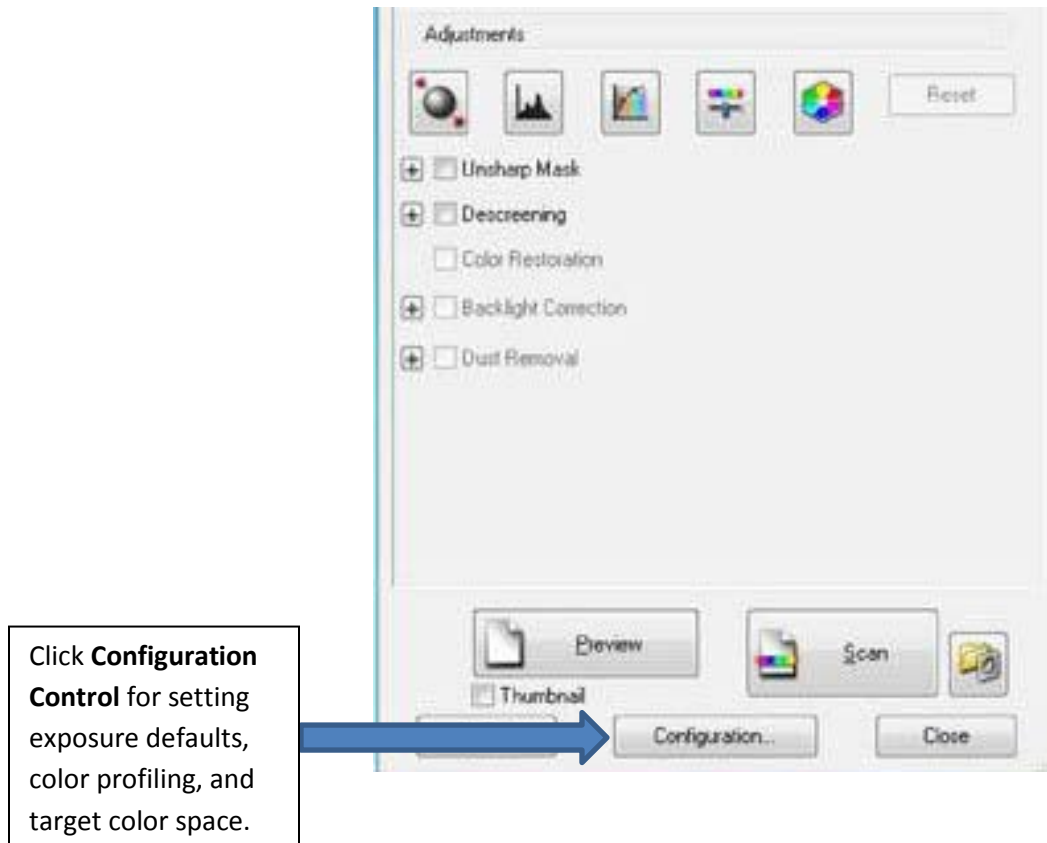
10. Uncheck “Show Add Page dialog after scanning.”

11. When you are finished adjusting your settings, click ‘OK’ to save them.



Configuration settings

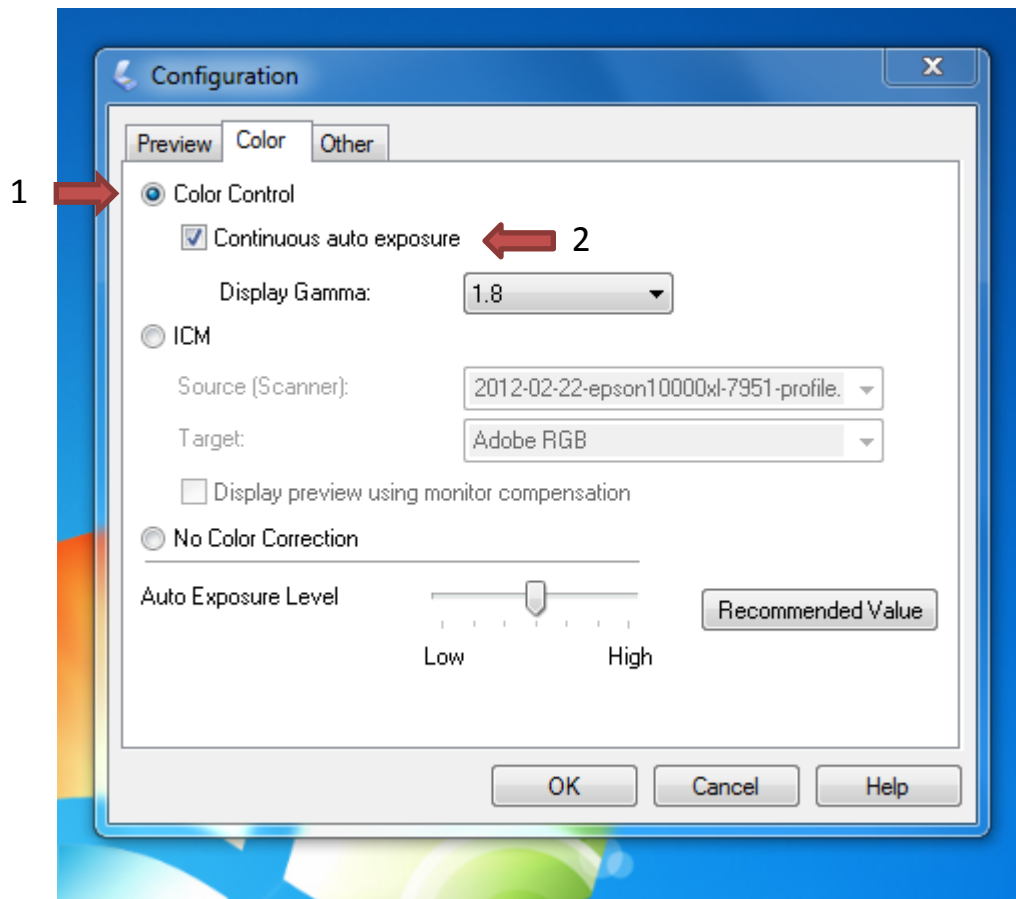
12. Click the configuration tab



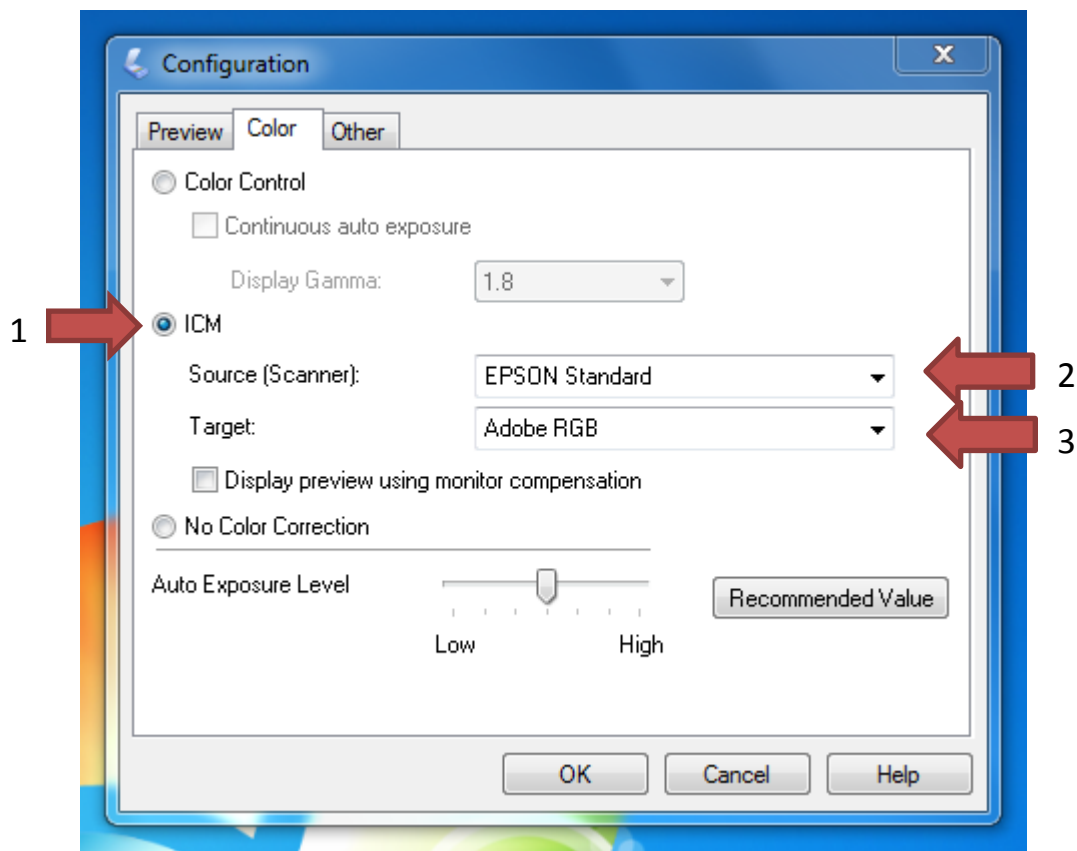
13. Make sure the profile you want to use is selected.

- a. Set the target color profile to Adobe RGB if available, or sRGB if Adobe RGB is not installed.
- b. You can create a customized profile, or you can use the default profile that ships with the scanner. A customized profile may provide slightly better color accuracy, but the default profile that ships with the scanner is usually adequate and is acceptable if you do not have color profiling software available.

14. Select the “Color” tab at the top of the Configuration window.
15. Deselect the radio button for “Color Control.”
16. Uncheck the box for “Continuous auto exposure.”



17. Select the radio button for “ICM.”
18. Select the profile for ‘Source’ from the dropdown list. You can use a custom profile or the default Epson scanner profile.
19. Select the profile for ‘Target’ from the dropdown list.
 - a. Use Adobe RGB, or if that is unavailable use sRGB.
 - b. You can download and install the Adobe RGB profile for free from <https://www.adobe.com/digitalimag/adobergb.html>.
20. Click OK to save your settings.



NOTE: These settings are “sticky;” unless they are changed, they will remain set even after the program is closed and reopened. It is important to confirm the settings each time you begin scanning, but you will not necessarily need to follow these steps every time!

Capturing Images Using a Flatbed Scanner

Image capture process

1. Check to make sure that your scanner glass is clean and dust-free.
 - a. Check the scanner for dust and smudges frequently during your scanning session and clean it as necessary.
 - b. To clean the scanner, gently wipe the scanner bed with one of the included soft, lint-free Kimwipes to remove dust and debris. If there is oil or dirt on the scanner glass, clean it according to the manufacturer's instructions. It is also usually safe to use a small amount of glass cleaner. Spray the cleaner on the cloth, *not the scanner*, and wipe the scanner gently in a circular motion using very light pressure.
 - c. If you are scanning transmissive materials be sure the glass of the lighting unit is clean.
2. Place the item to be scanned on the scanner glass.
3. Gently lower the scanner lid, being careful not to slam it down on fragile materials or create air currents that can move the paper.
 - a. For scans of archival materials, it is usually preferable to leave a small margin around the edge of the item so that a viewer can see all of the edges of the document. To create this margin, do not place the item flush with the edge of the scanner glass. Instead, leave a small space between the edge of the item and the edge of the scanner.
 - b. In most cases, you will want to create one scan per page (often called *one-up*). If an item has text that spans two pages you should scan it as one image (*two-up*).
4. Click the *Preview* button on the main scanner control panel. This will open the preview panel and display a view of the item on the scanner.
5. Use the marquee tool to select the area you wish to capture. Click *Scan* to capture the image at the specified settings and save the file to the designated folder.

Post-processing and quality control

1. Using an image editor such as Adobe Photoshop, open the files you have created and assess them for visual quality:
 - a. Check that they have been scanned at the desired resolution.
 - b. Make sure they are properly oriented for reading. If necessary, rotate the image so that it is straight and correctly oriented.
 - c. Crop each item to leave a small margin around the edge of each document. For some historical materials you may have to make compromises because of crooked printing or irregular paper; aim for balance and consistency.
2. Save the files, and double-check the file names to make sure that they conform to the naming convention you are using and are saved with the correct file extension.
3. When you have finished a scanning session, make sure to back up the files you have created to an external drive or cloud-based storage.



Things to remember

1. Check scanner settings and file saving settings before every scanning session. Scanner settings are usually saved with the user profile, so if the next person using the machine is logged in with a different profile, all of the settings (including configuration and file settings) will revert to default.
2. Keep the scanner glass clean and free of dust.
3. Take your time when handling fragile items to prevent damage. Be gentle when raising or lowering the scanner lid to prevent creating air currents that can push documents into the edge of the scanner, and always observe rules for the safe handling of materials.
4. Be sure to perform quality checks as you digitize, rather than waiting until you have scanned many items. This is especially important at the beginning of a project when routines are being established. Scanning needs to be done efficiently, but take time to get it right. Errors are more difficult to detect and correct later in the digitization process.



Resources

For a discussion of things to consider when determining scanning specifications, please consult these resources:

Summary of LC Image Quality Standards by Document Type and Expected Outcome

<https://memory.loc.gov/ammem/about/standardsTable1.pdf>

The Association for Library Collections and Technical Services Preservation and Reformatting Section
Minimum Digitization Capture Recommendations

http://www.ala.org/alcts/resources/preserv/minimum-digitization-capture-recommendations#note_6

Federal Agencies Digitization Guidelines Initiative Raster Still Images for Digitization: A Comparison of
File Formats

http://www.digitizationguidelines.gov/guidelines/FADGI_RasterFormatCompare_p1_20140902_r.pdf

