Instructions for using the Canon MS800 microform scanner

This microform reader/scanner is a much-needed addition to the library's micromaterials section. With it, you can print to the adjacent photocopier, or save images to the accompanying computer for transfer to CD or flashdrive.

This is a very expensive, and sometimes quirky machine. If you have any questions or problems with it, or generally feel uncomfortable with it, please ask a librarian! We will be happy to help you.

If something jams, please do NOT force it!!
To start

1) Turn on the scanner. **The scanner must be ON before you turn on the computer if you wish to scan!**

2) Turn on the computer. **The computer must be OFF, not merely hibernating, or else it will not recognize the scanner!** If you do not see a black boot-up screen with white text when you turn the power on, restart the computer from the start menu.

3) Log on to the computer:

   Logon:   ML-25
   Password:  Guest!
To load a microfilm:

1) Bring the film reels to the front. To do this, gently pull both sides of the reel carrier at once.
   (NOTE: You may need to move the microfiche plate all the way to the left, first.)

2) Mount the reel on the spoke, as shown. (NOTE: The film goes over the top of the reel.)

3) Manually feed the film under the first roller, under the glass, and then under the second roller, as shown.

4) Press and hold the load button. The film will automatically load onto the take-up reel. Hold until it has gone around at least once.

5) Push the film back under the lens to view.

6) To remove a microfilm, simply rewind the film using the big nob on the bottom right. Turn the knob to the left until the film is entirely back on its reel. Then remove the reel.
To load a microfiche:

1) Move microfiche plate to the front
   (NOTE: You may need to push the microfilm reels to the back first.)

2) Pull the microfiche plate out. The glass will raise up.

3) Put the microfiche underneath the glass. The fiche should go in label first, with the label facing down.

4) Push the microfiche back under the lens to view.
Reading microforms

Microfilm

To advance microfilms, turn the forward/backward control (shown) to the right. To rewind, turn it to the left.

NOTE: Towards the end of most microfilms, the advance function will stop working. The only option for advancing the microfilm further is to do it manually. PLEASE DO NOT FORCE THE DIAL!!! It won’t work. And if it is broken we will be most unhappy.

Microfiche

Simply slide the microfiche plate until you find the section you wish to read. You may need to zoom in.

Adjusting the image

You can adjust the image on the screen by focusing, zooming, and rotating the picture. Each of these is accomplished by the dial just below and to the right of the screen:

So, to zoom in or out on, rotate, or focus the picture on the screen, simply press the appropriate button and move the dial until the screen is displaying correctly.

You can also use the brightness controls to lighten or darken the scanned image as you would on a standard photocopier:

NOTE: this does not affect the brightness of the screen—only the scanned image is affected.
**Scanning and printing**

**Scanning individual images**

1) Make sure the computer is on.

2) Open the application "ScanT800" (on the desktop).

3) Select File>>Scan page.

4) The image will appear on the screen. You can then save or print it.

**Saving**

You can save your image to the computer's hard drive in JPEG, JBIG and Bitmap formats. To do so, select File >> Save Page As.

We strongly encourage all patrons to remove their saved images to a flash drive, CD or other medium AS SOON AS POSSIBLE. We will periodically clear the hard drive of all saved data.

**Printing**

You can print your image to the adjacent photocopier. Simply select File>>Print.

Tip: We recommend setting the print format to "fit to paper" (shown below) before printing. This ensures that the entire image will be printed.
Scanning or printing many images

There are several ways to capture many images (a “batch”) in succession, which will be discussed below:

1. Scanning a batch to the printer
2. Scanning a batch to an image file or files with the ScanT800 program
3. Scanning a batch directly to a PDF file with Adobe Acrobat

**Scanning a batch to the printer**

1) If you wish to print the document, select File>>Scan Batch to Printer
2) Position the microfilm to the first page you wish to scan.
3) Click "start scanning" to scan a page. The image will automatically be sent to the copier.
4) If you wish to continue, move the film to the next page and then select "continue scanning" in the dialog box. When you are finished, select "stop scanning."

**Scanning a batch to images**

The ScanT800 software can scan multiple images to a single image file, which can then easily be converted to PDF (if you save the scans as TIFF files), or to a series of individual, sequentially numbered files (if you save as .JPEG or .JBIG files).

Saving scans as TIFF files is only possible if the software is set to Black and White (under File>>Scanner Setting). This is good for plain text, but not so good for photographs, manuscripts, or film that is very light or very dark.
1) Select File>>Scan Batch to File.

2) Supply a name for the file and choose the file format.

3) Position the microfilm to the first page you wish to scan.

4) Click “start scanning” to scan a page. The image will automatically be saved to the disc, and the program will display a preview of the page you just scanned.

5) If you wish to continue, move the film to the next page and then select "continue scanning" in the dialog box. If you are finished, click "stop scanning."

6) If you saved your scans as a TIFF file, you can easily convert it to PDF. This is recommended, as TIFF files can be very large, and most image viewers will display only the first scanned page. Simply right-click on the file and select “Convert to Adobe PDF.”

Scanning a batch directly to PDF

Scanning straight to PDF using Adobe Acrobat has some advantages and disadvantages compared to using the ScanT800 program. Acrobat offers more control over the image quality of the scans, but unfortunately you cannot see each page as you scan it.

1) Open Adobe Acrobat Standard from the desktop.

2) Click “Create PDF” on the toolbar and select “From scanner…” from the dropdown menu.
3) Click the Scan button in the dialog box.

4) Choose the scanning mode (256-level Gray will produce the most faithful scans, while Black and White will result in smaller files), then click the Scan button.

5) You will probably get a message that says “No film in scanner. Add film medium to camera and continue?” We don’t know why. Just click OK, provided the film is actually in the scanner.

6) Once the page has been scanned, you will see the message “Position film image on scanner and select OK to scan. Select Cancel to stop scanning.” Advance the film to the next page and click OK, repeating until you have scanned everything you wish to scan. Once you have finished, click Cancel until you have exited back to the main window.

7) Save your PDF from the file menu.
Fine tuning results in Acrobat:

It may help to scan a test page and examine it before scanning an entire batch. That way if you need to make adjustments you can do so without needing to re-scan many pages. If you wish, check the image settings before starting the scan.

Generally these settings produce consistently accurate results:
More on scanning images

Image size controls

You can configure the scanner to scan to several different sizes and to read different parts of the screen. The page sizes available are:

11 x 17 (Ledger)
8.5 x 14 (Legal)
8.5 x 11 (Letter-landscape)
11 x 8.5 (Letter-portrait)
5.5 x 8.5 (Statement)

Use the button underneath to select the size desired.

NOTE: The sizes are approximate. Generally they end up being slightly larger than pictured.
**Image position controls**

You can configure the scanner to scan different portions of the screen, to suit your preferences. You use these controls:

![Image position controls](image)

We don’t know what the controls on the left do. We do know, however, that pressing the control button until none of the options are selected gives you the greatest flexibility. This is what we recommend doing.

The controls on the right determine whether the scanner uses the middle line or the left edge line as the starting point. For example, say you want to scan a letter sized (portrait) portion of the screen:

If you select scan from center, the machine will scan a letter-sized area centered horizontally on the middle line (denoted by black arrows):

![Scan from center](image)

However, if you set the controls to "scan from edge," the machine will scan an image of the same size, but it will aligned to the left edge:

![Scan from edge](image)

"Scan two pages" only works when you have the size controls set to 8.5 x 11 (portrait). When you scan the page, the machine will scan the entire field of the screen:

![Scan two pages](image)

The computer will display the first page (yellow, above), allowing you to edit, save or print the image to suit your needs. You must then select "scan image" again, and it will display the second page (orange). Note, that the scanner will only make one pass, so the second time it will not do anything.
**Negative/Positive control**

These controls determine whether the film will be scanned as a negative (black on screen yields white on paper) or positive (black yields black).

If you select the automatic option, the machine will make a calculation to determine which choice is best. We have found that it often makes the wrong choice, so we recommend telling it what to do yourself.

**Changing the lens:**

The microfilm reader normally uses a lens with a zoom of from 14X to 30X. This is sufficient for most purposes. Some very large documents, however, may require a lower-powered lens in order to fit an entire page in one scan. The library keeps a 7X-7.5X lens behind the circulation desk, which may be checked out as a reserve item for two hours at a time.

Changing the lens is simple. It sits in a gray plastic lens carriage, helpfully labeled LENS CARRIAGE: PULL HERE TO REMOVE. Pull the carriage out gently but firmly.

The lens (the black part) will simply lift out. **Please treat the lens with the care and respect due to a delicate and expensive scientific instrument.**

Insert the new lens so that the two small metal posts at the back of the carriage...
are inserted into the two holes in the underside of the outer rim of the lens.

The lens should fit **snugly** into the carriage; you may need to rotate the lens slightly until it drops into place.

**Correct:**

![Correct Image]

**Incorrect:**

![Incorrect Image]

Slide the carriage back into position and push gently until it locks into place.
Other stuff

Use the machine, make copies, but please stay within the bounds of Fair Use. Please respect the intellectual property rights of the authors. The user of this equipment will accept sole responsibility for any copyright infringements.

The old microfilm printer may still be used to view micromaterials, but it will no longer print.