Inessential Scanning on the SIPB Scanner

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If you have any problems or questions, just ask! We're here to help!

1. Log in on the computer next to the scanner (*alice-whacker.mit.edu*). If the machine is in use, please ask to use the scanner.

2. Position the document on the scanner glass, as with a photocopier. At the `athena%` prompt, run:

`cd /var/tmp`	Go to the directory to store large files on the scanning computer.
`add graphics scanner`	Add two lockers whose software you need.
`xv&`	Start *xv*, for playing with picture size, format, etc, after scanning.
`xscanimage epson&`	Start the scanner software.

¶ Sometimes, *xscanimage* complains: "`Failed to open device 'epson': Invalid argument`." If so, make sure the scanner is on, and try running *xscanimage* again. If this doesn't work, point a SIPB member at this: This often means that the scanner device isn't world readable. Become root and make it world readable: **chmod 666 /dev/sg0**

3. Select the **Scan mode** field: *Color* or *Gray* for pictures, as appropriate. *Binary* can be reasonable for text, but does not preview acceptably. If necessary, you can select one of them after previewing. Don't change the bit depth unless you are sure you need to.

4. Click **Preview Window**, and then **Acquire Preview** to see a low resolution version of your picture. (If you move the paper, hit **Acquire Preview** again.)

5. You can change the resolution, brightness, and contrast with the sliders; or click on them, use the arrow keys, and tab between fields. For resolution, we recommend between 100 and 300dpi. Higher resolutions take up a lot of space; the box above the **Scan** button will tell you how much unless you've changed the **Scan mode** since previewing. Athena printers can print at 600dpi. (The preview window scans at 50dpi.)

6. Use the mouse to drag a rubber-band box around the part of the picture you want to scan. Do not resize the preview window (the program will misbehave).

7. Hit **Scan**. This will pop up a window with a progress bar which will disappear when it's finished. The file name defaults to **out.pnm**, and the scanner only writes in .pnm format. PNM files are very space-inefficient, and use no compression, so be sure to convert to a different file format after scanning and before you leave (see below). If you get "`Permission denied`," another user has left behind a file of the same name—change your file name.

8. Load the file into *xv*. (If you don't know how to use *xv*, ask for someone to show you. Right-click in the *xv* window get a control window.) Use *xv* to crop the dimensions, or to change anything else. Then save the picture in an appropriate format (GIF, JPEG, PNG, Postscript, or TIFF) in your home directory. Save using the `/mit` path; e.g. you might use `/mit/`*`username`*`/flowers.gif` from *xv* to save a GIF of flowers to your top-level directory. Saving into your home directory is important; if you leave the files only in `/var/tmp`, you won't be able to access them from any other workstation, and they will be deleted automatically. Try `gimp&` instead of `xv&` for a more PhotoShop-like experience.

   ¶ If *xv* runs out of memory, type `unlimit` and restart *xv*.

9. To scan another piece of the same paper, drag another rubber-band box and repeat. If you move the paper or replace it, hit **Acquire Preview** in the preview window afterwards.

10. Before you leave, please rm all the files you left in /var/tmp; otherwise it fills up and others can't save. Remember to copy or move what you want to keep to your homedir first.