FREQUENTLY ASKED QUESTIONS — PRINTING

Printing Pricelist
Laser Printers (HP LaserJet 5550)

Tabloid (11 x 17)	Letter (8.5 x 11)
- B/W $0.20	- B/W $0.10
- Color $1.50	- Color $0.60

Inkjet Printers (Epson Stylus Pro 11880 & 4900, Canon Pixma Pro-1)

- Matte: $6 per sq. ft   - Luster: $7 per sq. ft
- Color and black/white are the same price

Types of Printers
Laser Printers: HP LaserJet 5550 (Spasky, Fisher)

Paper Size:
These printers can print between letter (8.5x11") and tabloid (11x17")
sizes.
DMA only has letter and tabloid paper in stock (North American sizes).
If you would like to print ISO 216 sizes (e.g. A1, B3) you must use your
own paper.

Custom Paper Type/Weight:
If you are printing on custom paper, you must physically change the Paper Type setting on
the printer!
Insert images here
Insert chart of possible sizes/types

Large Format Inkjet Printer: Epson 11880 (Dot)

Paper Size:
Epson Stylus Pro roll sizes: 24", 36", 44", 60" (Luster only),
64" (Matte only)
There is no double-sided printing option for this printer.

Paper Type:
We print on Epson Enhanced Matte and Luster papers, and stock a limited amount of
specialty rolls like Hahnemuhle Photo Rag and Ultrasmooth Fine Art.

Inkjet Printers: Epson 4900 (Buzz) & Canon Pixma Pro-1 (Mulder, Scully)

Paper Size:
Available sheet sizes are Letter (8.5x11"), Tabloid
(11x17"), Super B3 (13x19").

Paper Type:
Letter & Tabloid: Matte, double-sided, lightweight paper for booklet
printing
Super B: Matte and Luster, single-sided, medium weight

TUTORIALS

Printing

Printer Basics
Color Models (RGB vs CMYK)

A ***color model*** is an abstract mathematical system for describing color, using three or four main numbers representing primary colors. RGB and CMYK are the two color models that designers generally work with.
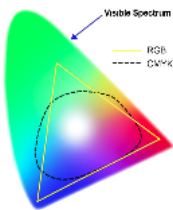
RGB color model
The RGB color model is an additive color model, used for **all media that transmit light** (e.g. computer monitors, phones). Digital media emit color as RGB (red, green, blue) light. ***Additive*** means that the more RGB light beams emitted, the closer you get to white. If no light is emitted (RGB 0 0 0), you will see black. If maximum light is emitted (RGB 255 255 255), you will see white. RGB values range from 0 to 255.

CMYK color model
The CMYK color model is a subtractive color model, used for **print**. Printers print with CMYK (Cyan, Magenta, Yellow, Black) ink; no matter what color model your digital file is, it will be converted to CMYK in order to be printed. ***Subtractive*** means that the more ink added, the closer you get to black. Different color inks absorb and reflect specific wavelengths. CMYK 0 0 0 0 looks like white (no ink laid down means no light is absorbed), whereas CMYK 0 0 0 100 looks like black (maximum black ink laid down means all colors are absorbed). CMYK values range from 0% to 100%.

RGB vs CMYK Color Gamuts
All color models can only display a ***limited gamut*** (range) of colors compared to the actual visible spectrum of color. RGB has a wider gamut than CMYK, most noticeable when dealing with very bright, vibrant colors. ***The neon colors you can get on a computer monitor cannot be reproduced when printing in normal CMYK ink on paper***, because while digital media emits light, ink on paper does not.

Color Management when printing at DMA

There are multiple approaches to color management when working with print media files. Printers print in CMYK but can accept both RGB and CMYK files; if a file is not already CMYK, the printer itself will convert it.

Some print houses ask designers to submit RGB files, while others want CMYK. It depends on both the type of printer and their particular workflow. **When printing on the inkjet printers at DMA, it is best to submit RGB files**. This is best for color accuracy and range with our particular self-service printers.

Here is the recommended approach for color management when printing at DMA.

#1 Work with RGB files
Working in RGB allows you to have a wider color gamut than CMYK, and also retain more color information to later convert to CMYK (versus trying to convert CMYK back to RGB if you need a file for screen display later). The important thing to remember is that **your RGB colors may not exist in the CMYK gamut**, meaning some RGB colors cannot be printed!

#2 Soft Proof on a Calibrated Screen
You can soft-proof your colors on screen if you are using a calibrated monitor and use the correct color profiles. This basically lets you work on an RGB file, and preview the final output of the document on your screen: a close approximation of how it will look when printed in CMYK, on a specific printer, on specific paper.
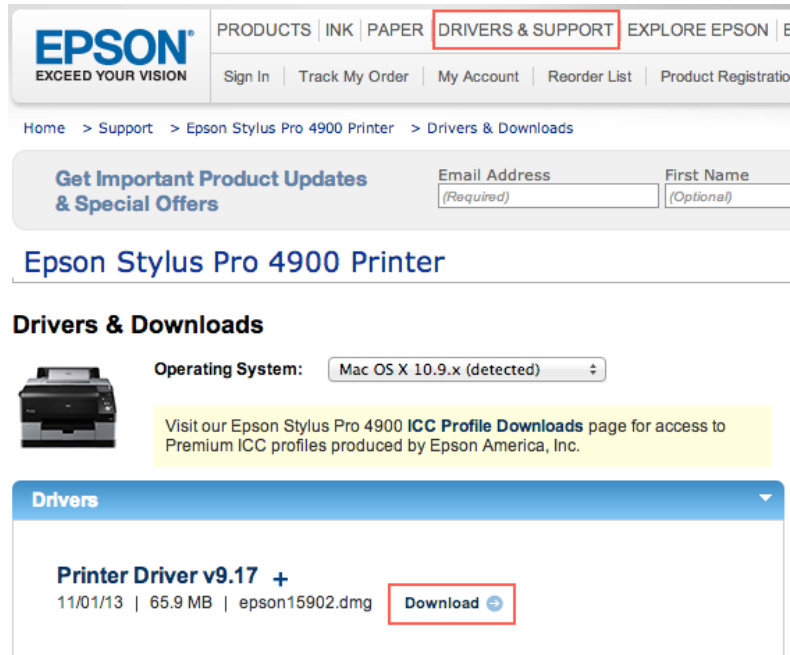*Insert instructions on how to soft-proof*

Printing + Paper
Adding Printers (Windows/Mac)

#1a. Installing Driver for Epson 4900 (Buzz)
1. Download correct driver from **Epson.com**
       Drivers & Support → Printers & All-in-ones
       Search for Epson Stylus Pro 4900 and click it
       Click "Drivers & Downloads"
       Click "Download"
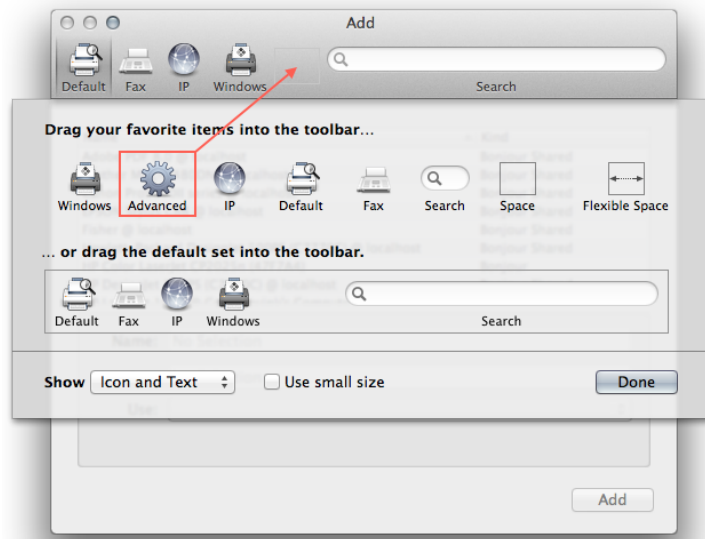2. Open the downloaded DMG. Follow the instructions to install the driver.

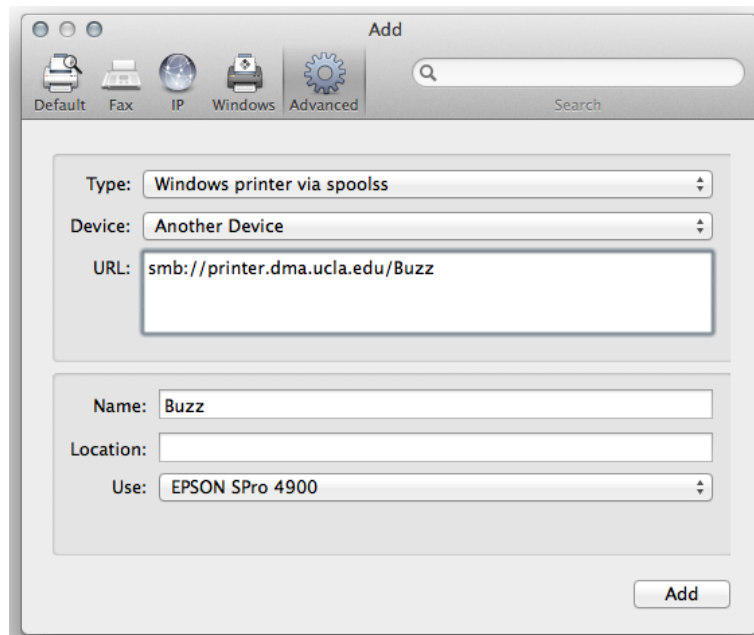### #1b. Installing Driver for HP LaserJet 5550 (Spasky, Fisher)
1. Download the driver from the temp folder on the server.
2. Double-click it to unzip the file.
3. Run Software Update and install system updates/restart your computer.

#2. Adding the Printers (Buzz, Spasky, Fisher)

1. Open System Preferences → Printers & Scanners. Press the "+" to add a new printer.
2. If the Advanced tab (gear icon) is not in the toolbar, right-click the toolbar and select "Customize Toolbar". Then drag the Advanced icon into the toolbar.
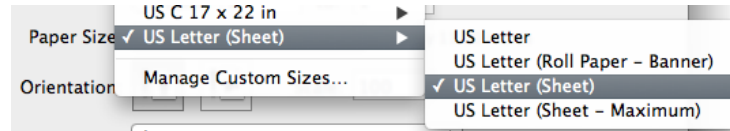

3. Click the Advanced icon and input the following information.
      Type: Windows printer via spoolss
      Device: Another Device
      URL: smb://printer.dma.ucla.edu/**Buzz** or **Spasky** or **Fisher**
      Name: Buzz or Spasky or Fisher
      Location: (none)
      Use: Choose "Select Software..."
4. Select the correct printer software for the printer you're adding. Search for either 4900 (for the Epson SPro 4900) or 5550 (for the laserjet 5550). Add the printer.

Printing on Inkjet

Printing to Buzz — Print Dialog

  1. Paper Size: Make sure you select the **(Sheet)** option for the paper size you want.

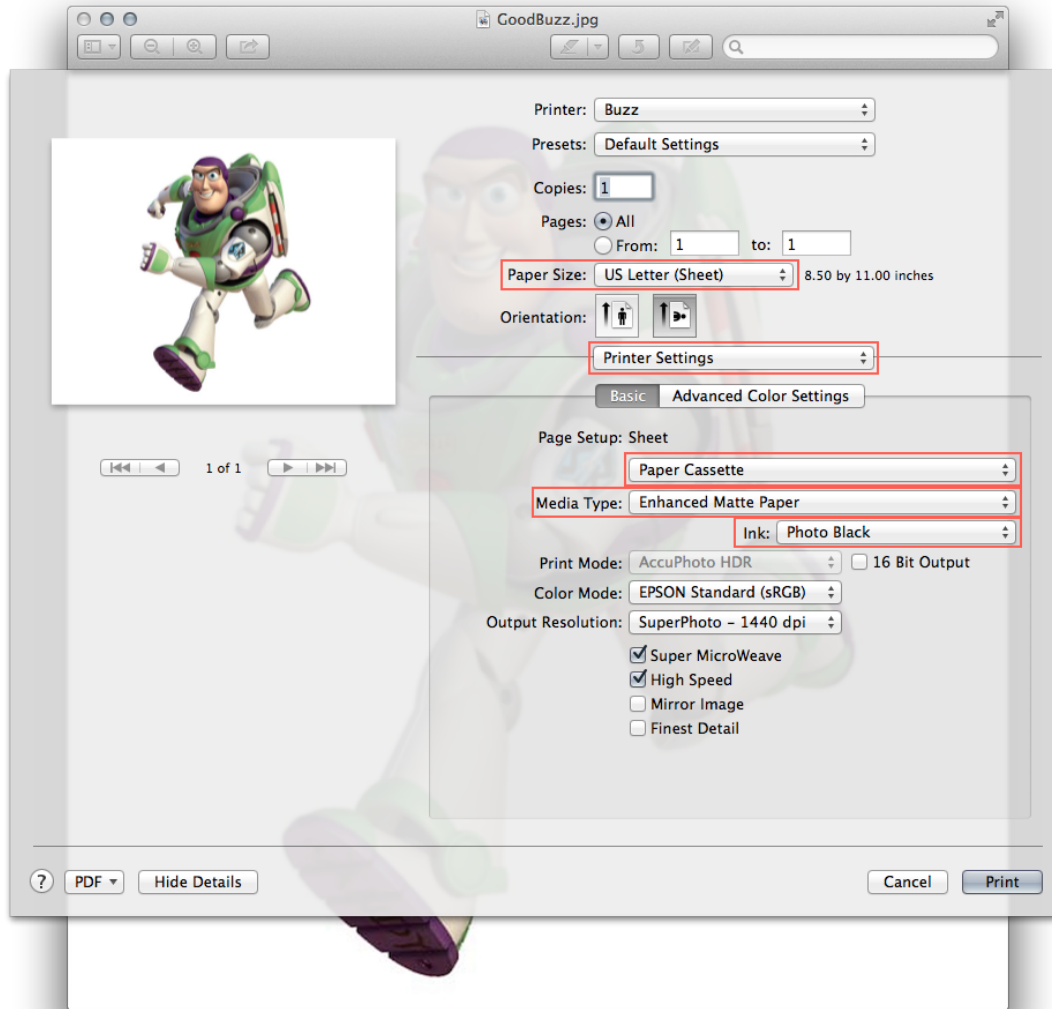 | US C 17 x 22 in | ▶ |
Paper Size ✓ US Letter (Sheet)	▶	US Letter
		US Letter (Roll Paper – Banner)
Orientation		✓ US Letter (Sheet)
Manage Custom Sizes...		US Letter (Sheet – Maximum)

  2. Under "Printer Settings", make sure you choose the following:

      Paper Cassette
      Media Type: (Your Paper)
      Ink: Photo Black (IMPORTANT!)

Inserting Paper

Insert paper into the cassette tray face down, and push the tray all the way in.
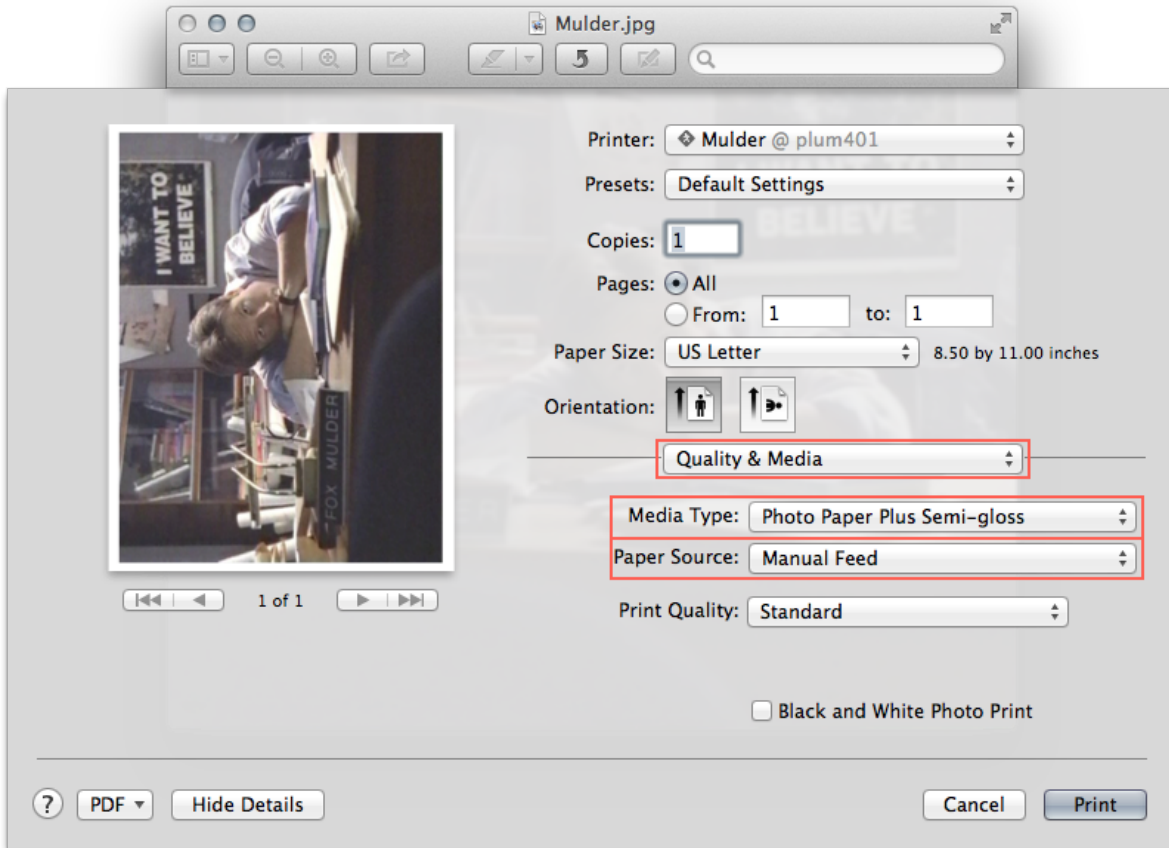
← Paper Cassette Tray

Printing to Mulder — Print Dialog

1. Paper Size: Make sure you select the correct paper size. Always select **Sheet** or it will ask for Roll.
2. Under "Quality & Media", make sure you choose the following:

   Media Type: (Your Paper)
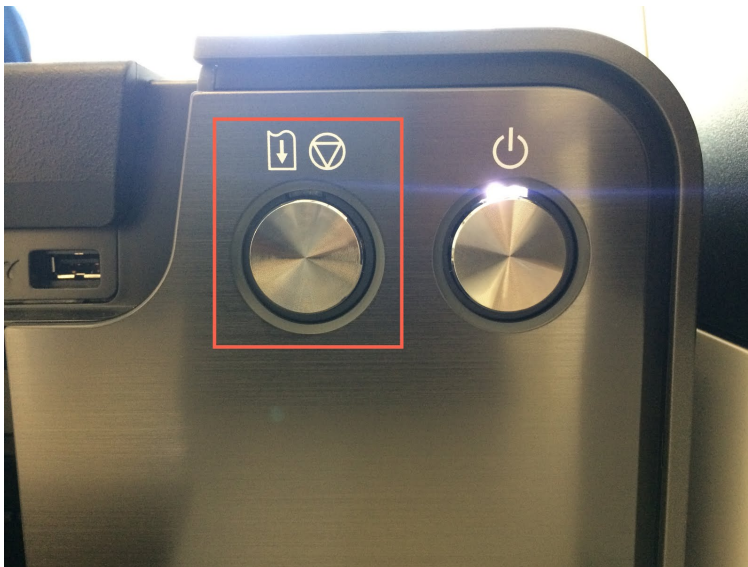
   Paper Source: Manual Feed

Inserting Paper

1. The **Manual Feed** is at the back of the printer.

2. Move the gray tabs to fit your paper size and then insert your paper.

3. When you print a manual feed print job, after you hit Print you need to physically press the "Resume" button on the printer (the left button, which should be flashing orange when it needs to be pressed).

Printing on Laserjet
Printing B/W
- Make sure under "Color/Quality", "Print Color as Gray" is CHECKED.

Printing double-sided
- CHECK "Two-sided" on the main print dialog page, and double check in "Layout".

Printing booklet
- *Insert booklet printing instructions*

Plotter printing
How to prepare file
- Make sure your file is 300 DPI, exported as a PDF or TIFF with flattened layers.

How to submit file to front desk
- Either bring it on a USB drive (ask the front desk for one to borrow), or drop it in the "files_to_print" folder on the TEMP server.

Custom paper

- Sizes, finishes, weights info

Troubleshooting

Hold for authentication

    - Password was typed incorrectly, press the circle arrow icon and retype password.

Printer paused

    - Press the green Resume button on the printer queue window. If it asks for a password, type your laptop user account password or if on a lab machine, ask the front desk for help.

Smudges / ink splatter

    -

Colors off

    -