

# UNIVERSAL LASER SYSTEMS M25 Standard Operating Procedure

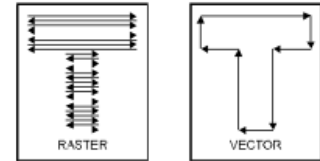
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1. Power up the LASER engraver.
  - a. The power switch is on the right side of the instrument, near the back.
  - b. After initialization, the LCD screen will display **READY**.
  - c. For the most reproducible results, allow the engraver to warm up for one hour.

2. Open CoreIDRAW.
  - a. At the **Get Started** welcome screen, select **New From Template**.
    - i. At the popup, select **My Templates** from the left sidebar.
    - ii. Select the template **Universal LASER M25**.

3. Draw, open or import a drawing.

- a. For vector engraving or cutting, all objects must be drawn with “**Hairline**” line widths. All other line widths will result in raster engraving or cutting, which is more time-consuming and can result in jagged features or edges.



- b. The LASER etcher allows for eight line color-defined power, speed and PPI settings per drawing. One must use the colors in the color palette on the right side of the screen to apply these different settings. See the user manual for the required CMYK color values (p.40).

4. Send your drawing to the LASER engraver.

- a. Press **Control + P** or select **File** → **Print** from the tool bar.
  - i. The default printer should be the LASER cutter, labeled **M CLASS**. If not, select this from the dropdown.
  - ii. Select **Preferences**.
    1. From the **Laser Settings** tab, set (or **Load**) the Power, Speed and PPI for the line color(s) you used, if necessary. To apply the settings, you must click the big **Set** button.
      - a. Maximum power is 25 Watts.
      - b. Maximum speed is 40 in./sec. (1.016 m/s).
      - c. PPI = pulses per inch.
      - d. You may **Save** your settings for later use if they differ from the default settings.
    2. From the **Engraving Field** tab, verify that the field units are **Metric** and that the page size is **609.6 mm** wide and **304.8 mm** high. If not, select the **Maximum Page Size** button.
    3. Select **OK**.
  - iii. Select **Apply**.
  - iv. Select **OK** to send the drawing data to the LASER cutter.

5. If you have not positioned your stock in the laser cutter, do it now and close the lid.

6. Start the LASER cutter.

- a. Verify that your print job is queued in the laser cutter. The **Power** and **Speed** settings for your line color will be displayed on the screen.
- b. Verify that the lid is closed and press the green **Start** button.
- c. Press the **Pause** button to stop the program in mid-run.

You should not have to change settings on the LASER itself. If you need to, contact Ryan or Nate.