

Using the Laser Cutters

Machine Startup:

- Log onto the computer using the user name and password on the computer monitor
- There are two power strips for each machine. One turns on the power to the computer and the machine and the other turns on the power for the ventilation
 - Turning on the power strip will not automatically turn on power to the computer or the laser, use the power buttons to turn them on.
 - The Laser's power button is located on the lower right of the machine behind the computer setup.

Loading Your File:

- Open your file in Rhino. We suggest you copy and paste into our template file and make sure that your linework is on the correct layer before printing.
 - Having an outline of your material on a layer set to not print will help you set your print window.

Printing your File:

- Use CTRL+P or go to File-->Print
Check your Print Settings
 - Using the scroll wheel will cause you problems here, just use the arrows or click and drag on the bar to move through the options.
 - The destination should be set to the laser already
 - Output Type: Vector Output
 - Output Color: Display Color
 - Print from Pages
 - Scale: 1:1
 - Once you've laser cut once, you do not have to set properties again if using the same file and material. Just select the new page.
- Once this looks correct in the preview click **Properties** located under the printer.

Laser Settings:

- Click on the **Material Database** tab
Choose your material from the list.
 - We are trying to make all user material under #1 SoA Material
 - Chipboard can be cut with Matboard settings
- Use a caliper to measure your material and input that into Material Thickness
- Once you have set your material thickness click Apply
- Click on the **Manual Control** tab
- Make sure Z-Axis is set to off and Flow is 100% for all colors
- If everything looks good Click OK and Print

Open the UCP:

- The UCP is the red square icon that is pinned to the task bar
- Your file should be loaded on the screen with the proper colors showing
- On the right hand side you'll see a button that looks like the tip of a pencil. This is the focus tool. Click on this and then on the screen about midpoint of your file

Focus your Material:

- Place your material in the upper left corner of the machine. Make sure that it is sitting flat.
- On the Machine use the black arrows until **Z** is highlighted. Hit the check mark in the middle to select it.
- Use the focus tool provided to focus your material using the black arrows. If you need it to move faster or slower hit the check mark in the middle.
- Once focused hit the return arrow on the machine and go back to the UCP
- Click on the settings tab in the lower right and make sure everything looks good
- Make sure your material is good, close the laser cover and hit the play button