

LASER CUTTING

If you haven't already, you must attend a training session with Eric Field before using the laser cutter.

This handout is to serve as a reference only after completing a training session.

Power Up!

To operate the laser cutter, turn on both the machine, and the fan associated with it. The fan switch is on the north wall, the system power switch is on the right side of each cutter.

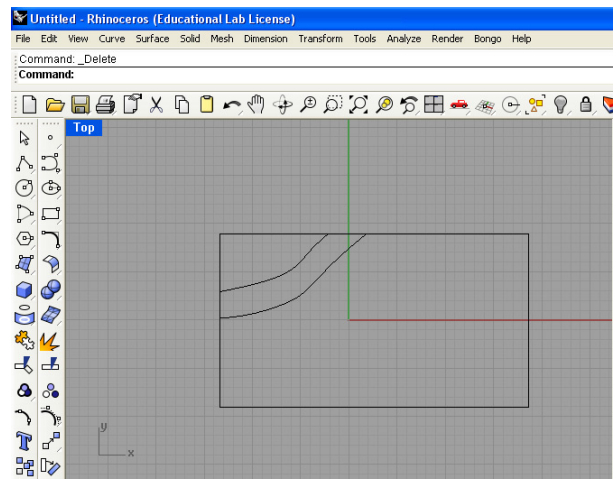
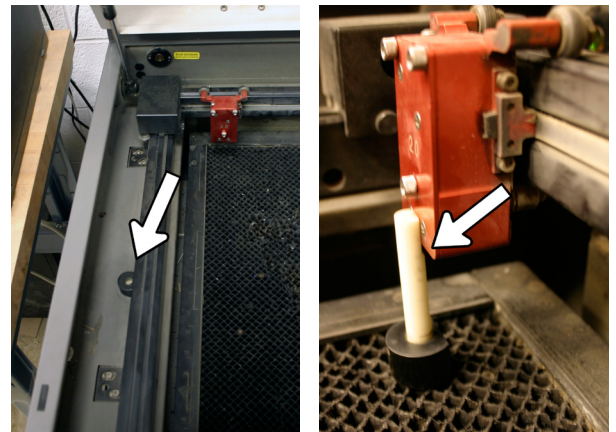
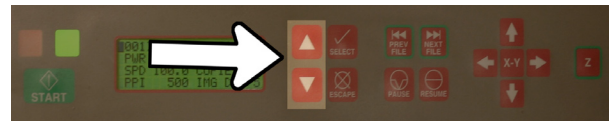
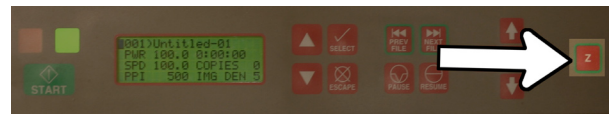
Calibrate the system

VERY IMPORTANT. If you don't do this, you won't get a good cut... and you may very well ruin the equipment. If you're not clear on how to do this, ask someone for help.

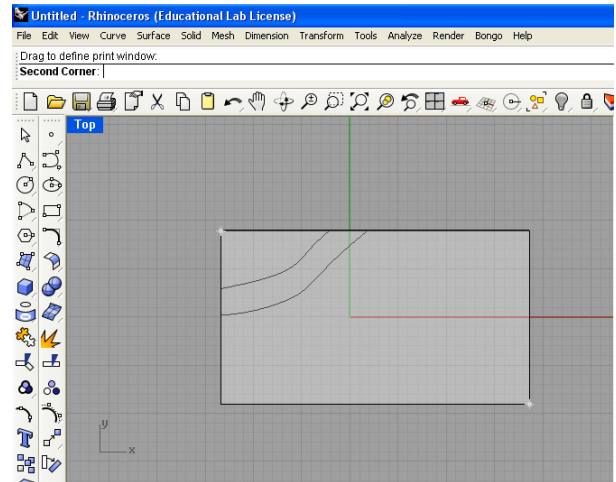
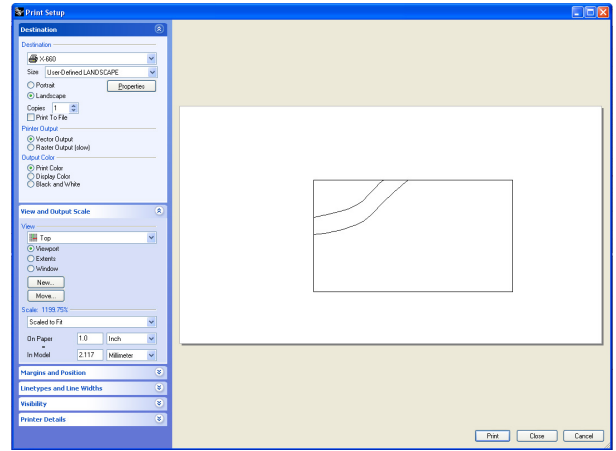
1. Locate the pin at the left edge of the cutting tray.
2. Place the material you will cut on the cutting tray.
2. Press the Z button, and place the pin against the red face of the cartridge (on top of your cutting material).
3. Use the up and down arrows to position the notch on the pin just below the face. Press select (this will advance you to the "hundredth" degree) and continue to adjust the Z level so the notch meets the cartridge face.

Preparing a file (Rhino)

1. Draw an 18x32 rectangle in your file (or a box that fits the size of the cutting tray). This rectangle will frame the file sent to the cutter. If you are cutting at a known scale, you'll need to either adjust the dimensions of this rectangle, or the model accordingly.
2. Select File > Print. Choose the X-600 if you are on the large cutter. Select "Print Setup"



- In this menu, you'll see a print preview, relative to the size of the cutting tray. We'll begin by sizing the print area to the rectangle we drew in step 1. To do this, select *View & Output Scale > Window > New...*
- Draw along the edges of this rectangle to set the print window.



- Select Print in the "Print Setup" menu. Choose "Preferences."

In this menu, you can set the strength and speed of the laser (depending on the material you're cutting, and the type of cut you'd like to make).

Take a look at the board above the cutter for recommendations on settings.

Also of interest here, the "Engraving Field" tab will allow you to set the dimensions and of the field you are printing to.

