DIGITAL FABRICATION LAB
279 WURSTER HALL

ILS/VLS 660
SYSTEM STARTUP AND PLOTTING
1. Turn on Optics Air - Red Handle Up.
2. Turn on Air Vent/Main Power ILS

Turn Systems On - Air, ILS/VLS 660
1. If you do not see the red UCP laser driver icon in the system tray (A) open the driver by right clicking (B)

Save all files to your G:drive or other media. Backup your work up in some fashion. One copy is not a backup...

Anything saved to the local machine maybe subject to removal at any time without warning.

For assistance or to report a problem: www.ced.berkeley.edu/computing/arch/help

477 support office is open 10am-4pm Monday through Friday

Please be considerate and clean up your trash when leaving workstation.

For instructions on Plotting see PDF on desktop.
3. Turn on Air Vent/Main Power VLS 660 (A)

4. Turn on ILS Power (B). ILS Startup (left) and Ready Screens (right). Turn on Power VLS 660 (C) .

**Turn Systems On - Air, ILS/VLS 660**
2. Open Rhinoceros and make sure graphics are organized by color by layer according to the kind of cutting to be done. Only graphics with colors shown will plot. Plot order happens red first through to orange.
3. Make sure graphics are on the board outline (unless plotting from a window). Select the Laser layout tab (A).
4. From the menu File/Print or key Ctrl+P. Check (A) Vector Output, (B) Display Color, (C) Page. Press (D) Properties.
5. If Rhino or Illustrator click (A) Engraving Field and (B) Max Size. Click (C) Load.
6. Navigate to:
   Desktop/ILS SETTINGS BY MATERIAL/{material}/{material by type and or thickness}
   Select *.las file and click Open.

Plot to ILS/VLS 660 - 6 Rhino, AutoCad, Illustrator
7. Adjust Power, Speed, PPI(pulses Per Inch) if desired. Press Set button (A) to change settings. On the Vector tab select Enhance and Sort or Sort Only if desired (B). Press OK (C).

Presets are a general guide and should be tested/adjusted to best cut the specific stock purchased.

Plot to ILS/VLS 660 - 7 Rhino, AutoCad, Illustrator
8. Click Print (A).

Plot to ILS/VLS 660 - 8 Rhino
9. In the UCP control panel, click the Focus View Icon (A). Click a point in the bed preview window to move the lens carriage on top of your material (B). Use the stick located to the left of the rail to adjust the height of the lens carriage (C) using the arrow keys on the machine (D). See page 13.
9. Focus the laser: File/Z and with the down arrow (A) lower the bed. Place your material on the bed. Press Focus button (B) ONCE QUICKLY. The lens carriage moves to the middle left on the table. Use the Up Arrow to position the lens carriage as shown below. (C)
10. Focus the Laser Continued: Place the Focus stick on top of the material with the upper flat surface against the Lense Carrage Box (A). Use the Up Arrow (B) to position the top edge of the slant on the stick at the level of the bottom of the Lense Carraige Box as shown. Move the bed up until the bottom edge of the flat on the stick (C) is even with the bottom of the Box (D). Press the Back Button (E) and remove the focus stick. Close the lid, always hold and move the lid from the middle as shown.

Focus the ILS - 10
11. Click the UCP icon in the system tray.
12. Click Play (A) to start plotting. Get up and watch the laser to make sure it is focused and cutting well. If you need to pause the laser select Pause (B) and then select Pause (B) again to resume.
13. Open AutoCAD. Insert drawing into template. Graphics should be on layers and colored by layer for the kind of cut or engraving to be done. From the menu File/Print or keyboard Ctrl+P.
14. Click Properties (A) and follow Steps 5-7 on pages 8-10. Then Click Window (B). Make sure LASER.ctb is loaded (C) for Plot style table.
15. Click the opposite corners of the widow to Plot (shown black above).
17. Open Illustrator and choose from the File menu New/New from template/ILS LASER TEMPLATE.ait (A)
18. Make sure curve strokes are set to .1pt and use eyedropper tool to make sure colors are derived from the swatches in the template. From the menu choose File/Print or keyboard Ctrl+P.
19. Click the Setup button (A). In the Print dialog make sure to choose ILS12.150D (B) and then click the Preferences button (C). Follow Steps 5-7 on pages 8-10. Then click Print (D) and then Print again (E). Follow Steps 11-12 on pages 14-15.

Plot to ILS/VLS 660 - 19 Illustrator