

UNIVERSAL LASER SYSTEMS INSTRUCTIONS:

location : CAED WORKSHOP :

[grey laser, X-660]

1. check that both the laser cutter and the fan are on
2. open file in chosen graphics program, and check that you've created geometry with the knowledge that our conventions are red=cut, blue=etch, black=raster, yellow=score
3. print from graphics program
(printer driver auto-opens)
4. make sure window fits your geometry and scale is 1:1
5. click "properties"
6. click "load" to load existing material settings
7. select your material and click "open"
8. click "ok"
9. click "print"

*we recommend doing a test in an unused area of your material first!

10. press green "start" button on the front of laser cutter

****if a small test print doesn't yield results that you like, your material doesn't exist in our collection, or you're experimenting with custom settings on your own, you can manually adjust settings yourself, and test them until they're tailored to your specific job**

..within printer driver **properties** window (from step 5):

a. start adjustments from scratch or start by clicking "load" and working from existing presets for a material, maybe one similar to yours

b. pen mode: choose which mode the laser uses for a given color
(control whether a color signifies vector, raster, or skip)

c. % power: 0-100 (a change to higher power creates darker or deeper effects)

d. % speed: 0-100 (a change to higher speed moves the laser over material more quickly, so it corresponds with lighter or shallower effects)

e. PPI: pixels per inch 0-1000 (a change to higher density pixels concentrates affected points, so it creates darker or deeper effects)

*after any change to settings throughout the process, continue to click "set" to maintain changes you've made as you work through selections and changes to different colors!

f. click "ok"

g. click "print"

* when you're done, you can click "save", within the properties window, if you want the .las file with your custom presets to be saved on your flash drive/ computer for your own use in the future

h. press green "start" button on the front of laser cutter

location : DFAB :

[green laser, VLS\$6.60]

METHOD 1 (materials database) :

1. check that both the laser cutter and the fan are on
2. open file in chosen graphics program, and check that you've created geometry with the knowledge that our conventions are red=cut, blue=etch, black=raster
3. print from graphics program
(printer driver auto-opens)
4. make sure window fits your geometry and scale is 1:1
5. click "properties"
(ULS properties panel auto-opens)
6. click the "materials database" tab, upper left
7. select your material
8. enter your material thickness, bottom left
9. click "apply"
10. click "ok"
9. click "print"

*we recommend doing a test in an unused area of your material first!
10. manually open ULS control panel (red square icon in task bar, bottom right)
11. click play button to start job

METHOD 2 (manual control) :

1. check that both the laser cutter and the fan are on
2. open file in chosen graphics program, and check that you've created geometry with the knowledge that our conventions are red=cut, blue=etch, black=raster, yellow=score
3. print from graphics program
(printer driver auto-opens)
4. make sure window fits your geometry and scale is 1:1
5. click "properties"
(ULS properties panel auto-opens)
6. click the "manual control" tab, upper left
7. click "load" to load existing material settings
8. select your material and click "open"
9. click "apply"
10. click "ok"
11. click "print"

*we recommend doing a test in an unused area of your material first!
12. manually open ULS control panel (red square icon in task bar, bottom right)
13. click play button to start job

****if a small test print doesn't yield results that you like, your material doesn't exist in our collection, or you're experimenting with custom settings on your own, you can manually adjust settings yourself, and test them until they're tailored to your specific job**

..within the manual control tab of the properties panel (from step 6 of method 2).. :

a. start adjustments from scratch or start by clicking "load" and working from existing presets for a material, maybe one similar to yours

b. mode: choose which mode the laser uses for a given color
(control whether a color signifies vector, raster, or skip)

c. % power: 0-100 (a change to higher power creates darker or deeper effects)

d. % speed: 0-100 (a change to higher speed moves the laser over material more quickly, so it corresponds with lighter or shallower effects)

e. PPI: pixels per inch 0-1000 (a change to higher density pixels concentrates affected points, so it creates darker or deeper effects)

f. z-axis: value should reflect material thickness

*after any change to settings throughout the process, continue to click "set" to maintain changes you've made as you work through selections and changes to different colors!

g. click "apply" when all changes have been made

h. continue with step 10 of method 2

* when you're done, you can click "settings" and then "save", within the control panel, if you want the .las file with your custom presets to be saved on your flash drive/ computer for your own use in the future

location : DFAB :

[red laser, ILS9.150D]

1. check that both the laser cutter and the fan are on
2. open file in chosen graphics program, and check that you've created geometry with the knowledge that our conventions are red=cut, blue=etch, black=raster
3. print from graphics program
(printer driver auto-opens)
4. make sure window fits your geometry and scale is 1:1
5. click "properties"
(ULS properties panel auto-opens)
6. click the "materials database" tab, upper left
7. select your material
8. enter your material thickness, bottom left
9. click "apply"
10. click "ok"
9. click "print"

*we recommend doing a test in an unused area of your material first!
10. manually open ULS control panel (red square icon in task bar, bottom right)
11. click play button to start job