

Laser Cutter “Pre-Flight” Checklist

*Please check **all** these things, **in order**, **every time!***

1. **Water chiller on**
2. **Exhaust fan on**
3. **Compressed air on**
4. **Laser cutter on**

5. Start Full Spectrum Retina Engrave software
 - Verify connection to laser cutter (lower left)
6. Open design in Acrobat
 - Vector formatted PDF file with hairline thin lines in pure RGB color.
7. Print design from Acrobat
 - Full Spectrum Engineering Driver is the “Printer”
 - Remember to change paper size to **FSL ProLF Series 36x24**
8. Look at design in Retina Engrave
 - Verify Vector and Raster view are what you want

9. Update **Vector** cutting parameters according to material sheet
 - **Speed, Power, Passes, and Vector Current for cutting**
 - **If there’s a color you don’t want to cut, set passes to 0 for that color**
10. Update **Raster** properties if you’re engraving
 - **Raster power, Raster speed, B.W threshold**

11. Home the laser
 - Home button in Retina Engrave or Home button in FX mode on laser
12. Lower the bed before placing material on the bed
 - FZ on laser display, then use down button on laser
13. Place **APPROVED** material flat on bed
 - Make sure that there are no other objects on the bed
14. Jog laser so that autofocus button is somewhere over the material
 - FX on laser display, then use buttons
15. Autofocus
 - From Retina Engrave SW, or FZ mode and AF on laser
16. Jog laser to upper left corner of planned cut
 - Verify tiny bright red dot in center of aiming dot
17. If **Vector cutting only**, make sure to select **Vector Mode** in Retina Engrave
 - Other choices are Raster Mode, and Raster Then Vector.
18. With laser positioned at top left corner, choose **Run Perimeter** in Retina Engrave or on laser cutter to make sure the cut will fit on your material

19. **If everything has been set, press the green “Play” button to make your cut.**

If anything seems wrong, big red button on the laser cutter shuts it down!

After cutting, clean up, turn off laser, compressed air, and filter unit (you can leave water chiller running). Put key back in tool box.

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