ILLUSTRATOR FILE PREPARATION
FOR THE TROTEC LASER
Create Your File In Adobe Illustrator

1a - File, New

1b - Make your art board the same size as the material you are cutting. You cannot exceed 720mm x 420mm (29” x 17”).

1c - Set the color mode to RGB.

1d - Click on create.

Layup Your Design

2a - Right click on the page & select Show Rulers.

2b - Left click on the ruler and drag down to create a guideline, 5mm from the top. Repeat for the left side.

You can now do one of the following:

- Open your vector/Ai file, copy and then paste it into this file.

- Create your drawing in this file.*

- 2c - Place your file into this file, make sure to use PLACE- EMBEDDED

* I recommend creating your design in its own file, so you can later edit it. Then copy/paste into your final layup file for the laser.
Create Your File In Adobe Illustrator

3a - Line up your design in the top left. Your design needs to be spaced 5mm from the edges. This insures the laser does not cut along the steel ruler and your object has a square edge.

Engrave & Cut, Selection & Colour

To Normal Engrave*;
Solid fills need to be pure black (R0, G0, B0)
1c - Stroked lines need to be pure black and have a 1pt stroke or larger.

To Deep Engrave*;
Solid fills need to be pure blue (R0, G0, B255)
1e - Stroked lines need to be pure blue and have a 1pt stroke or larger.

To Cut**;
The Stroke colour needs to be pure red (R255, G0, B0).
Stroked lines need to be .001pt.

*Engraving is a very slow process, as the head goes back and forth across the laser.
**Cutting is very fast, as it follows the path.

4a - To select your filled objects, Use the Selection Tool.

4b - Click on your object.

4c - Click on the Fill on your tool bar.

4d - You can then change the fill colour.

4e - To select your strokes, Use the Selection Tool.

4f - Click on your object.

4g - Then click on the Stroke on your tool bar.

4h - You can then change the stroke colour.

4i - To change the stroke thickness, select the path/line and go to the top menu.
Preparing Fonts For The Laser

Fonts must be converted to Outlines before completing your file for output. Once you convert a font, it cannot be edited. This is also why I recommend creating your design in it’s own file, then creating a file just for the laser.

5a - Select your text.

5b - Click on Type - Create Outlines. Your text is now an object.

Saving Your Design

6a - File - Save As

6b - Choose Illustrator 10

6c - Click Ok

If you are outputting this at Makerspace, save it to a USB.

If Makerspace is outputting your file for you, you will need to Zip Compress it before Uploading it.
Summary - Check List

1. Make your Artboard the size of your material, but no larger than 720mm x 420mm (29” x 17”).
2. The file **Color Mode is RGB**.
3. Your object/design is 5mm from the edge.
4. None of your images or vectors are linked to an external file.
5. Shallow engrave is pure black, and strokes are 1pt or larger.
6. Deep engrave is pure blue, and strokes are 1pt or larger.
7. All Cutting paths are pure red, and the stroke is .001pt.
8. All fonts are converted to outlines.
9. Your file is saved as an Illustrator 10 file.
10. Your file is zipped Compressed if you are uploading in online, to Makerspace for output.