



Vinyl Cutting

on the Roland GX-24



Draw all cutting paths in Adobe Illustrator

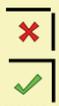
Vinyl cutters use vector graphics, which are composed of straight or curved paths connected by anchor points. It's line art in its simplest mathematical form. These paths determine the motion of the blade on vinyl and therefore, the shapes the cutter produces.



Outline all text

All text used needs to be converted to paths. This is to convert the text to vectors and preserve your font.

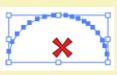
- With text selected, select Type > Create Outlines



Maintaining continuous vector geometry

Make sure that all your vector paths are continuous. If shapes are constructed from more than one path, make sure that you close the paths by joining open endpoints.

- To do this, use the Direct Selection Tool and select the open endpoints
- Select Object > Path > Join (Cmmd+J)



Reduce anchor points/simplify drawing

Draw with the least amount of anchor points possible without sacrificing the drawing appearance. The machine will process your drawings quicker. Too many anchor points can also impact quality.

Avoid Small Details and thin cutting widths

It is recommend that the minimum cutting widths be no smaller than 1/8in. The vinyl cutter struggles with small details. You will need to delete small details that are unnecessary and redesign any necessary details so they are larger.

Cleaning up drawing/ remove overlapping lines

- View in Outlines (toggle Cmmd+Y.) This mimics how the vinyl cutter will "view" and process your file. If there are any paths that you don't want to cut, remove them.

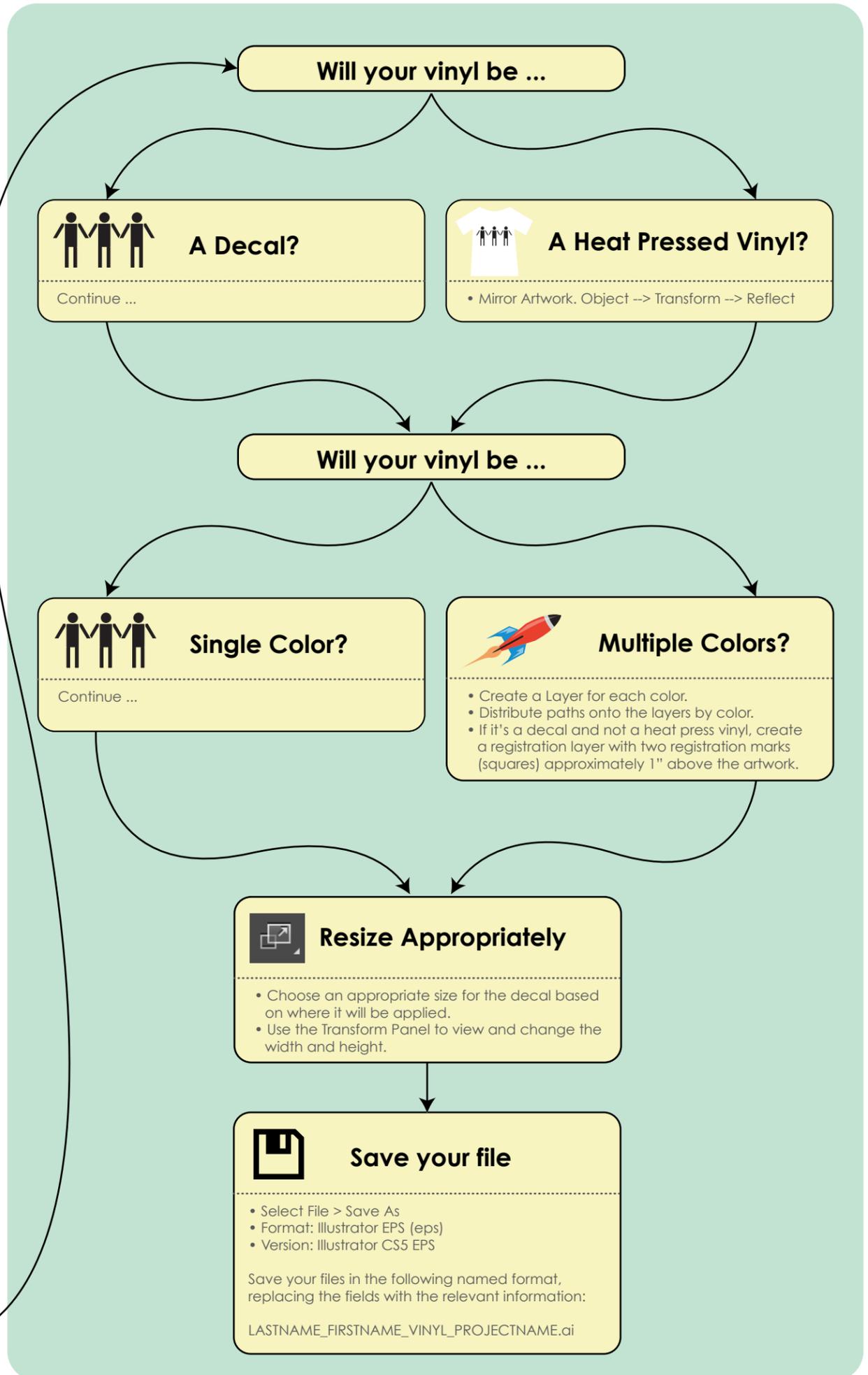


- Make sure that your artwork looks as expected.



- Ensure that there are no duplicate paths stacked up on one another. If you don't get rid of them the vinyl cutter will cut these lines repeatedly, ruining the material and damaging the machine.

- Delete all unnecessary artwork from hidden layers.



Will your vinyl be ...



A Decal?

Continue ...



A Heat Pressed Vinyl?

- Mirror Artwork. Object --> Transform --> Reflect

Will your vinyl be ...



Single Color?

Continue ...



Multiple Colors?

- Create a Layer for each color.
- Distribute paths onto the layers by color.
- If it's a decal and not a heat press vinyl, create a registration layer with two registration marks (squares) approximately 1" above the artwork.



Resize Appropriately

- Choose an appropriate size for the decal based on where it will be applied.
- Use the Transform Panel to view and change the width and height.



Save your file

- Select File > Save As
- Format: Illustrator EPS (eps)
- Version: Illustrator CS5 EPS

Save your files in the following named format, replacing the fields with the relevant information:

LASTNAME_FIRSTNAME_VINYL_PROJECTNAME.ai