Creating a file in Illustrator

Although it's outside the scope of this guide to tell you how to use Adobe Illustrator, we'll cover preparing a simple file.
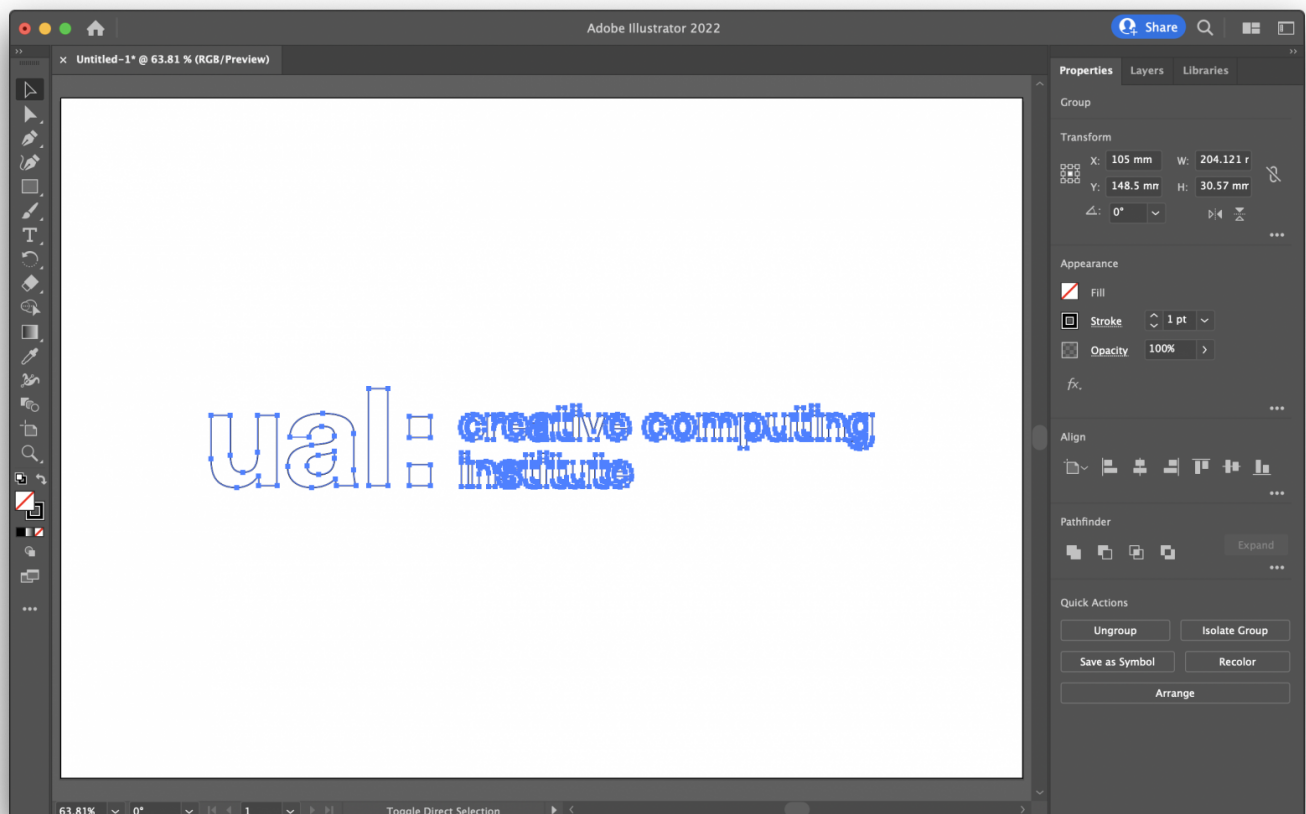
We're going to etch the UAL Creative Computing Institute logo, outline it with an engraved line, and then cut out a bounding box.

Step 1

The laser cutter can etch raster images, however to be able to cut out or engrave we need to provide vector lines which is why you will need to use software such as:

- Adobe Illustrator
- Corel Draw
- Affinity Designer
- Inkscape

Here you can see we've created an Illustrator document in RGB colour mode (not CMYK) and added a vector of the CCI logo to the artboard:
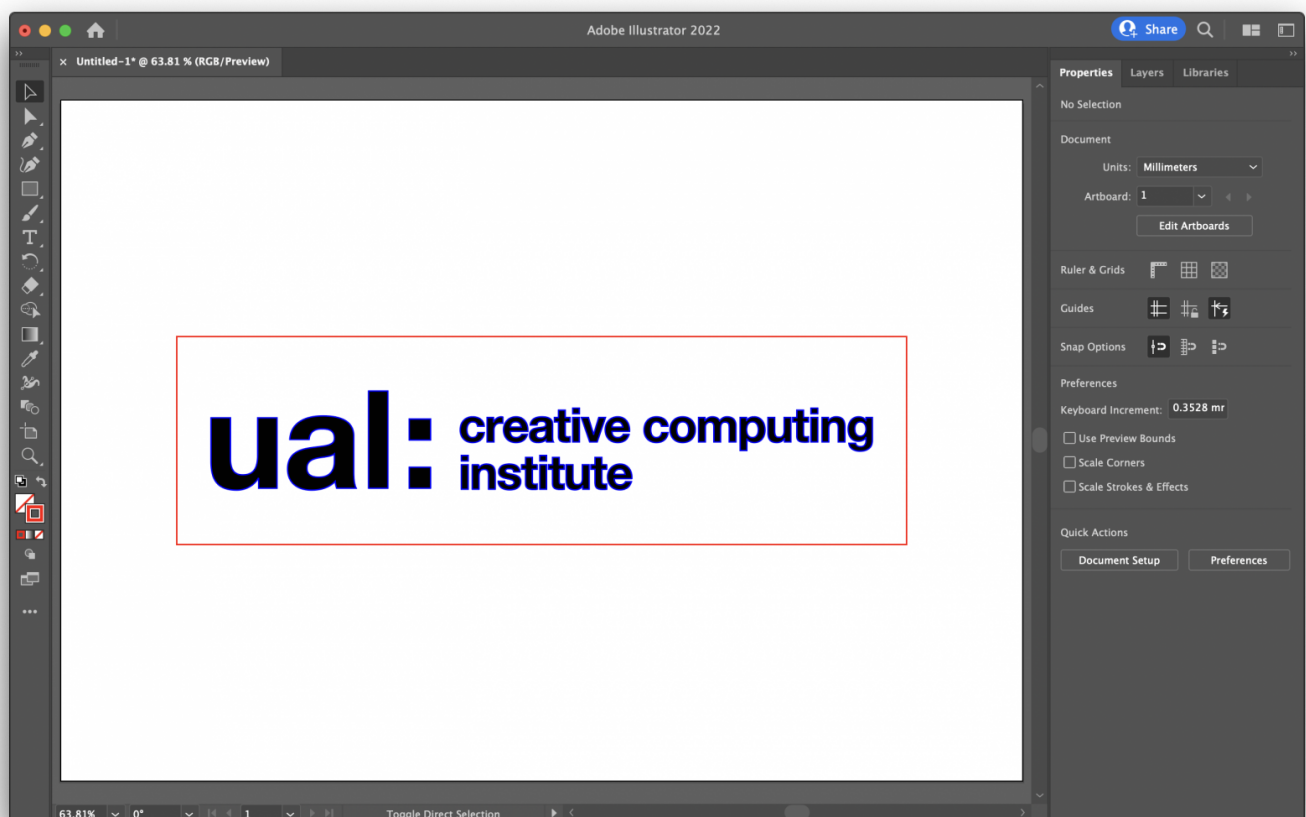
Step 2

When preparing files for laser cutting with most machines you usually have to use specific colour and line thicknesses, and it's good practice to retain this with Trotec Ruby, however it is far more forgiving than older software.

As a general rule there are 3 types of action, and these are the colour fill and stroke settings for those actions:

- **Cut** - This is a vector line all the way through a piece of material.
  Stroke: #ff0000 - RGB Red
  Fill: None
- **Engrave** - This is a vector line cut into the surface of the material.
  Stroke: #0000ff - RGB Blue
  Fill: None
- **Etch** - This is an area etched into the surface of the material.
  Stroke: None
  Fill: #000000 - RGB Black

By selecting these colours and strokes you will save yourself work later, if theres a mistake you can change it in the design step in Ruby.

Step 3

Now you need to save the file, Ruby will accept various formats including:

- AI
- PDF
- JPG/JPEG
- PNG
- BMP
- SVG
- TSF

Save the file to your computer.