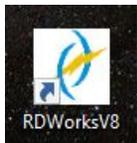Large Laser Instructions
Updated 6/2/2018 – Tony Bellomo

1. Search for an image you want to raster or engrave. Use Google image search and click tools and Line drawing to find images that are good for laser cutting.
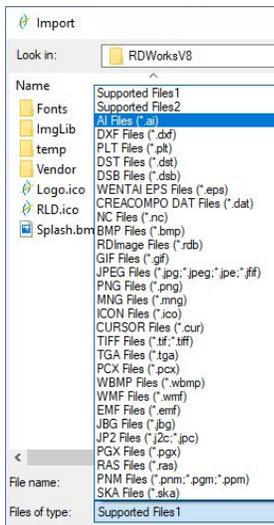

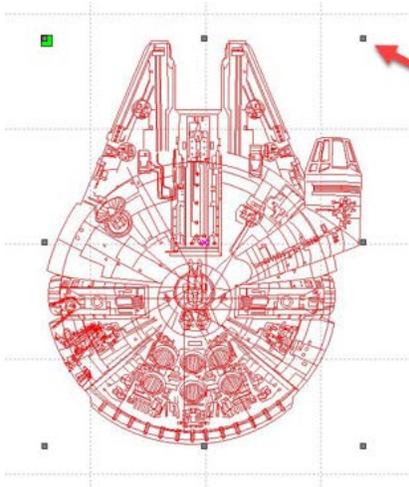2. Open your image in the RDWorks v8 software.

3. Use File ☐ Import to open the file you just downloaded

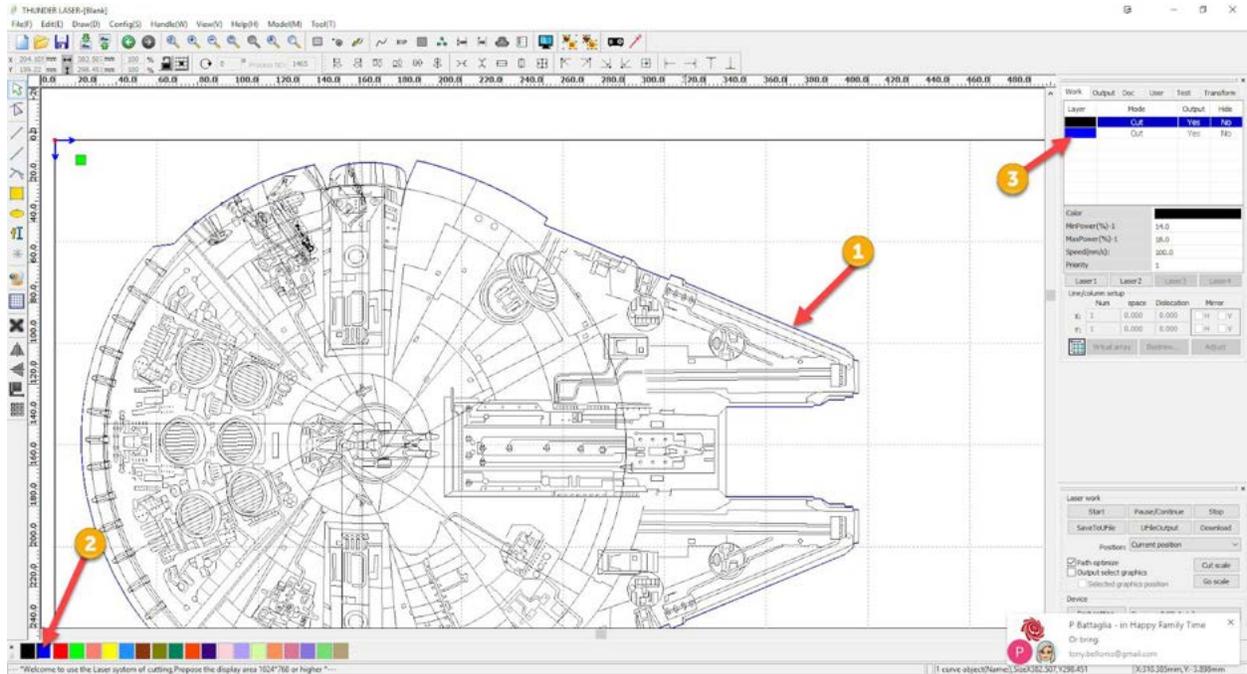4. The software supports several types of files:

5. In this case, we've opened up a vector file of the Millennium Falcon so we can both engrave and cut.
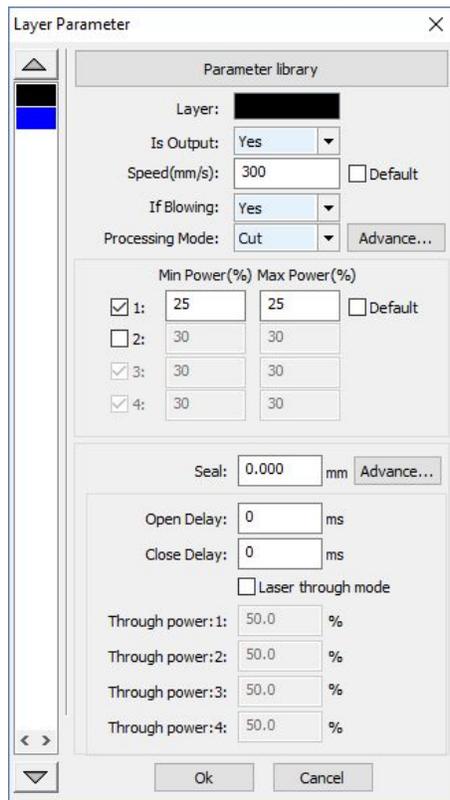

Move your mouse to the corner of your image to resize

If you double click, you can also rotate your image

6. In this case, I've increased the size and rotated 90 degrees so I can make a larger cut. This works best with vector files because they can be scaled without degradation of the image.

7. In the image above, I wanted to set different parameters for the internal and external parts of the ship so it would cut the outside line and only lightly engrave the inside lines.
    a. First, I clicked on the outside line (1) and then clicked to change the color (2). You can see at (3) that there are now two work layers, black and blue
    b. You can double click on a layer to set its properties
        i. Fast cuts (300mm/sec) at low power (25%) is good for engraving
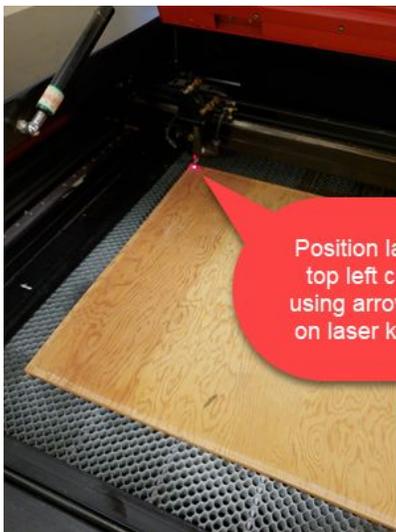   ii. Slow cuts (5mm/sec) at low power (20%)

8. Turning on the machine

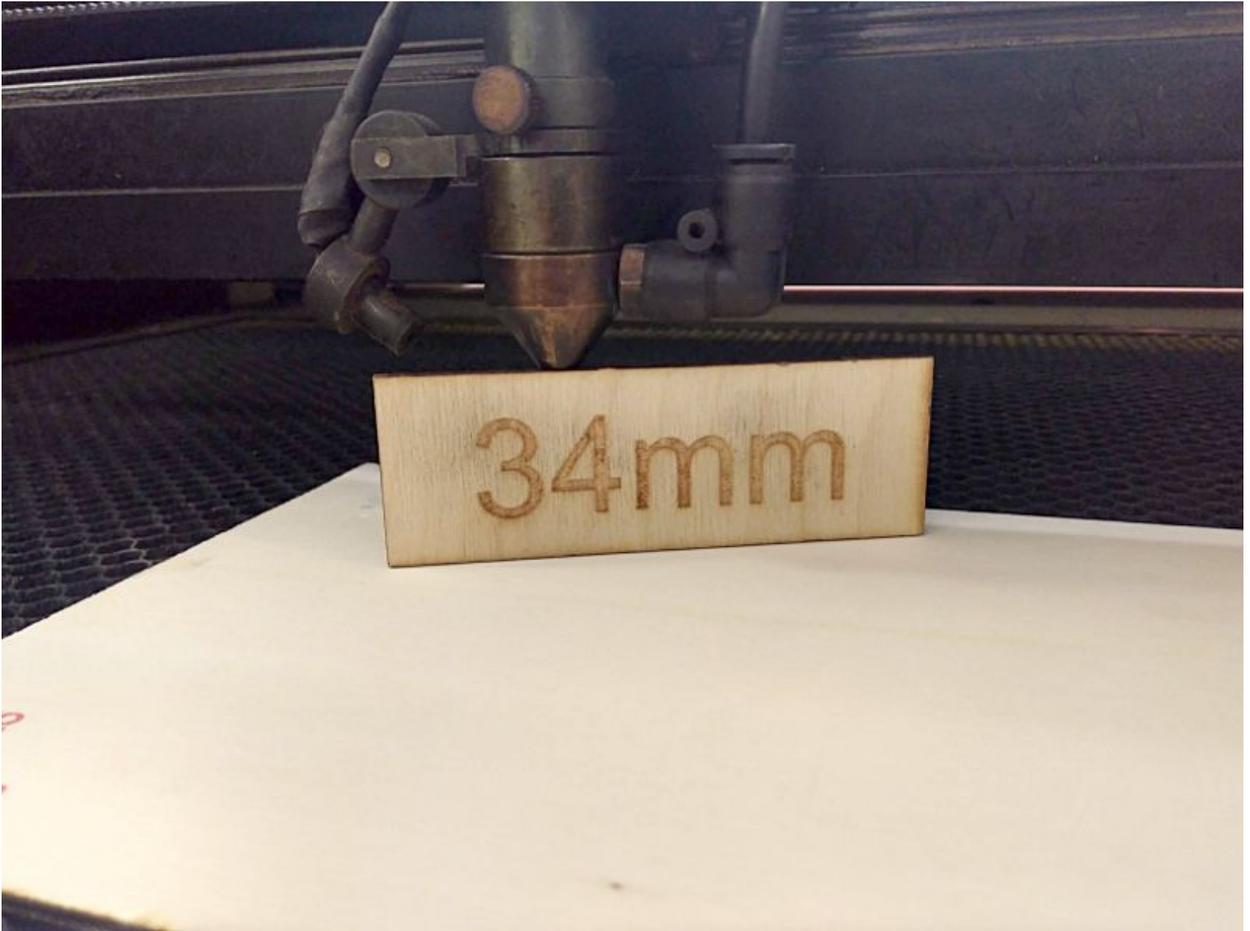   a. Use the main power switch to turn the unit on

    b. Position at the top left of where you want to start your cut / engrave using the arrow keys and then **press the origin key**
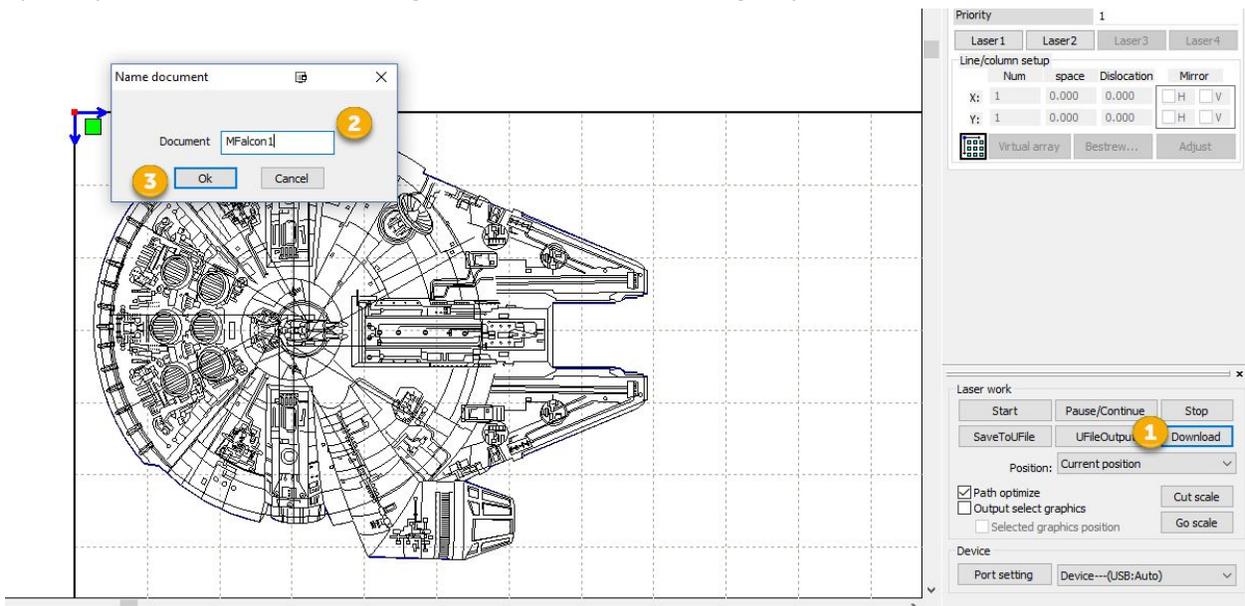
9. Focus the laser
    a. Use one of the 34mm focus measuring tools to focus the laser.
    b. Use the buttons on the right side of the laser to move the bed up or down until the focus tool just barely fits between your work piece and the laser head.

10. Upload your work to the laser using the download button (1), give your document a name (2) and click OK (3).
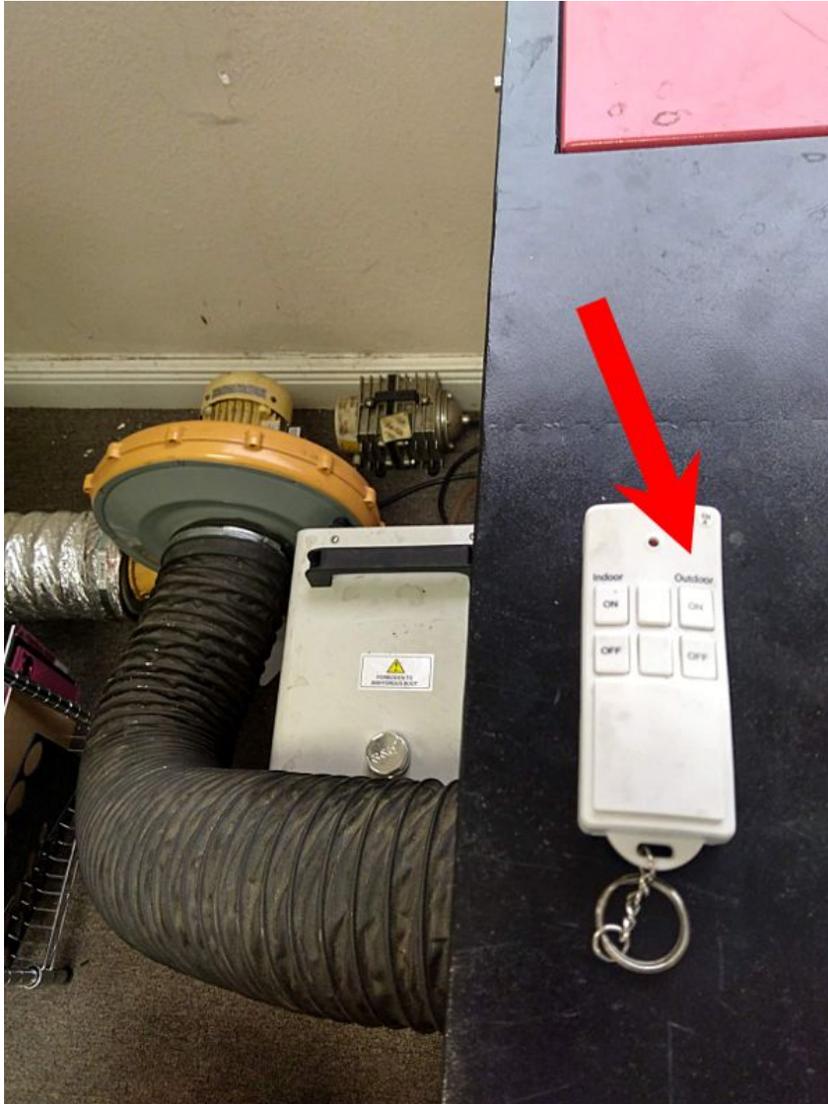
a. You will get a message that says.

b. At this point you are done with the computer. Go to the laser.

11. **CRITICAL – BEFORE YOU START CUTTING, USE THE REMOTE TO TURN ON THE FUME EXTRACTION SYSTEM!**
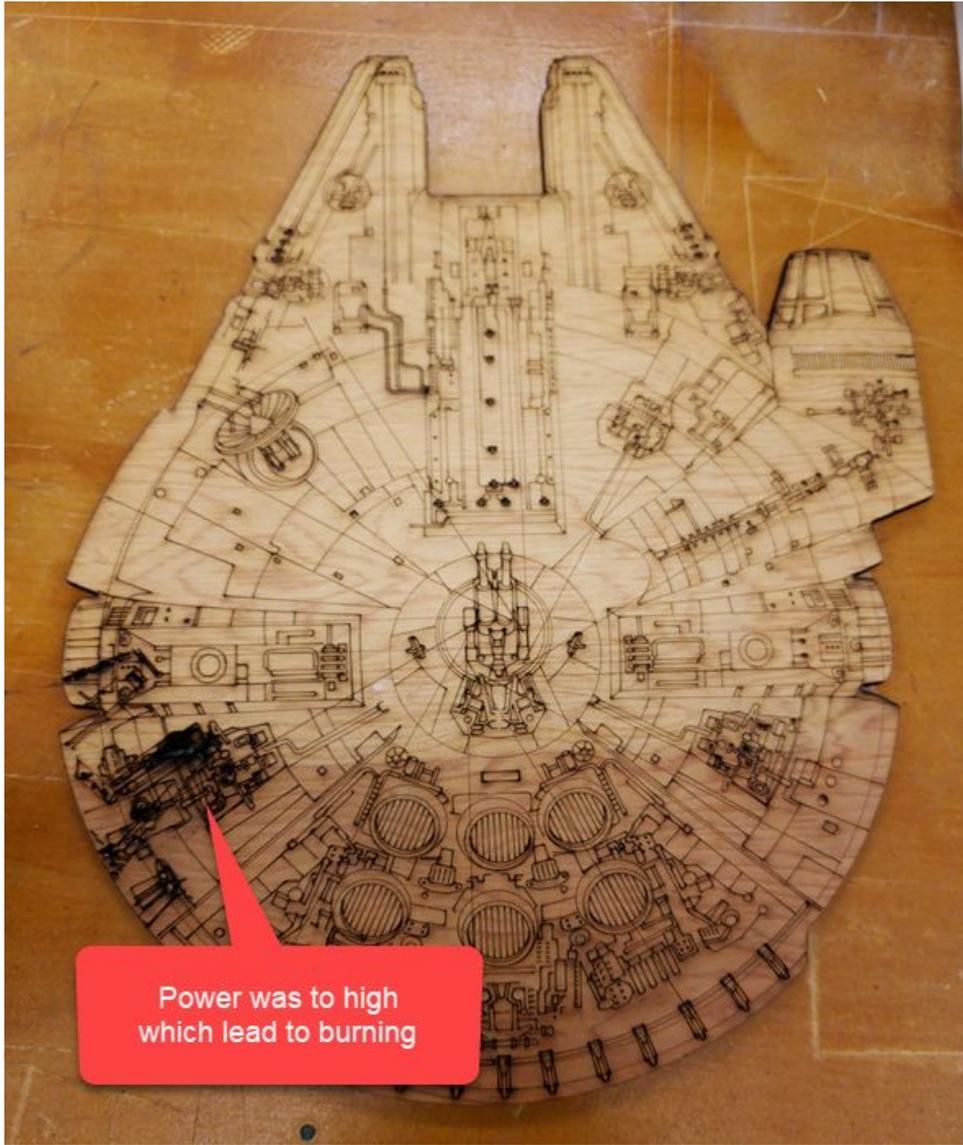
12. Use the keypad to load your file into memory on the laser

    a.   Use the file button and find your document using the arrow keys. Once it is highlighted, press the enter button.

    b.   Use the Frame button (1) to have the laser travel the perimeter of your document so you can see where it will fall on the media (wood, plastic, etc). When you are ready, hit Start Pause (2) to start the process

Power was to high
which lead to burning