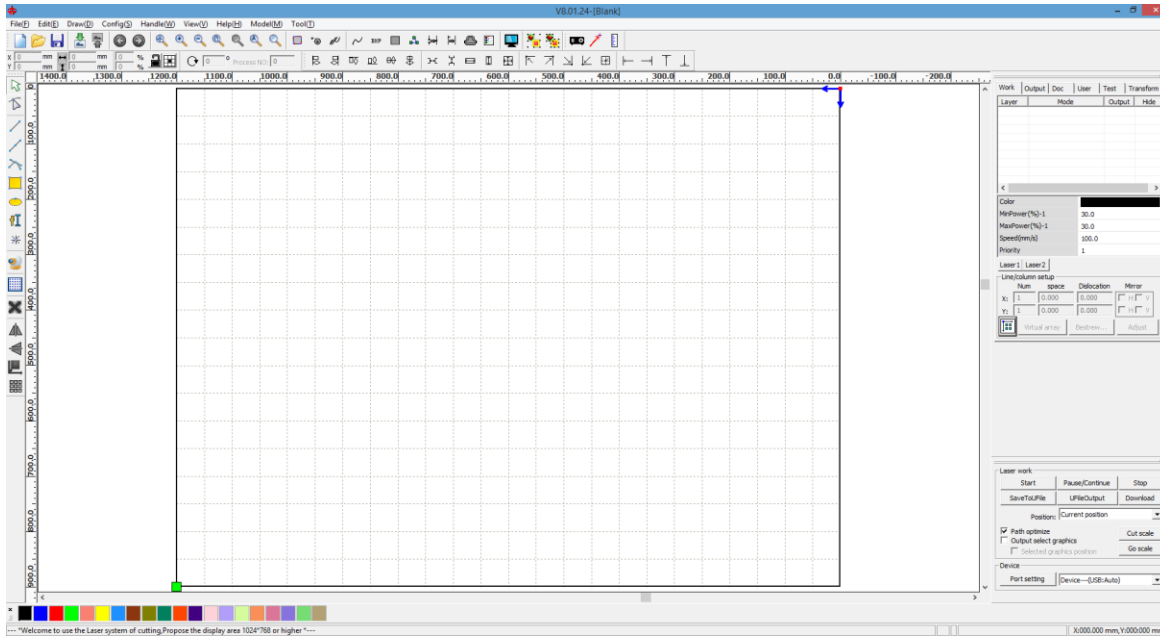


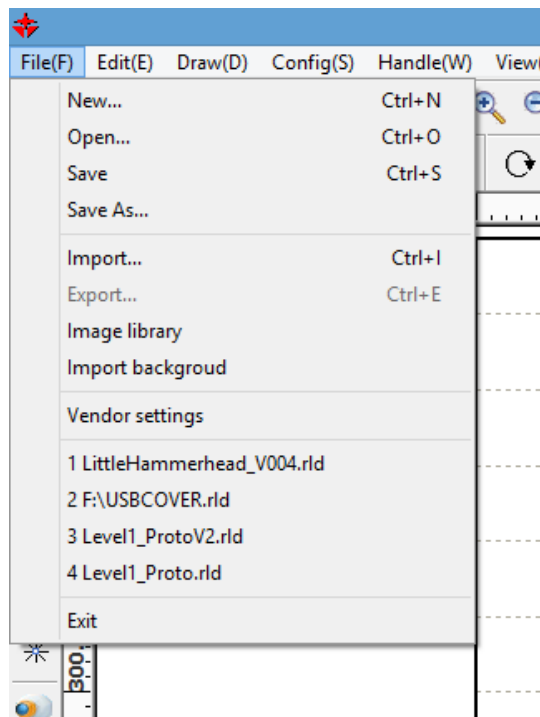


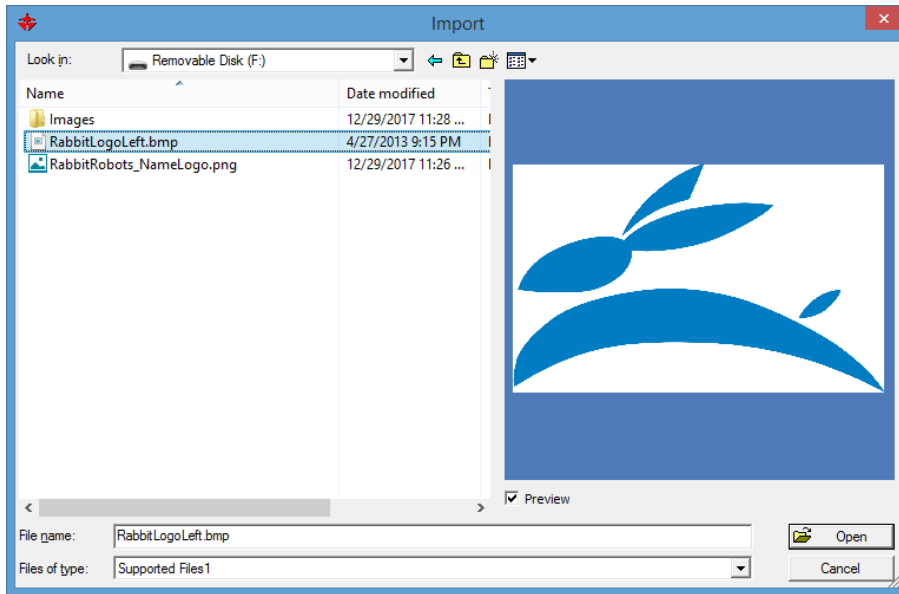
Working with RDWorks to import a Bitmap. Complete the following steps:

- 1.) Open the RDWorks windows application or use the file menu to start a new project.

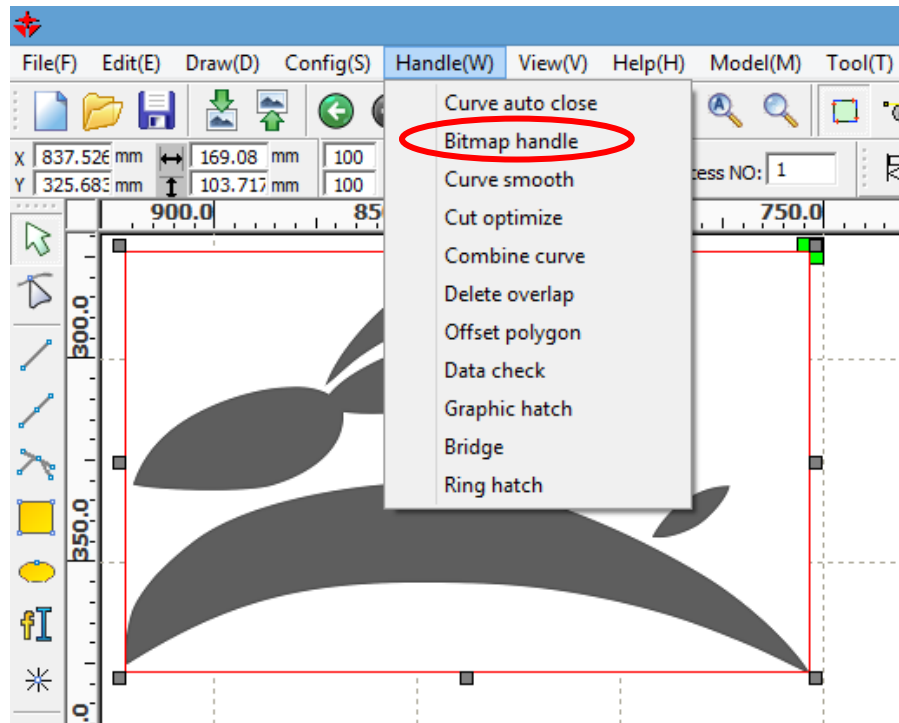


- 2.) Import the graphic file by using the menu item “File (F)... Import...”. Locate the desired graphic file. The compatible file formats include: \*.ai, \*.dxf, \*.plt, \*.dst, \*.dsb, \*.eps, \*.bmp, \*.gif, \*.jpeg, \*.jpg, \*.jpe, \*.jfif, \*.png, \*.mng, \*.ico, \*.cur, \*.tif, \*.tiff, \*.tga, \*.pcx, \*.wbmp, \*.wmf, \*.jbg, \*.j2c, \*.jpc, \*.pgx, \*.ras, \*.pnm, \*.pgm, \*.ppm, \*.ska, and \*.raw .

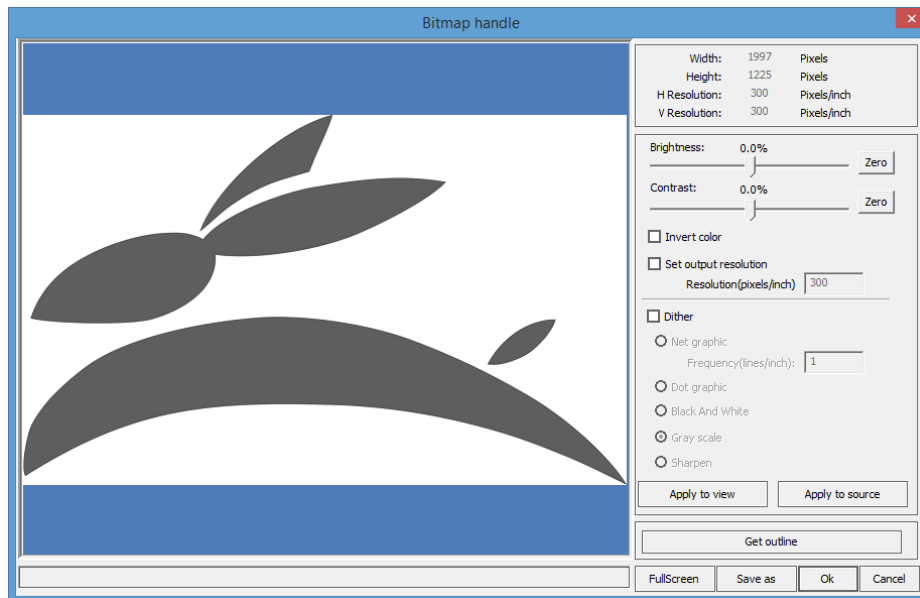




3.) In this example, we have chosen to use the RabbitLogoLeft.bmp file. The original file is actually blue, but the bitmap will import as a grayscale.



4.) If the graphic file is too soft colored or needs some basic adjustments, RDWorks has an internal method to make such adjustments. Click to highlight the Bitmap Graphic and then select the menu for “Handle(W)... Bitmap handle...” The application window called “Bitmap handle”.



In the Bitmap Handle window the image editing options include:

- A Brightness slider with a button to reset to zero
  - This will make the colors lighter as the slider is increased.
- A Contrast slider with a button to reset to zero
  - Good for making the light colors lighter and the dark colors darker
- A Checkbox to invert the color



Before



After

- An option to adjust the resolution
  - Measured Pixels/Inch
- Dither options include: (only one dither option may be applied at a time)
  - Net Graphics
    - This will produce a black and white image from grayscale by alternating white and black in the gray areas
  - Dot Graphics
    - This will produce a black and white image from grayscale by alternating white and black dots in the gray areas

*Rabbit Robots*

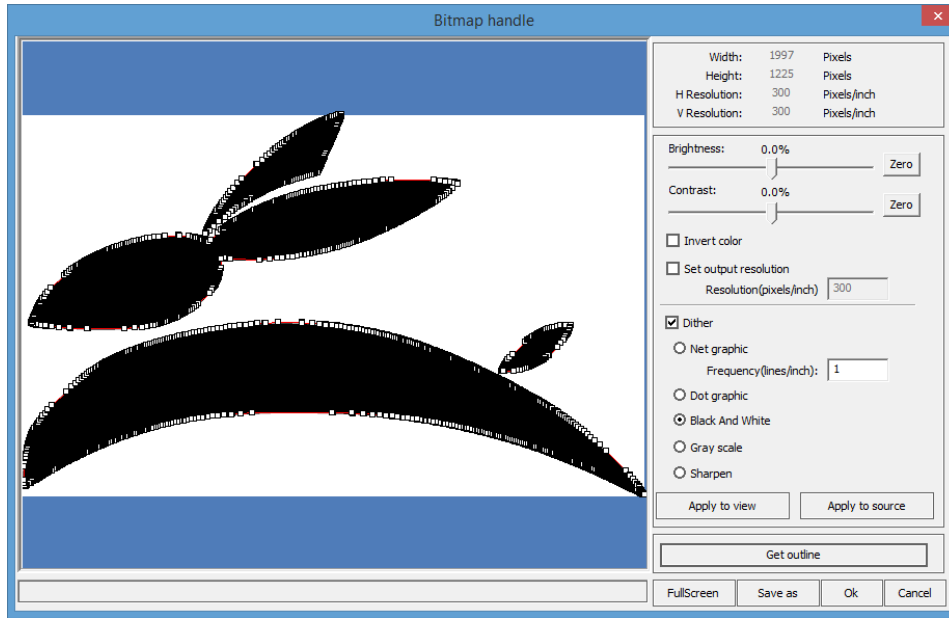
Before

*Rabbit Robots*

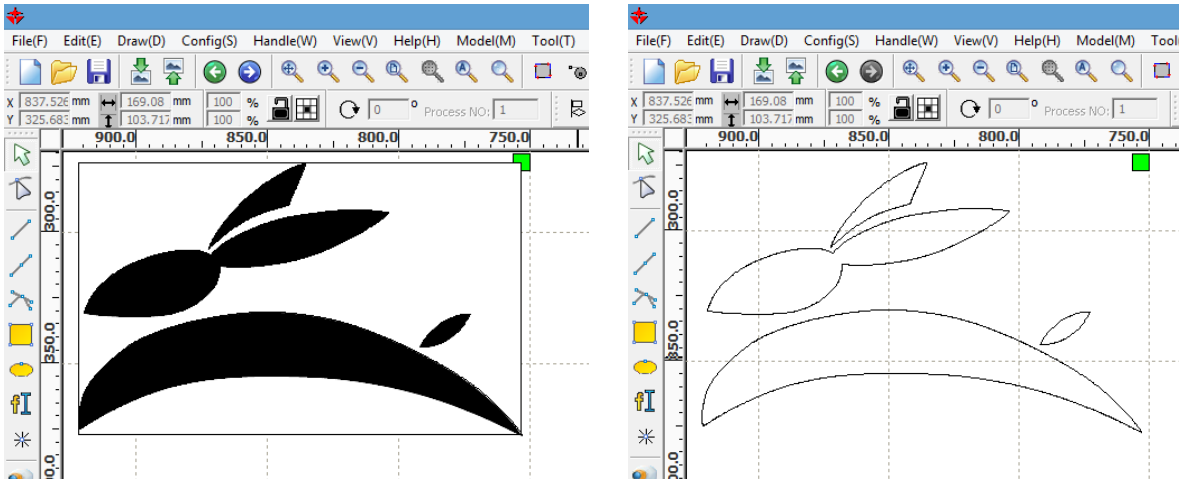
After

- Black and White
  - Works best for getting the outline of an image, but may produce unwanted results

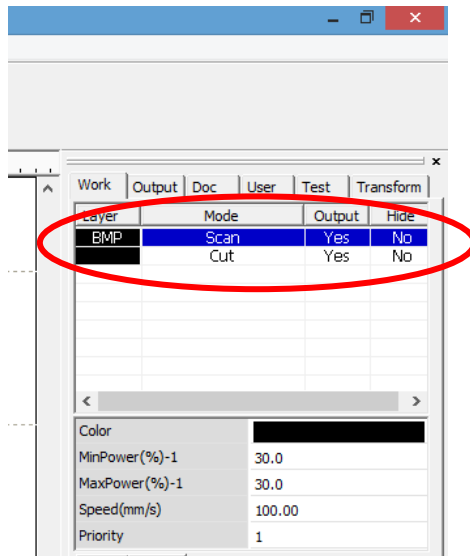
- Gray scale
  - This is useful if the image was not already converted to grayscale
- Sharpen
  - This will help define the edges of an image
- Apply to view
  - Acts as a preview button
- Apply to source
  - Will apply current settings to the image
- Get outline
  - Note: this feature can be slow to outline the image so use after modifying the image.
- Save as
  - Saves the modified image to the computer



5.) When finished with modifications press “Apply to source” and press “Ok” to leave the menu. In this tutorial, the image was converted to black and white and outlined to allow the image to be cut out.

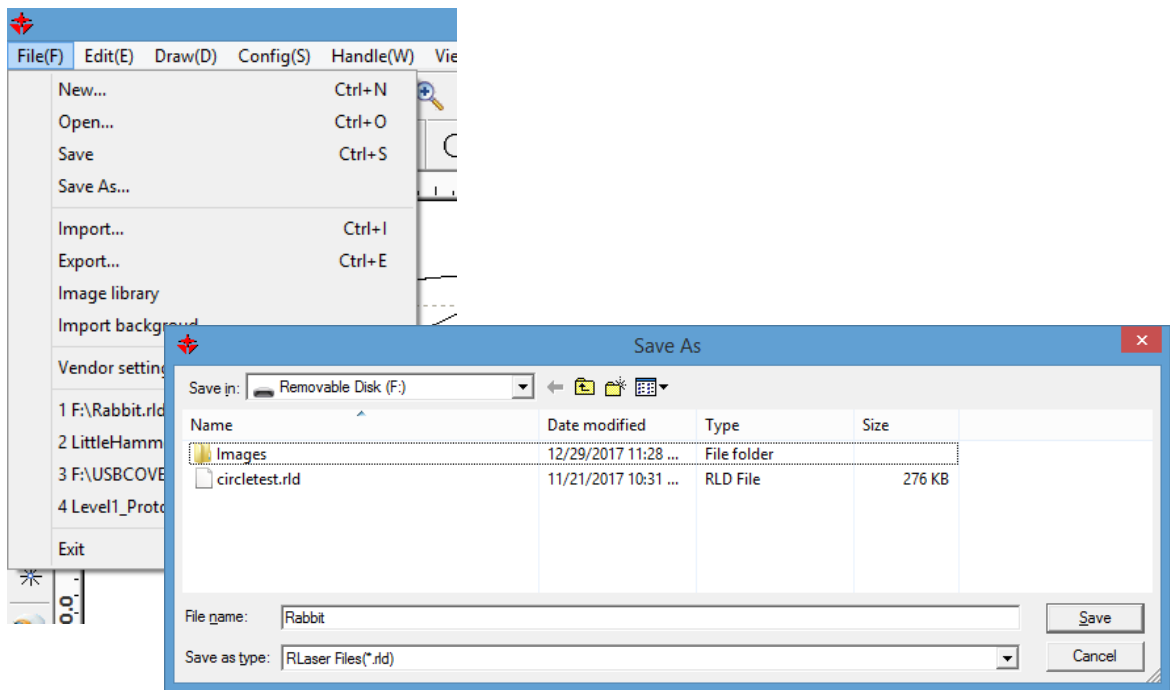


The “Get Outline” produces a vector graphic that is placed onto a new color layer with the “Mode” set to “Cut”. Hiding the original BMP color layer will reveal the new outline artwork.



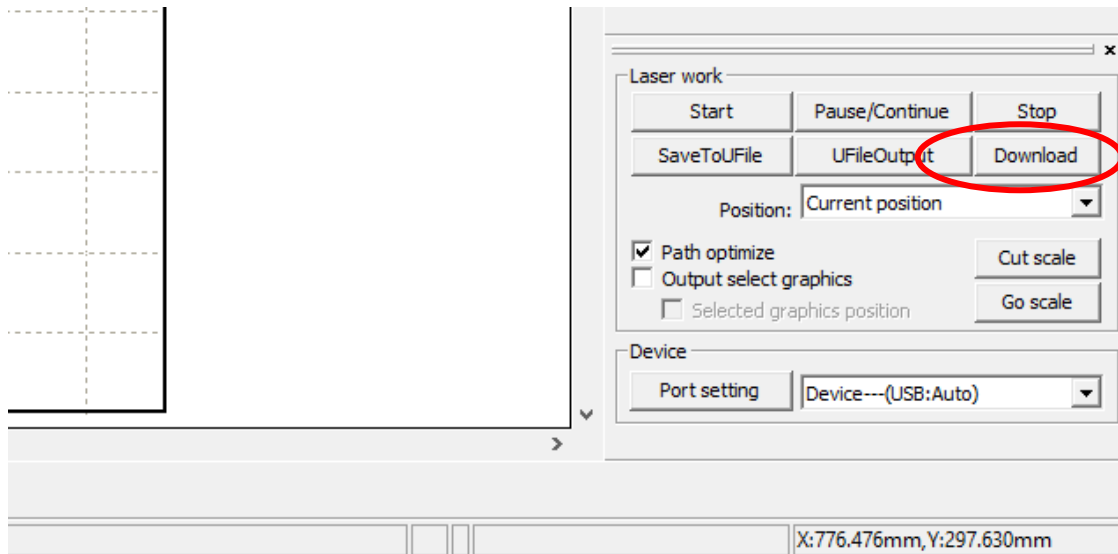
6.) Modify the cut/scan settings by double-clicking on the appropriate layer in the layers menu. Please refer to our “Common Settings for Cutting and Engraving Materials” data sheet for help finding the appropriate settings.

Note: The bitmap will be labeled “BMP” on the layer color and can only be set to “Scan”, but outlines will remain on a different layer as shown above

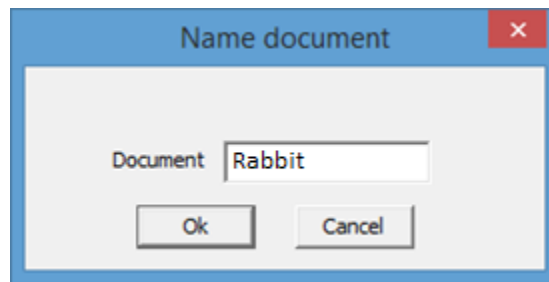


This file has been saved with the name “Rabbit.rld”. The \*.rld file extension is for this RDWorks program and does not denote any other software file format.

7.) The project layout is completed. The laser settings are modified. The design project has been saved to a file. The next step is to click “Download” the design into the laser machine. Make sure that the computer is connected to the laser machine by USB cable and that the laser machine is turned on. (The computer should already have the device drivers installed.)



- 8.) The “Download” command will start a new connection to the laser machine. The “Name document” window will appear. Enter a name for the laser machine to use. The RDWorks software will only accept letters and numbers to be used for the Document name and is limited to a maximum eight characters long.



- 9.) The computer should communicate with the laser controller to transfer the project. Once done, the will show a small window that your project has transferred successfully. The project can be opened in the laser operator panel and should be ready to engrave and cut.

\* This project is quite simple, but demonstrates that any basic design can be imported, modified, and made ready for the laser. Once you are able to accomplish this typical process, you can import much more complicated designs for cutting, engraving, and mixed mode combinations.

\*\* Please remember to check focus and proper cutting material space.