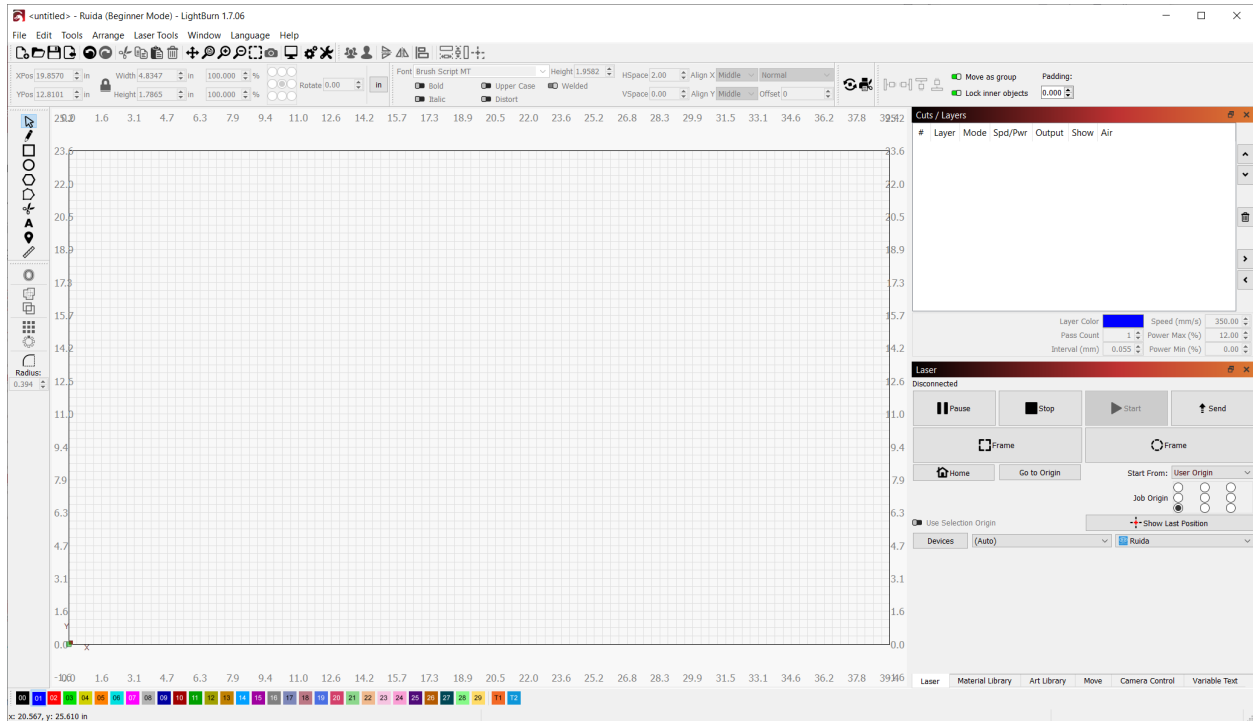


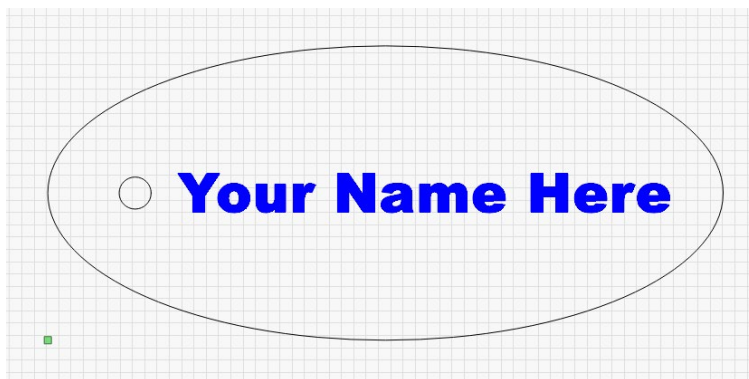
Introduction to Lightburn Software

One of the best ways to learn to use Lightburn is to use it. This guide will provide you with the basic functions to use the Lightburn software at TinkerMill. A more detailed guide can be viewed on the Lightburn Web Page:

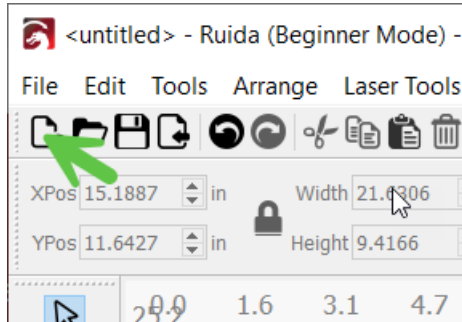
<https://docs.lightburnsoftware.com/latest/GetStarted/FirstProject/>



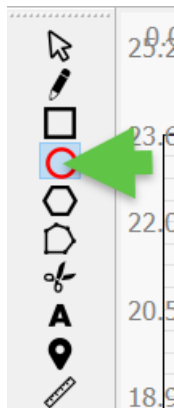
Making something that goes onto a keychain is a very simple thing that you can make for yourself or as a gift for your friends. It can be as simple as engraving your or your friend's name on it, or engraving an image on it. To make this item, you will be using the tools on the left side of the screen.



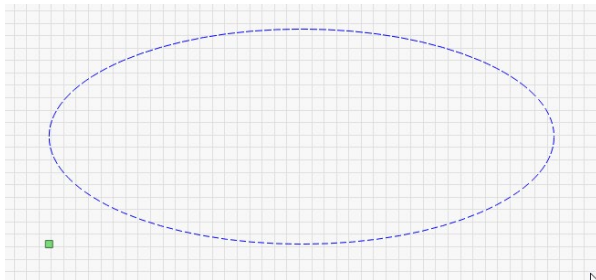
Steps to make keychain item.



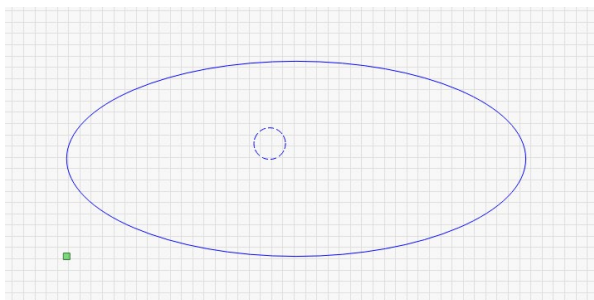
1. Click the mouse on the 'New' icon at the top. This will give you a new workspace for your design.



2. Left click on the circle icon in the tools bar on the left. The icon will turn red when selected to show it is active. The Rectangle and Polygon tools can be used if desired and operate the same way as the circle tool.



3. Left click and drag the mouse anywhere on the workspace. Holding shift while dragging will make a perfect circle starting where you clicked the mouse. Holding cntl while dragging will start the shape in the center.



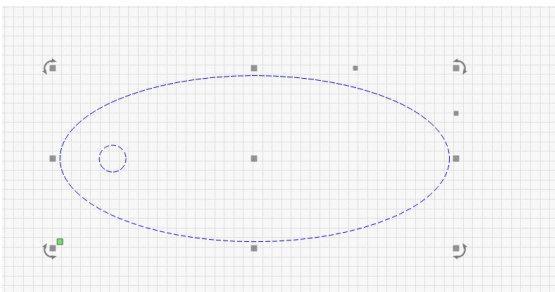
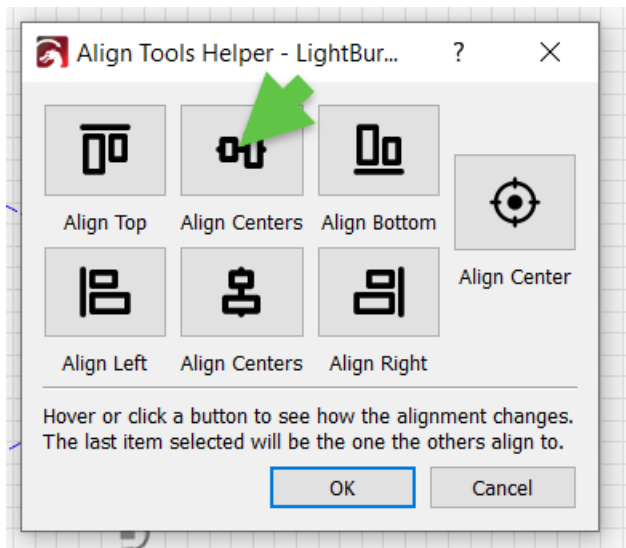
4. Repeat step 3 and draw a smaller circle for the chain hole.



5. Left click on the Arrow icon on the left and then drag a box around both objects to select both. You will see the lines of both objects are moving and are dashes instead of solid. This is an indication that the objects are selected.



6. Left click on the alignment helper at the top and align the 2 objects in the center.

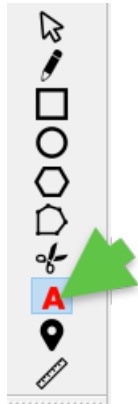


7. Left click outside the selected objects and then left click on the small circle. Use the left and right keyboard keys to move the small circle to the left where you want.

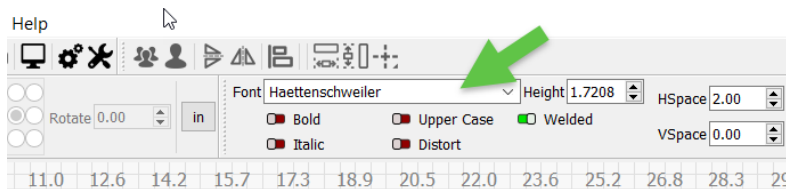
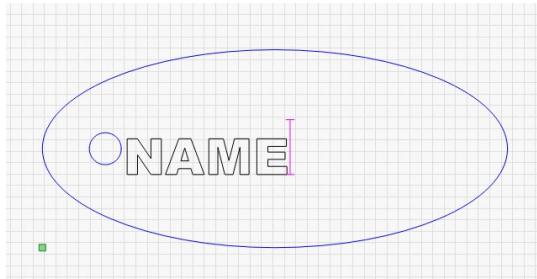
8. Repeat step 5 to again select both objects.



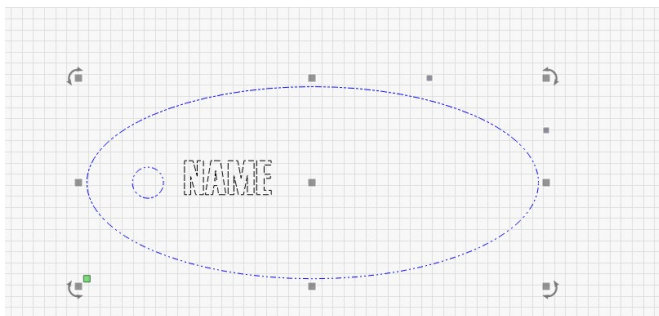
9. Left Click on the Group icon to combine the two objects as one layer. Left click on the Blue box at the bottom left to assign the group to the blue layer.



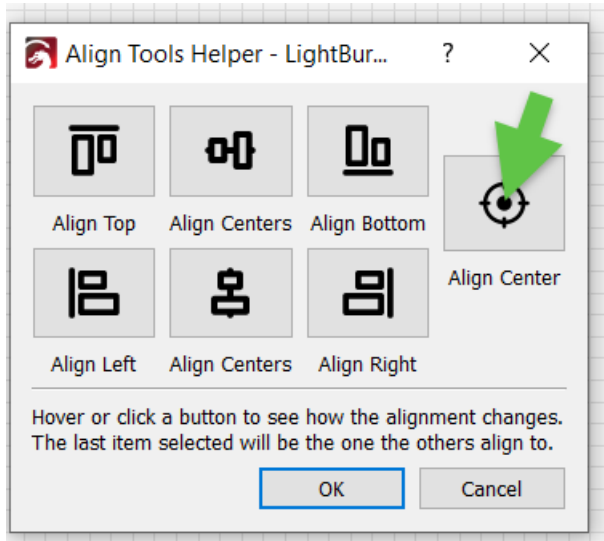
10. Left click on the text tool icon and the black box at the lower left. Then left click inside the object on the screen. Type a name to engrave on the tag.



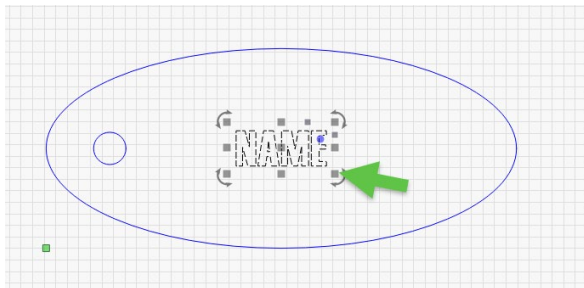
11. At the top select a font for the engrave.



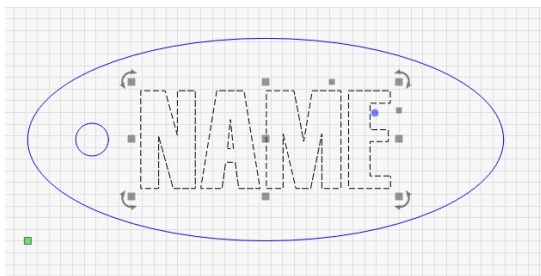
12. Repeat step 5 so the name and the object are selected.



13. Repeat step 6 and select align center then Ok.



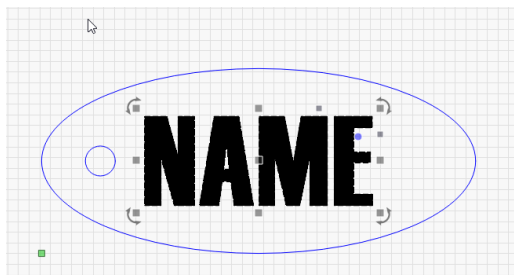
14. Left click off design and then left click on name to select it.

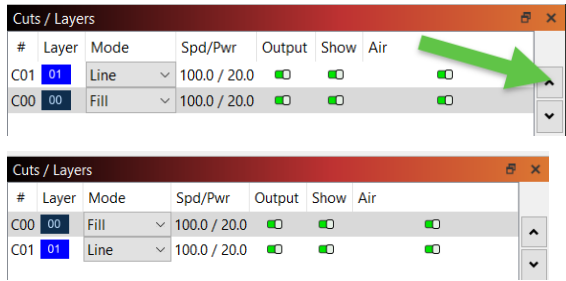


15. While holding cntl, left click and drag on the gray box in the lower right corner to resize the text to fit as desired within the item.



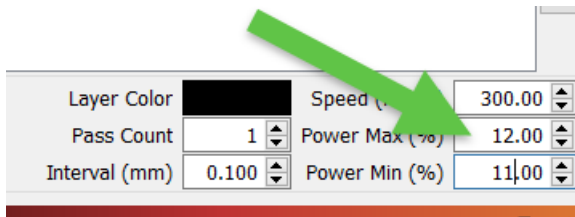
16. In the Cuts \ Layers window on the right, change the second line mode setting to 'Fill'. This is the engrave code for name and fills the design with the layer color.



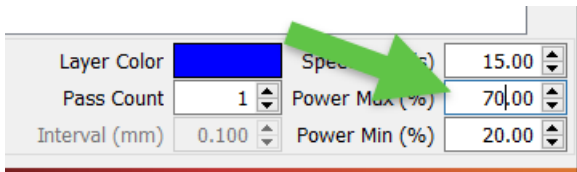


17. As a general rule, the engrave process should be the first layer performed. This is followed by any inside cuts and then outside cuts. To change the layer order, left click on the layer changed in step 16 and then click on the ^ icon on the right of the window.

18. Next, you need to determine what material to use to cut your design. [Laser Cutter Settings](#) contains a list of materials with corresponding speed and power settings for cutting and engraving. For example, you choose 3mm (1/8") birch plywood for your project. Looking that up in the list, you find for engraving on this material, speed = 300 and power = 11-12. For cutting, speed = 15 and power = 70.

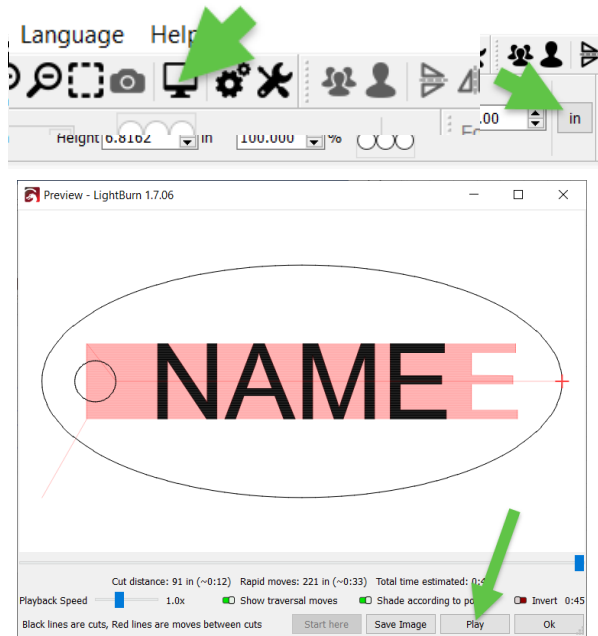


19. To enter these values, repeat step 14 and then enter the corresponding values for engrave in the lower right of the Cuts \ Layers window.

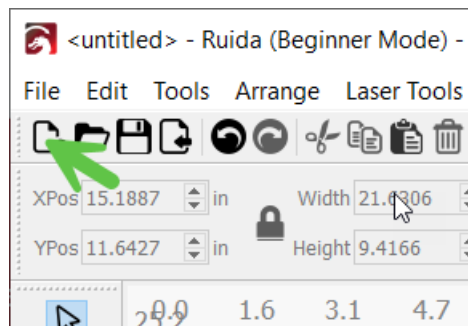


20. Left click the mouse to select the oval and circle group. This highlights the cut group so you can enter the cut values from step 18. Note: set Max power to power setting and Min power to about 20% of Max. This allows the cutter the ability to cut the power level when cutting in the corners to avoid burning the material.

21. Repeat step 5 to select the whole design. You will now resize the design to the desired size. For this keychain item project, you should have it about 3" wide. At the top, click on the lock icon to set it to locked and then enter 3 in the width column. If mm is indicated, change the selector to 'in' before changing the width. With the aspect ratio locked, the height is automatically changed with the width.



22. Preview the job. Click on the screen icon. Then click on play to see how the job will cut.



23. You are now ready to save the project and/or send it to the cutter. Save the file as you would any file for your PC. When using the TinkerMill PC, you can save to a USB drive. Next, click on send in the Laser window in the lower right. Accept and overwrite the suggested name. This will send the design to the cutter and you are ready to see the results of your design project.

