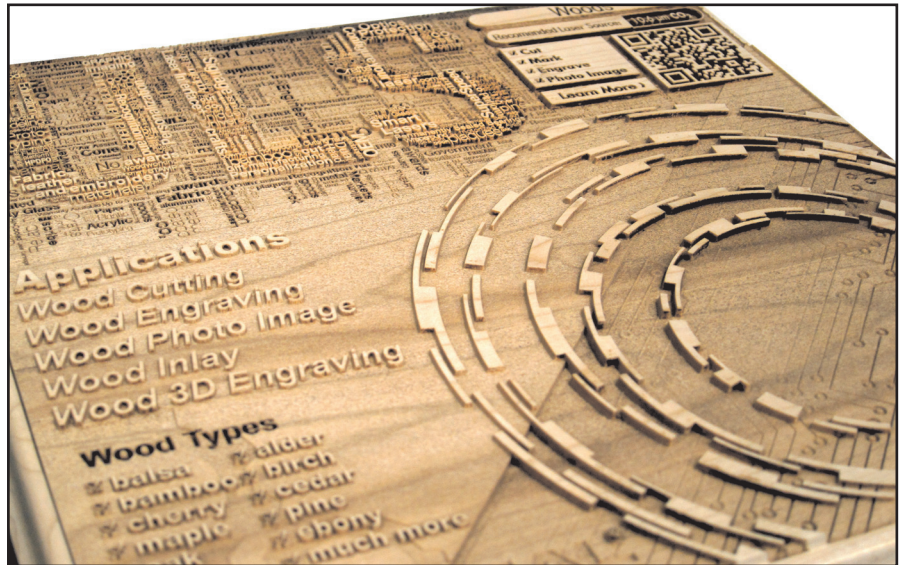


APPLICATION TIPS



Version 1.1



3D IMAGES IN CoreIDRAW®

Introduction

This application tip will explain how to convert basic design shapes and vector logos into 3D images using CoreIDRAW® for laser engraving.

Overview

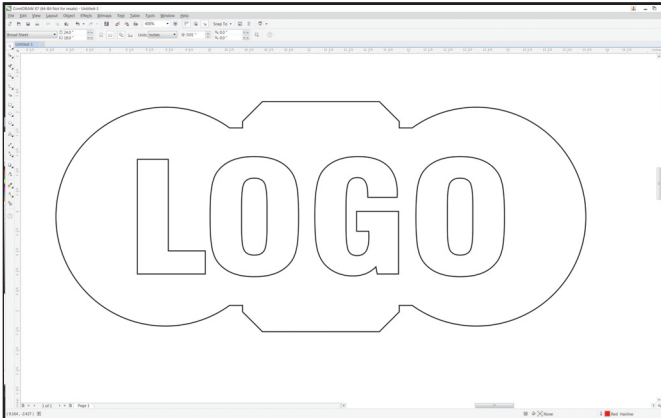
CoreIDRAW® versions 12, X3, X4, X5, X6 and X7 will work with this process. This tip sheet uses CoreIDRAW® version X7 to illustrate the process.

Notes: High laser power is recommended for this process; however, lasers of varying watts will work though the process will be slow.

More advanced images such as photos and faces, cannot use this method. Images from high cost advanced 3D scanners, 3D cameras systems or special 3D generation software are necessary for this kind of image.

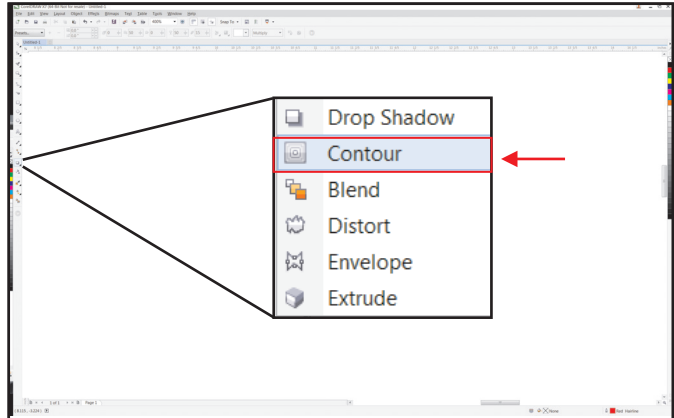
If highly detailed images are necessary and cannot be generated using this tip sheet, there are companies with the software and hardware to create or convert your image to a 3D ready laser image for a fee. These companies provide 3D clipart, and can do custom work. If you are interested in this go to: www.gantryco.com.

3D IMAGES IN CorelDRAW®



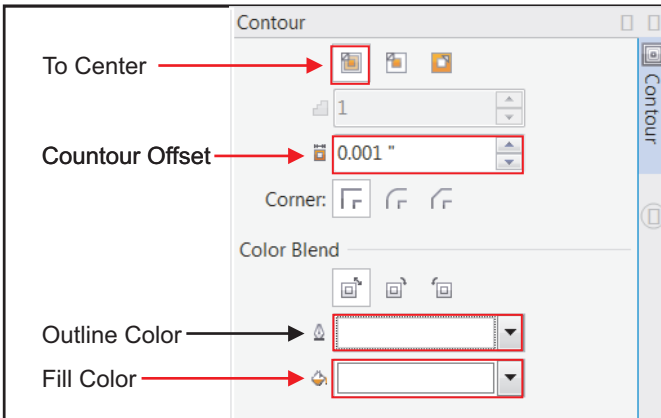
1. Design or open file, convert file to black hairline outline as shown.

Hairline is the thinnest line weight possible

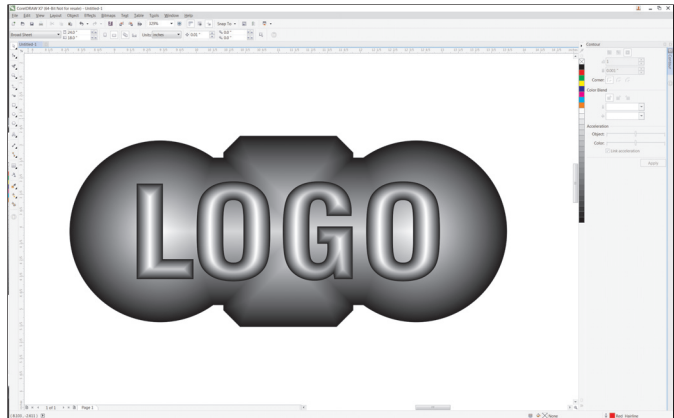


2. Select the contour tool on the left tool bar, or the drop down menu: Effects/Contour.

Contour Quick Key: Ctrl+F9

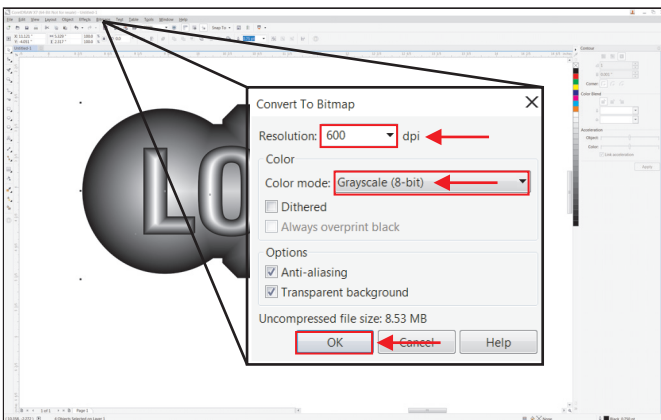


3. Select outline file to contour. In the contour fields select "To center" and set the contour offset to 0.001" (0.25mm). Set the outline and the fill colors to white as shown. Select the "APPLY" button.



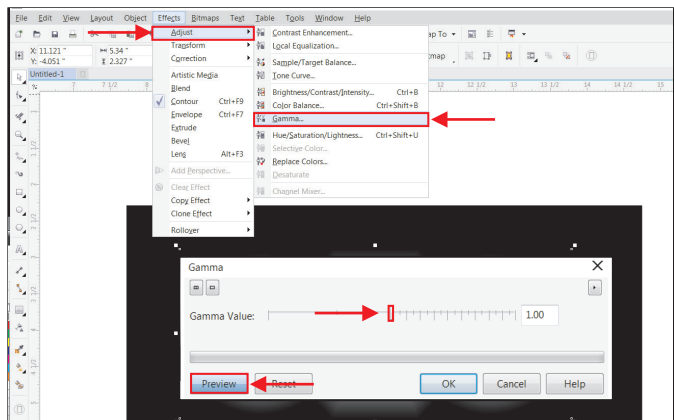
4. Select each component of the design and apply the settings for each.

You may have to change the order for the object to show. Do this by selecting item then pushing "Shift+Page up or page down" to place it above or below



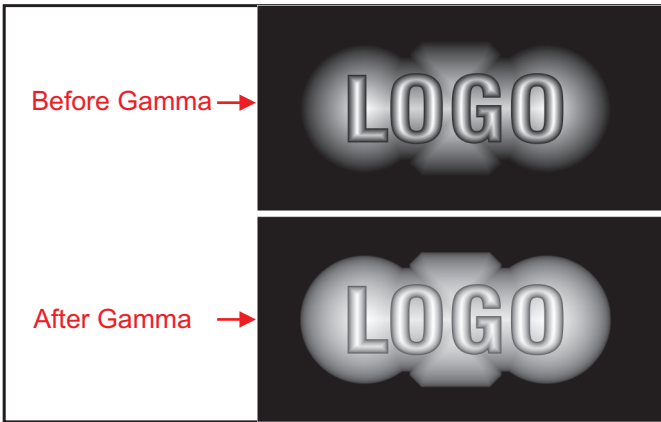
5. Select image and go to the drop-down menu Bitmaps/Convert to Bitmap. In this screen change the resolution to 600dpi, the Color mode to grayscale (8-bit) and select "OK".

This converts image to a .bmp format and reduces the size to manage it better.



6. Place a black backing behind the image for effect (not necessary). Select image and go to the drop-down menu Effects/Adjust/Gamma. Adjust the slider "Gamma Value" to modify image and "Preview" to view the adjustments.

3D IMAGES IN CorelDRAW®

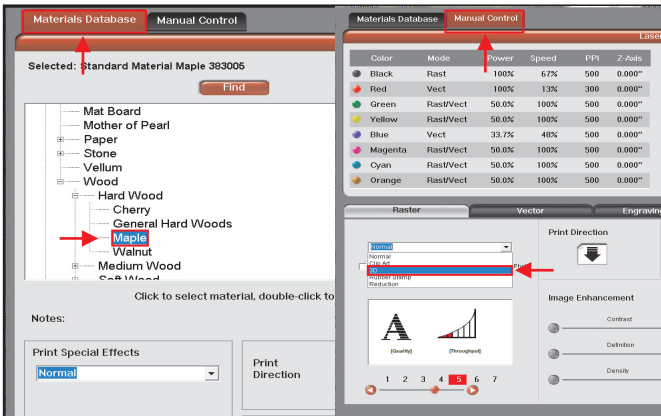


7. Gamma correction will affect the image angles and determine how it will engrave. More adjustment equals less angle.

Testing will be necessary to get desired affect depending on material processed, and desired depth into that material



8. File is now ready to be processed.



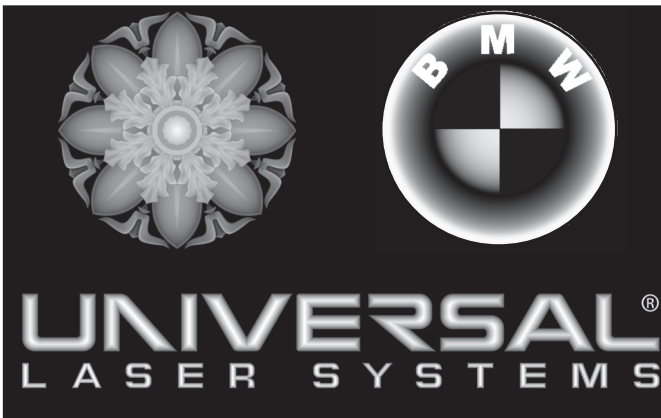
9. Select material from Materials Database. Go to Manual Control Tab and "3D" mode in the "Raster Tab".

Selecting the material setting first in the materials database provides settings in manual control, 3D mode is an advanced feature is not supported in the Materials Database.

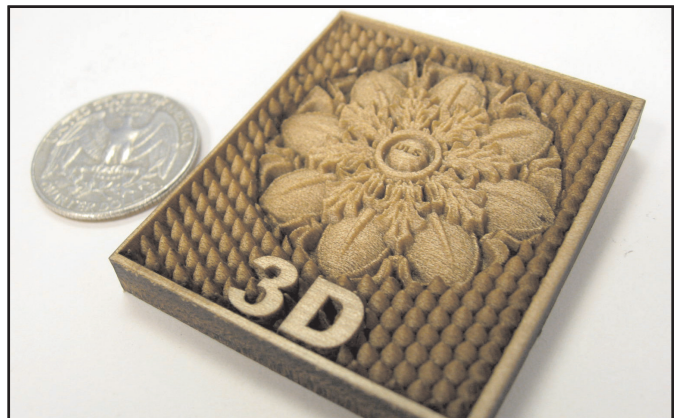


10. Run your 3D image (hard maple wood).

Multiple passes are recommended to produce depth rather than slowing the laser settings down, producing a cleaner sharper looking image. (The sample is 4 passes with a 50 Watt laser)



11. Most basics shapes and vector logos can be converted to a 3D effect using this method.



12. Hard woods and some plastics work the best for 3D engraving. Some materials work better then others, testing is necessary to determine how materials work with 3D laser processing.