

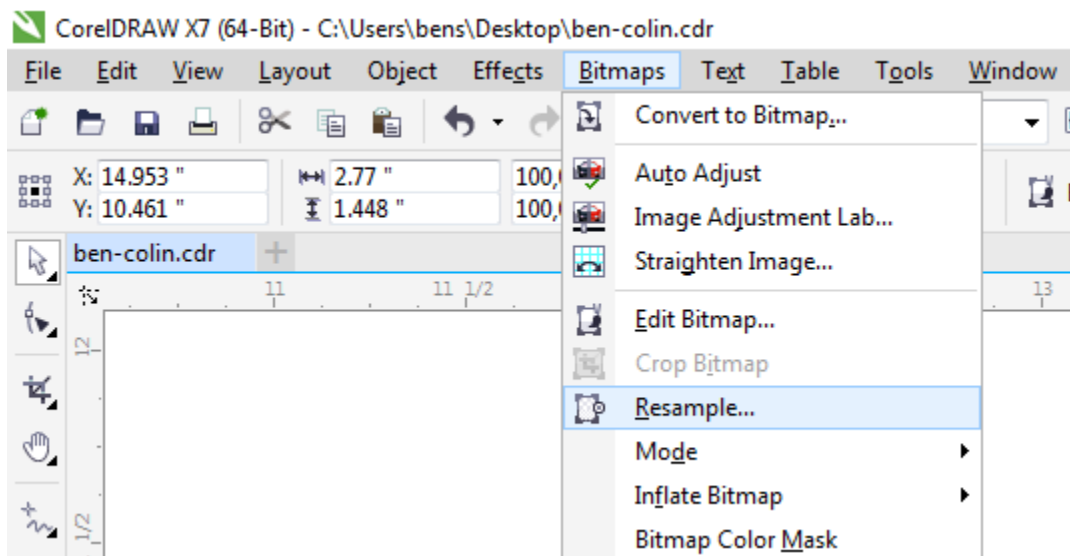
Processing a Photo in CorelDRAW X5-X8 for a Wood Engraving

1. Open your photo in CorelDRAW, then resize and crop the photo to the final size you are going to engrave.
 - **Note:** It's very important not to change the size of your photo once you convert the photo to a Black and White 1-bit photo in the final step of this process.

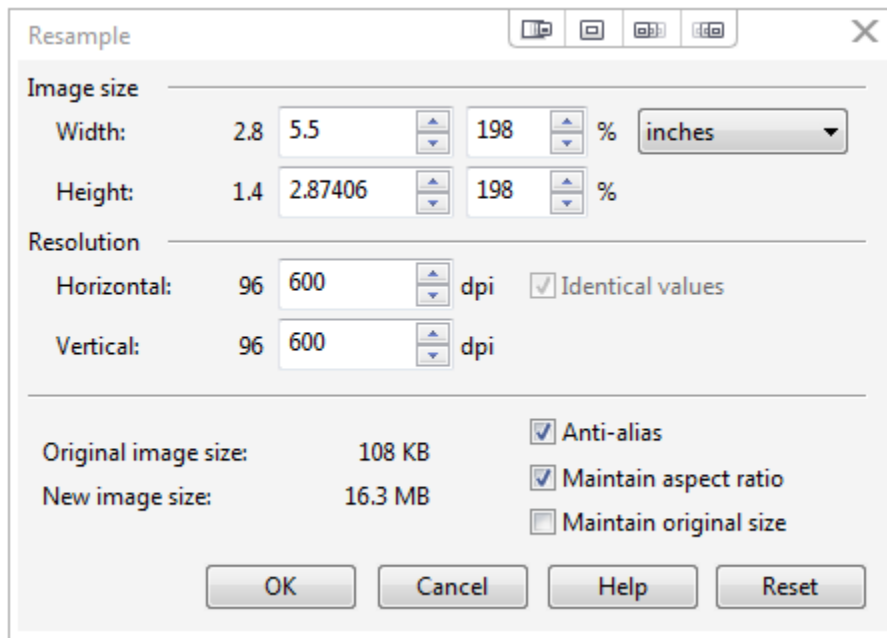
Example Photo:



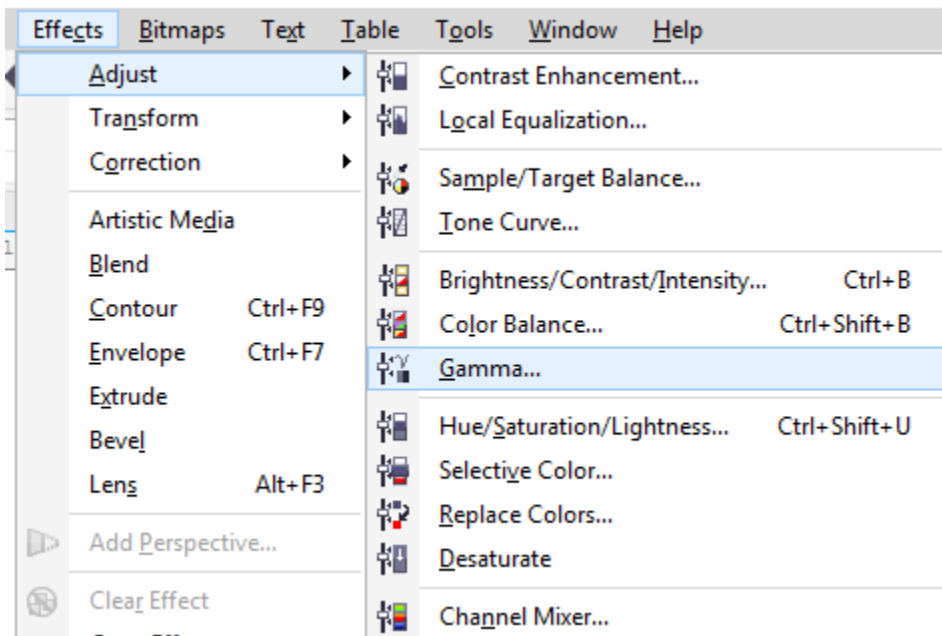
2. With your photo imported and selected in CorelDRAW, **open the Resampling Palette by selecting Bitmaps/Resample** from the drop down menu.



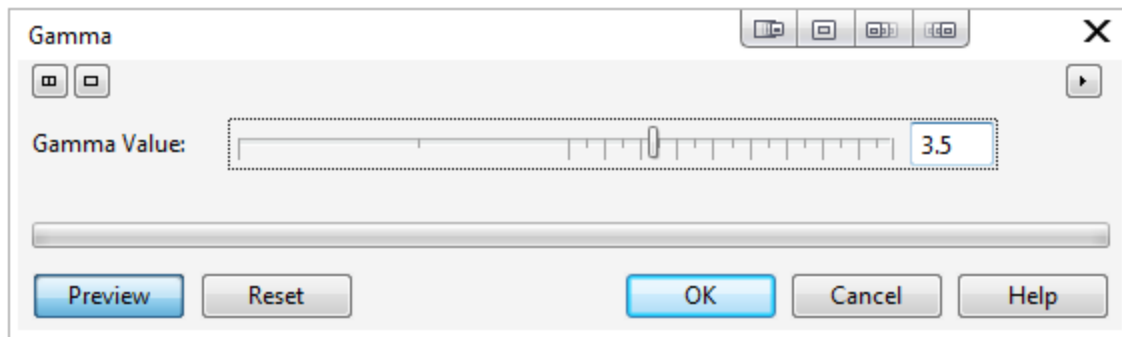
3. In the Resample Palette, change the **DPI to 600**, and then click OK.



4. Now the real fun begins! There are 4 different CorelDRAW effects/filters we are going to apply to the photo.
 - **Gamma**
 - **Unsharp Mask**
 - **Sharpen**
 - **Convert to Black & White (1-bit) with Halftone Dither**
5. **Gamma Adjustment Filter:** The Gamma filter allows you reveal detail in the low-contrasting areas of a photo without significantly affecting the shadows or highlights.
 - With the photo still selected, start by opening the Gamma adjustment palette. Select **Effects/Adjust/Gamma** from the drop-down menu.



- In the **Gamma Palette** enter the value **3.5**, and then click OK. This will brighten every value in the photo and bring out detail in the dark or shadowed areas.

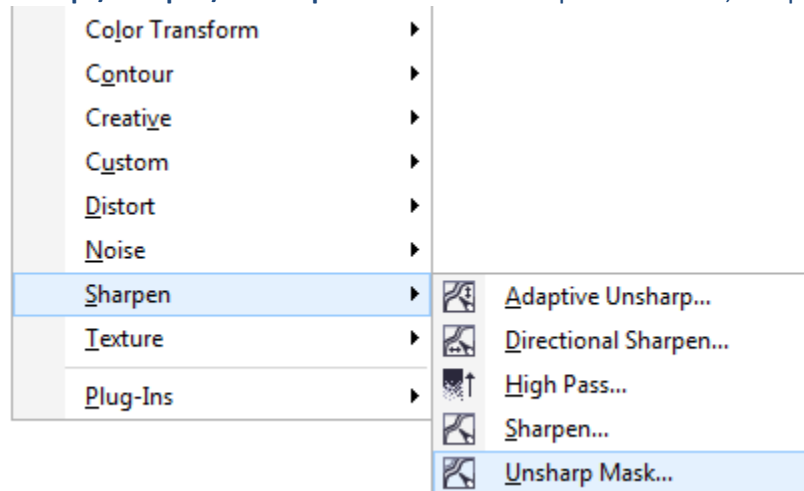


Results:

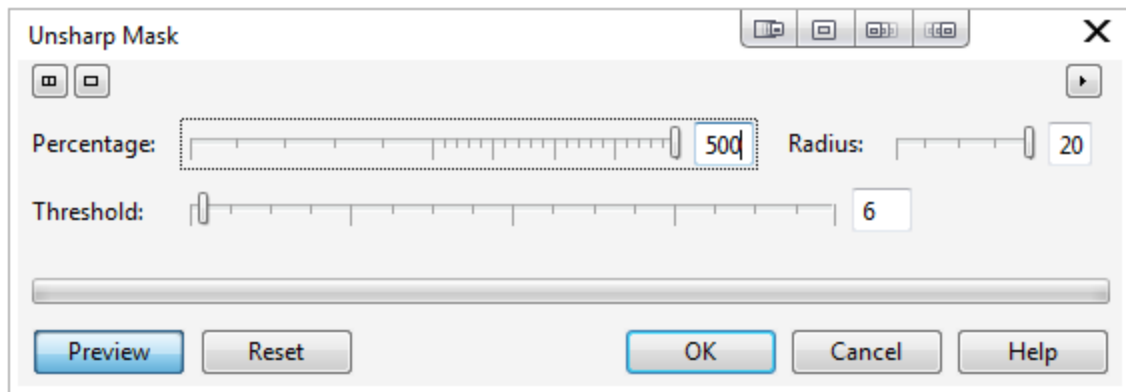


6. **Unsharp Mask Filter:** This filter accentuates edge detail and focus blurred areas in the photo without removing low-frequency areas. Low-frequency areas are the areas in a photo with subtle or smooth tonal changes - a good example is a portrait photo.

- **Select Bitmaps/Sharpen/Unsharp Mask** from the drop-down menu, to open the **Unsharp Mask** palette.



- In the Unsharp Mask palette enter these values **Percentage 500, Radius 20, and Threshold 6**, and then click OK.

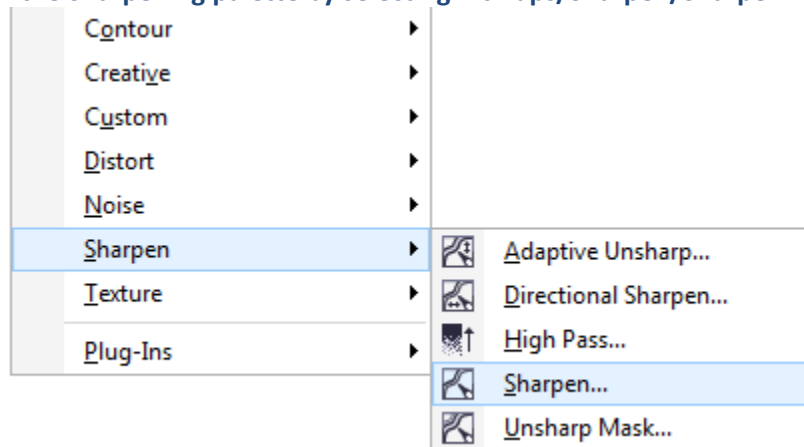


Results:

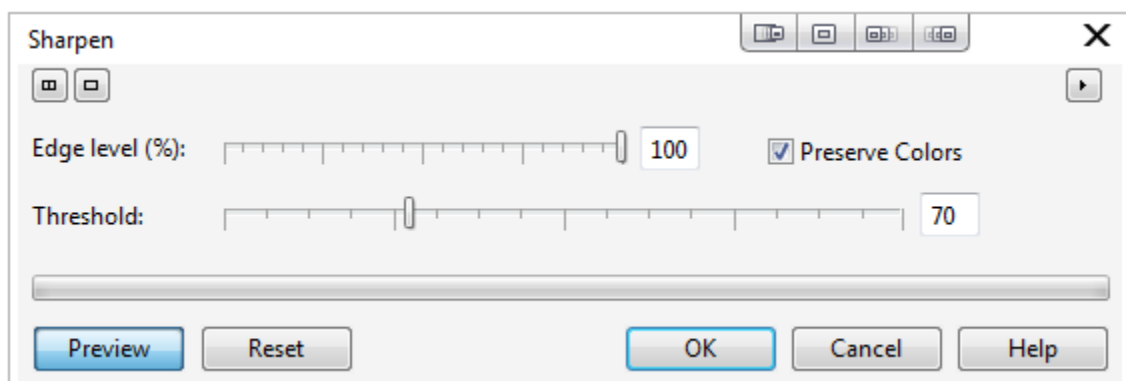


7. **Sharpeing:** The Sharpen filter accentuates the edges of the photo by focusing on blurred areas and increasing the contrast between neighboring pixels. The result creates a greater contrasted edges in the photo.

- **Open the Sharpening palette by selecting Bitmaps/Sharpen/Sharpen** from the drop-down menu.

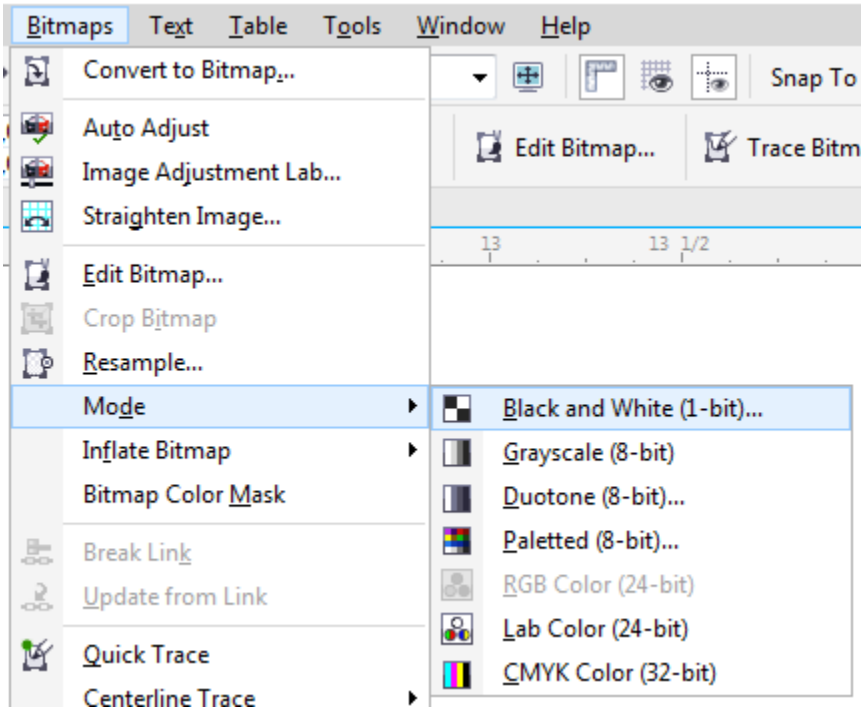


- In the Sharpen filter palette enter these values, **Edge Level (%) 100**, check the box for **Preserve Colors**, and **Threshold 70**, and then click OK.

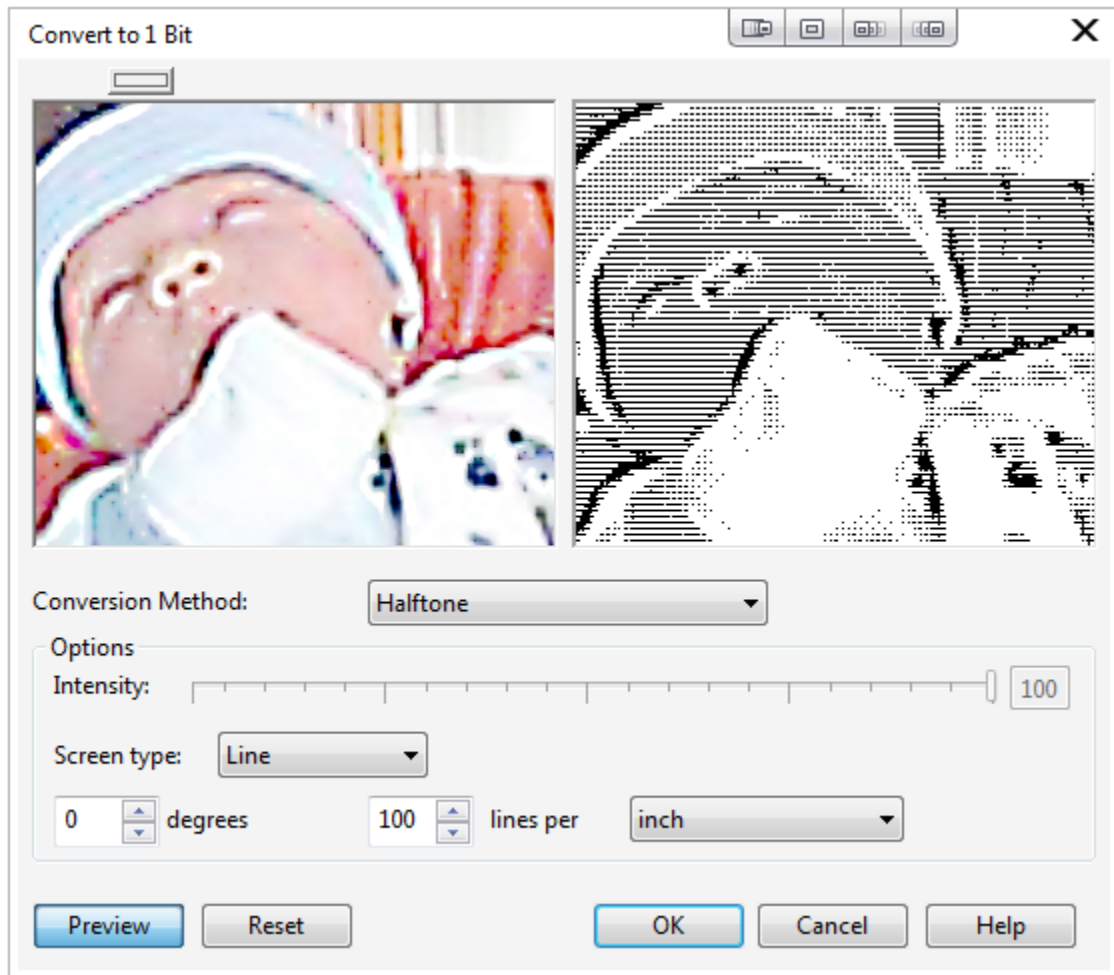


8. **Convert to Black & White (1-bit) Photo (Halftone Dither):** When a photo is converted to a Black and White photo, each pixel in the photo is either converted to black or white. There are different types of dithering patterns applied to black and white photos: Halftone, Line Art, Ordered, Jarvis, Stucki, Floyd-Steinberg, and Cardinality-Distribution. When engraving a photograph on wood, a Halftone dither works best. A Halftone dither tricks the eye into seeing different shades of gray by varying the pattern and density of black and white pixels in a photo. When applying a Halftone dither, we are able to vary the screen type, angle for the halftone, lines per unit, and the unit of measure.

- **Open the Convert to 1 Bit palette by selecting Bitmaps/Mode/Black and White (1-bit)** from the drop-down menu.



- With the Black and White palette open, select **Halftone** for the **Conversion Method**, select **Line** as the **Screen type**, enter **0 degrees**, and **100 lines per inch**, and then click **OK** .



- Results:



9. The only thing left is to print to your Epilog Laser system!

- The wood engraving below was engraved using the Epilog Mini 40-watt system.
- **Speed 60%**
- **Power 100%**
- **600 DPI**
- **Dithering: Jarvis**

Final Engraving:

