

Image Sizing and Quality Parameters

If you have an existing digital photograph of your custom car, there are several image quality issues that I have to adhere to when having the custom posters digitally printed. While any image will print, I strive to keep the image quality at he highest possible standards that I can to ensure your print will be at the highest possible quality.

Below are image minimums that I would like to pass n that you can check yourself, or have me review the image and send the information to you.

Many images are set to be viewed on the internet of your computer screen and are far too low in resolution to be printed properly for your poster design.

Following is a guide to the best settings for digital printing. Some images can be enlarged up to a point, before getting pixelated and start to produce poor quality digital prints.

For images based on the standard 16" x 12" image area

Image File Resolution	Image Size – Inches	Image Size – Pixels	RGB File Size
	Image only	72 pixels = 1 inch	uncompressed
200 Pixels Per Inch (Min.)	16" x 12"	3,200 pixels x 2,400 pixels	22 megabytes
300 PPI (Max)	16" x 12"	3,200 pixels x 2,400 pixels	49 megabytes

Most of the posters I design have the cars cut out and sized much smaller than these sizes. By cutting out the image, this allows me to integrate your image into a much larger overall poster design that will be a high quality composite.

Image Compression

Most image files are distributed over the internet are .JPEG Compressed files. This allows a smaller file to be transported easily and then uncompressed to a high quality file that can be digitally printed at the best possible quality.

200 PPI Image	22 megabytes =	1.7 megabytes compressed
300 PPI Image	49 Megabytes =	2.0 megabytes

This is a rough guide to file sizing and there are many other factors involved that can affect image quality. Initial camera quality, Camera settings (at the time of image capture, degree of compression and image file resolution will affect your final print quality. I will always strive to work with and keep the highest quality possible form your original digital images. Depending on your originals, quality can vary greatly.

I realize that all of this information is overwhelming (even for me at times) but is critical to optimum image quality. I am always willing to talk you through this process, or review your images for the best quality possible.

See samples on next page.

For Questions and answers, contact me at marko@dogitalhotrod.com or 253.906.5789

www.digitalhotrod.com



File resolution Samples:

These samples can show how the relationship to Image size, File resolution and Pixel Dimansion can affect the final printed image quality.

File types acceptable for images:

Compressed .JPEG (acceptable) .PICT .BMP *Uncompressed* (preferred) .EPS .TIFF .PSD (best) RAW Images from Digital Camera (best)

Original: 1364 pixels x 1364 pixels 4.5" x 4.5" at 300 Pixels Per Inch

300 PPI Maximum Quality

72 PPI Typical Website Image is 1" x 1" 72 pixels x 72 pxels



200 PPI Minimum Quality



200 PPI Minimum Quality



300 PPI Maximum Quality



72 PPI Typical Website Image is enlarged 200%



If you are shooting new Digital Photos, here are some guidelines to be aware of to keep the best quality for your images.

General Camera Settings:

- Shoot at the lowest ASA or ISO Rating Possible to minimize Film Grain, unless this is an effect that you want. Film Grain can also be added in Post-Processing.
- Shoot at the cameras largest pixel dimension. Try for a minimum of 2,000 to 3,000 pixels wide. Larger is always better, in that it allows me more options in the long run.
- Shoot in TIFF or RAW Format if possible. Use JPEG as last option. TIFF Format is usually uncompressed image data and will give a better image quality than JPEG that is compressed data. RAW Format is the best quality if your camera has the option. These files are much larger but giver the best initial quality possible. There is a whole range of pre-processing tahat can be done to refine even marginal images.
- Use a Tripod if possible. You can shoot with much lower Shutter speeds without causing problems, especially when shooting with lower ASA or ISO ratings.
- Try to shoot several angles, both left and right, but also high and low angles. These can be very dramatic in a poster design.

When Shooting Outdoors:

- Be aware of the backgrounds you are shooting towards. If I am taking out the background for a Poster design, there may be reflections that make no sense on a new background. I can work with just about anything, but sometimes the reflections can be very distracting. The same applies to cars parked next to a very polished car. Most of the time this is unavoidable at car shows, but if you are shooting your car alone, check out the surroundings. If you are keeping the background, all bets are off. Go for it.
- Be aware of shooting in bright sunlight. With most cars, there is a lot of chrome and they are highly polished. It can be very difficult to get a good photo, as there will be a lot of distracting highlights. Some is good, too much and it will fight with the car, which is what you want to focus on.
- Shooting cars on lawns is also very distracting if I am taking out the background. There is a LOT of green reflections and tire tend to sink into the turf and need to be fixed. Asphalt is good because it is a natural setting and is a neutral color and doesn't affect the cars color as much. Watch out for parking lot lines reflecting into door panels!

When Shooting Indoors:

- Same goes with the backgrounds indoors, but you may have the option of getting the car in front of a smooth and / or neutral background. This make my job of knocking out the background easier. It also keeps the distracting reflections to a minimum. You want to have some reflections to show off the curves of the body lines.
- There may also be problems with indoor lighting. Depending on where you are shooting, there will be many, many small spots of reflection on the car. Try to minimize this as much as possible.

Good Luck!