What Are Vector and Raster Graphics?

What about Type?

A common mistake people make is to type the main text of their book cover in a raster software program like Photoshop. It is best to type your back cover text using a software program like Adobe Indesign or Adobe Illustrator, so the type remains sharp. Also make sure that your type is 100% black and not a CMYK black for best clarity.

What is a vector graphic?

A Vector graphic is made up of lines and curves defined by mathematical descriptions called vectors. Vector graphics are saved and printed in postscript, the language used by high-quality printing devices. You can create and save a vector graphic from software such as Adobe Illustrator in the .eps or .ai format.

Vector graphics are resolution-independent—that is, they can be scaled to any size and printed at any resolution without losing detail or clarity. It is *highly recommended* to use the vector format for logos, as the edges will always appear smooth, regardless of the size of the image.

Use the vector format for logos, the edges will always be sharp.

What is a raster graphic?

A raster graphic is made of a grid of small squares known as pixels. Photographs must be raster graphics in order to show shades of colors. Adobe Photoshop is the recommended software to create and save a high-quality photo as a .tif file.

Raster images are resolution-dependent—that is, they contain a fixed number of pixels. Resolution is measured in Dots-Per-Inch, also known as DPI. To get a good quality printed image, the number of dots should be at least 300 DPI. Below this number, the edges will appear fuzzy and rough. It is *not* recommended to use the raster format for logos.

For more information on how to create a high quality raster graphic, see "How to Get the Best Quality Photos" available in the information section of our website.

Do not use the raster format for logos, the edges will be fuzzy.