Digital printing

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Digital print for a roadside billboard

Digital printing is one of the fastest-growing segments of the sign industry. Its progress can be seen in the incredible size of what can now be produced. Whatever the message or product, size has become a major trend in advertising. Today, one sees huge digital prints wrapped on the glass fronts of office buildings, and massive digitally printed banners draped down the sides of buildings. The automotive industry has also become a part of the digital advertising world, with vans, cars, buses, and trailers fully wrapped with digital prints.

Printers and laminators

To accommodate these digital advertising products, the size of printers has also grown in size, from 12 inches wide to more than 10 to 12 feet wide. Laminators are another important part of the digital print process — liquid and vinyl laminators add longevity to the huge investments made in this newest type of advertising.
Digital cameras

The digital camera can be an important tool for the digital designer. If you catch the right action shot with a high-resolution camera, you can easily create a background image.

Conceptualizing the billboard

For this tutorial, I was inspired by a photo from the Corel® Photo CD (see Figure 1). This image of a drill, tape measure, and pencil could be used for the advertisement of a contracting company. The digital print would be used for a roadside billboard.

When you start your design, you need to consider the size of the final output. I design my digital artwork at half the final size and at 300 dpi. This setup produces a good-quality print when the image is produced at full size. I have designed this project for a 10 × 20 foot billboard. Because this sign is going to be displayed off the road and in a field, which means that it will not be viewed close up, the digital print will work at a very low resolution, such as 10 dpi. Up close, the digital print will seem to be of poor quality, but at 100 feet off the road, a top-quality billboard will be seen.
Designing the sign

The first step in designing the sign was to set the page size in Corel PHOTO-PAINT®. With this design, I used a 10 × 20 inch (height × width) page size to keep the file size small for the tutorial. I started the page with a black background and then imported and sized the picture on the page. I used the Interactive Object Transparency tool to blend the right side of the picture into the black background (see Figure 2). In this way, I created contrast, which added more impact to the company name.

Another tip or trick that I often use is to make a duplicate of the original photo and add a motion blur (Effects ▶ Blur ▶ Motion Blur). Now, placing the original photo on top and using the Interactive Object Transparency tool, I blended both the original and duplicate photos together, resulting in a high-quality picture for digital printing (see Figure 3).
This prep work creates a suitable image for digital print to which copy or text can be added. Choosing the right copy is an important part of any sign, whether or not it is printed. Highway billboards, which viewers have only a few seconds to read, need to be kept simple. For this sign, the copy would include the contractor’s name, what the company does, and some contact information. Starting with the main copy, which is the contractor’s name, I chose a new serif font that was created by a sign font supplier. The font is tall and thin, and I chose to make it larger so that it would be better seen from a distance.

I chose white for the main copy and created a mask of the text (Mask ▶ Create ▶ Mask from objects). Then, I added a 3D effect to create an extra dimension on the lettering (Effects ▶ 3D effects ▶ Bevel effect) (see Figure 4).

![Figure 4](image1.png)

Building on this effect, I copied the same text layer on top, changed the color to light green, and made the top of the second layer transparent by using the Interactive Object Transparency tool. Then, I added a small interactive drop shadow to the outside of the original text to create even more depth (see Figure 5).

![Figure 5](image2.png)
On the bottom, I added a black panel, which I then reduced to 40% opacity so that the background image could be seen through it. I added a blue line along the panel’s top edge. Also, I added a green panel on top of the black panel and made the top of the green panel transparent. The contractor’s phone number, along with the “Design Build” text, was fit into this panel (see Figure 6).

![Figure 6](image)

I chose a heavier font for the bottom panel, making it a contrasting color to the background so that it could be read from a distance. Visibility and contrast are an important part of the designs I create. Why do a design if you can’t read it? I use the lighter color for the most important copy on a darker background or vice versa, depending on the color selected. With this bold font, I again added the interactive drop shadow to give depth and impact to the message (see Figure 7).

![Figure 7](image)
For the line of copy at the top of the sign, I chose a sign painter’s font in a nice flowing script to add a classy touch. The copy on this line is not as important as the name and phone number, so I used a color with a little less contrast. The information is there, but the words do not overpower the name of the company. Keeping with the theme of the lettering, I added the drop shadow around the text to add depth to the sign (see Figure 8).

![Figure 8](image.jpg)

**Preparing the sign for production**

All of the information was now on the sign, and the layout was complete and pleasing to the eye. Now the file could be prepared for production. This stage is where the challenges begin, because the image on your monitor can differ from what is produced on the other end.

I started by going to **Object ▶ Combine ▶ Combine all objects with background**. This command flattened the image and prevented the layers from being further edited. At this time, I could have chosen **Adjust ▶ Image Adjustment Lab** to lighten, darken, or add some contrast to the image before the final output (see Figure 9).
I had been saving the design in the raw Corel PHOTO-PAINT file format (.cpt). The output devices do not use this format, however, so I needed to size up the design to the full size first and then export it as a TIFF file (.eps). Many designers would send the file as a JPG, but that format entails a loss of image information. I chose TIFF because it is the leading commercial and professional image standard and is supported across all platforms, including Mac®, Windows®, and UNIX®. Now the file could be sent to the printer, directly to an in-house printer, or to an industry supplier.
About the author

Doug Downey, owner of Creativeink Design Group, has been designing for more than 25 years. Doug got his start in the sign industry when he established his own design and sign shop. After selling his sign shop, he moved to the Niagara Falls area and worked for a sign company, where he designed all of the digital printing for a local casino. In 2000, Doug ventured back to Stratford to open up a Web and digital design company. Doug has been designing in CorelDRAW since the first version and was the winner of the 1999 CorelWORLD™ Design Competition. Doug now travels and speaks about large-format printing and about the fundamentals of design for beginner designers. You can view Creativeinks design work online (www.creativeink.ca).