Glowing Black and White Infrared

By Mark S. Johnson | October 24, 2008 | Tutorials, Special Effects, Layer Effects, Text Tutorials

There's little debate that black and white infrared images are striking. But what are the visual characteristics that define this classic and beautiful appearance?

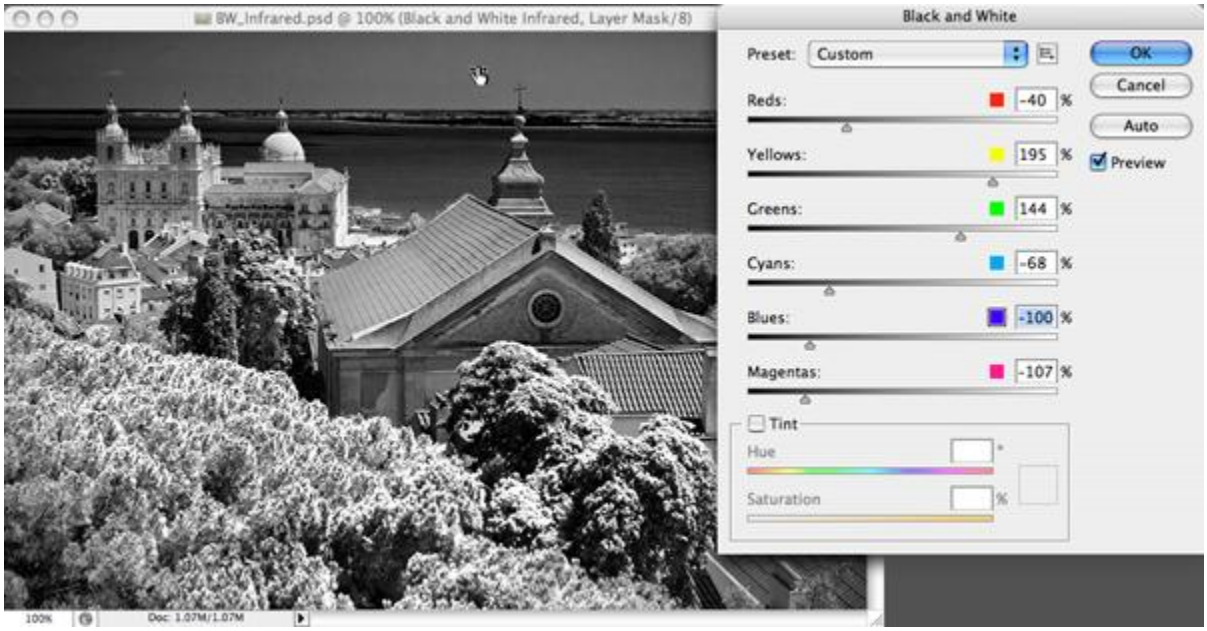
I believe that it originates from a combination of four primary characteristics—increased contrast, glowing foliage, dark blue skies, and visible grain. Fortunately, when starting with a tonally-rich color image, Photoshop is quite capable of producing all four of these characteristics. Here are the steps.

Step 1: Open an Image
Open a tonally-wealthy color image that contains green foliage and a blue sky.

Step 2: Add a Black & White Adjustment Layer
While pressing Option (PC: Alt), choose Black & White from the Create New Fill or Adjustment Layer icon at the base of the Layers panel. In the New Layer dialog, name the layer "Black & White Infrared" and click OK.

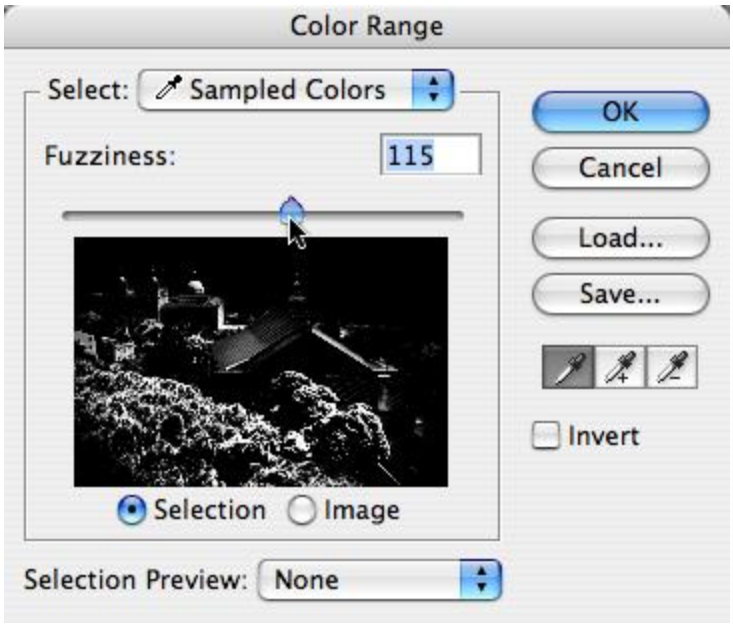
In the Black and White dialog, pay a visit to the Preset pull-down menu. You're seeking an option that creates the best initial black and white infrared appearance. Although Infrared is a menu choice, don't immediately assume that it is the best starting point. I suggest exploring each of the options. As you're exploring, keep in mind the four characteristics mentioned in the introduction to this topic. In my example image, Infrared is indeed the best starting point.

Although the Infrared choice serves as a good starting point, it still requires tweaking. For starters, the foliage is overly bright and blotchy. To reduce its intensity, hover over the trees in the lower left corner and drag left. Now hover over the sky and drag left to darken it. Press OK.



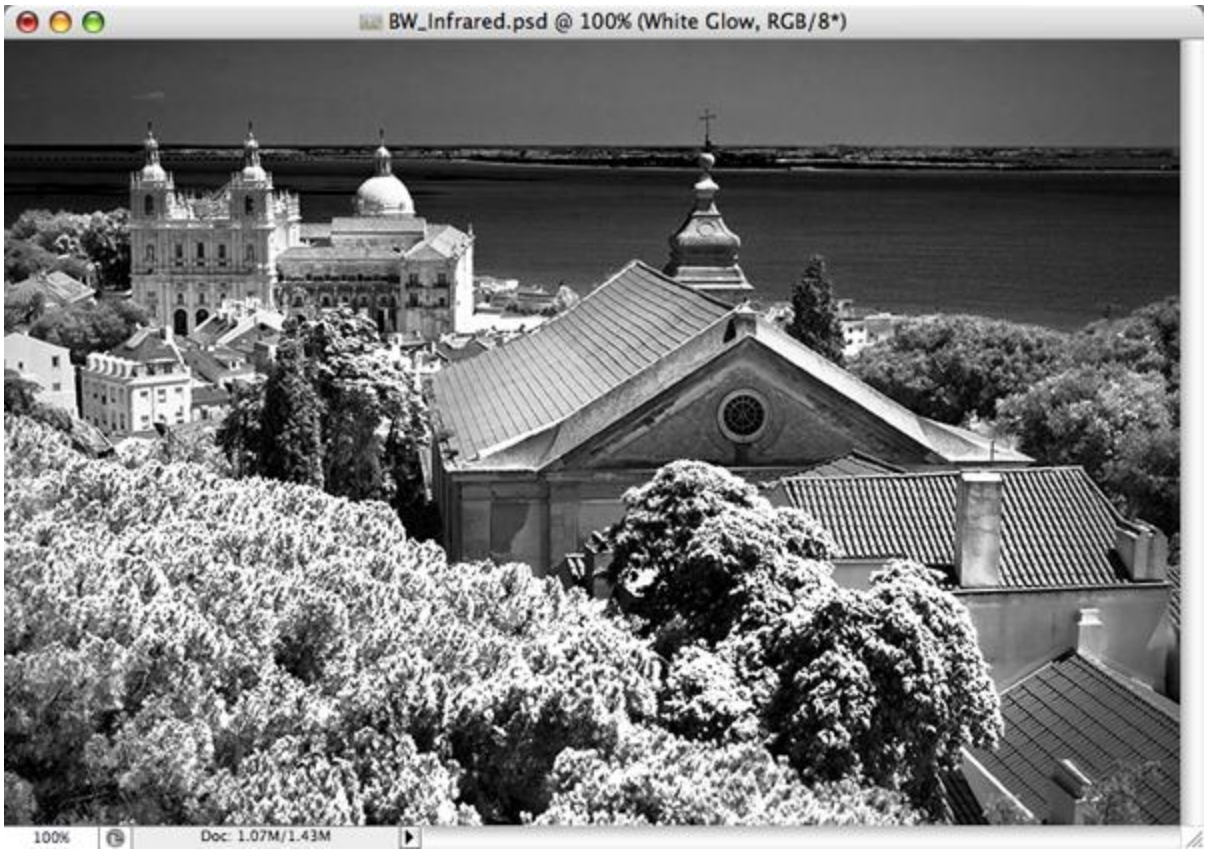
Step 3: Create a White Glow Layer
Hold down the Option (PC: Alt) key and click on the Create a New Layer icon at the bottom of the Layers panel. In the New Layer dialog, name the layer "White Glow." Click OK.

Step 4: Select the Brightest Tones in the Image
From the Select menu, choose Color Range. Hover over the picture and click once on a bright highlight value in the lower left trees. In the Color Range dialog preview window, white areas represent parts of the scene that will glow. Drag the Fuzziness slider left or right until the trees exhibit splotchy, white areas. Only after experiencing this technique a few times will you get a sense of how much white to include.



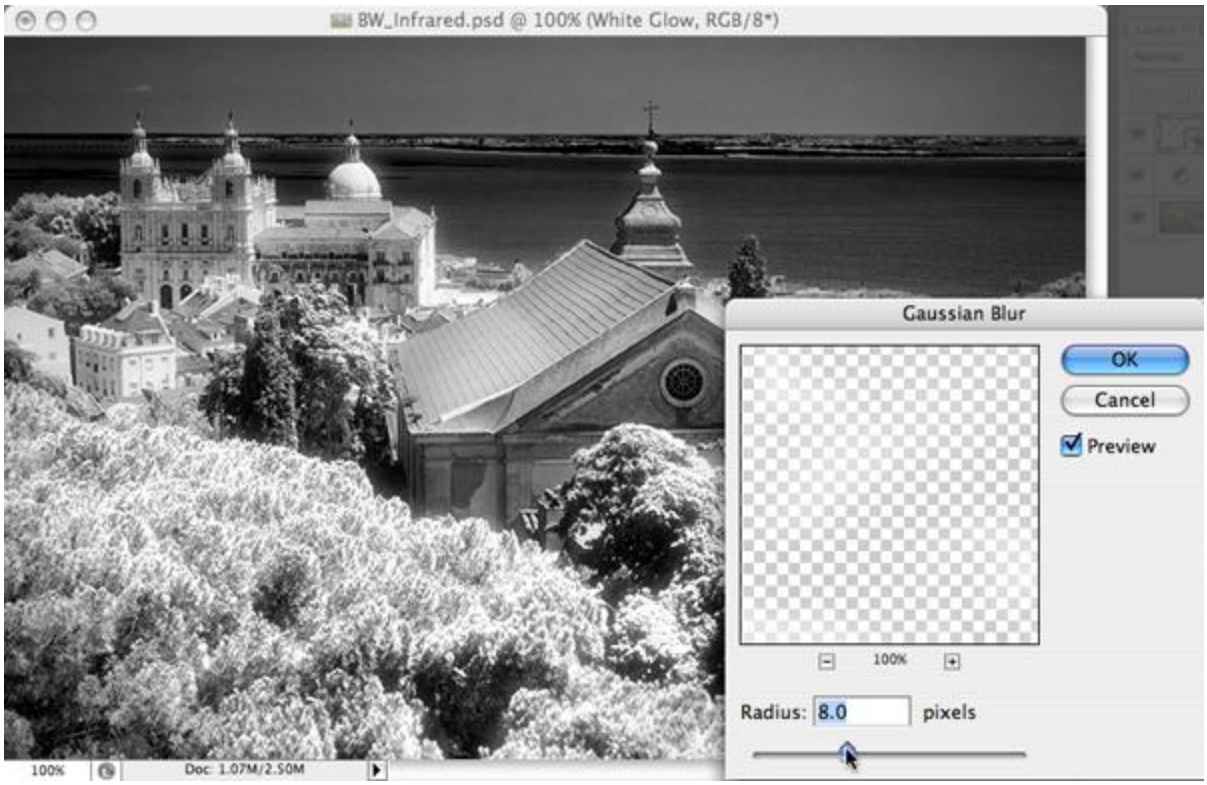
Press OK and the marching ants begin crawling over the picture.

Step 5: Fill with White
Press the D key to set the default foreground and background colors. Now press Command-Delete (PC: Control-Backspace) to fill the selected area with the white background color. Choose Select>Deselect.



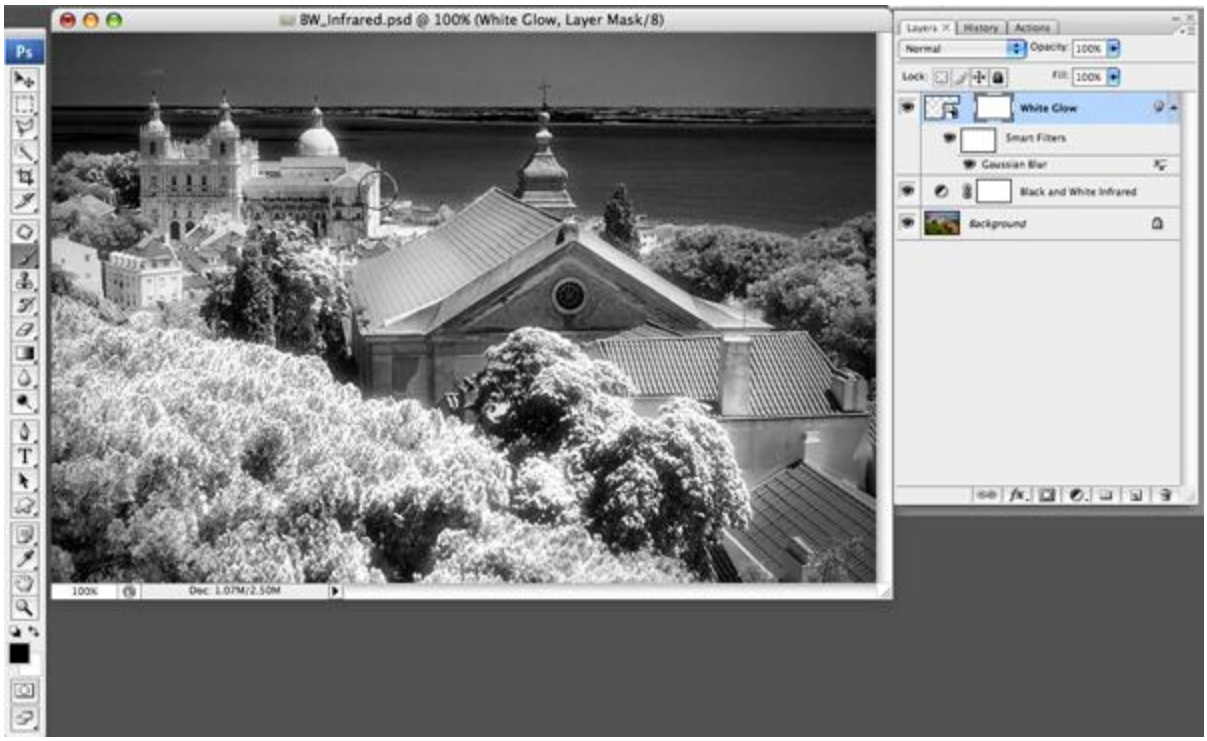
Step 6: Convert the "White Glow" Layer for Smart Filtering
Choose Filter>Convert for Smart Filters. The resulting smart object layer is now ready to be blurred in a non-destructive fashion.

Step 7: Apply a Gaussian Blur
Choose Filter>Blur>Gaussian Blur. Set a Radius that creates a pleasing glow. Press OK.



If the glowing portion of the image looks good, skip ahead to Step 10. If the glowing area's intensity is too much or too little, or if it exists in undesirable regions, the next two steps offer potential solutions.

Step 8: (Optional) Create a Layer Mask to Hide the Glow in Undesirable Regions
If the white glow is showing in areas of the image that should not have a glow, such as along the right side of the distant building, add a layer mask to the "White Glow" layer and paint with black to eliminate the glow.

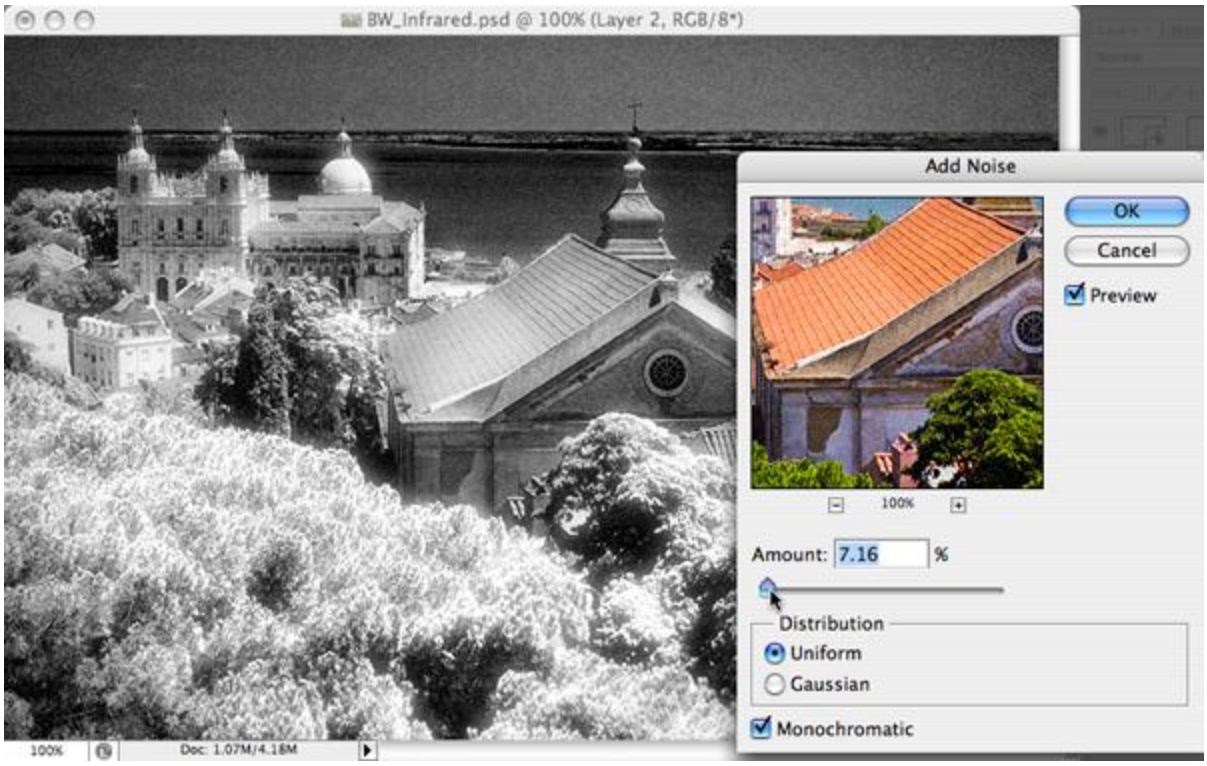


Step 9: (Optional) Change the Intensity of the Glow
If the white glow is too intense, drag the Opacity slider to the left. If the glow is too faint, press Command-J (PC: Control-J) to duplicate the "White Glow" layer.

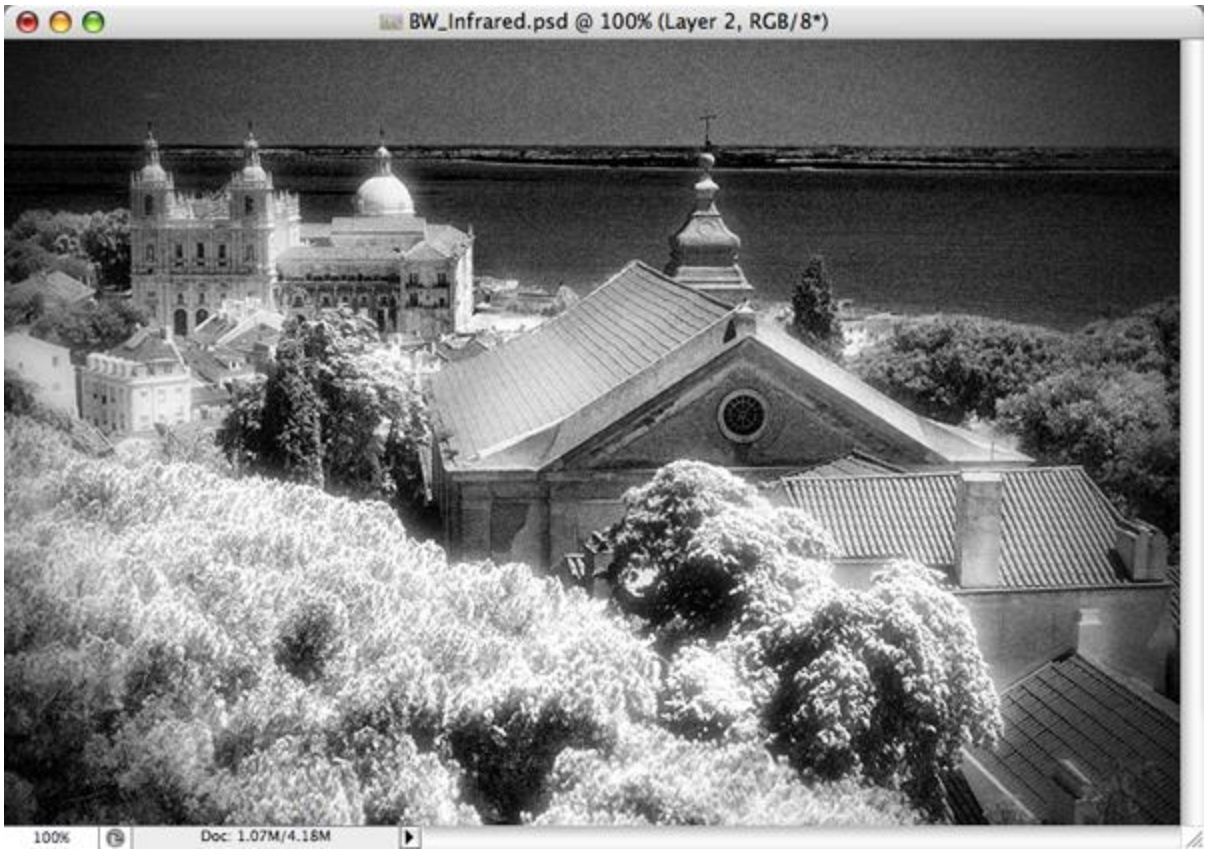
Step 10: Zoom the Image to 100% Magnification
In the Tools panel, double-click the Zoom tool to magnify the image to 100%. When you add grain in a coming step, this ensures that what you see on screen is fairly representative of what you'll see on the printed page.

Step 11: Convert the Background Layer for Smart Filtering
Make the Background layer active. Choose Filter>Convert for Smart Filters. The Background layer is now prepared for non-destructive filtering.

Step 12: Add Grain Using the Add Noise Filter
Choose Filter>Noise>Add Noise. Based on your preference, choose a Distribution type. Now move the Amount slider until you're satisfied with the amount of grain. Press OK.



Not all black and white infrared images exhibit corner vignetting, but I think this effect can serve as a nice finishing touch. If you choose to add a vignette, do so by applying the Lens Correction filter to the Background layer. Since the Background has already been converted to a smart object, the vignetting effect will be applied in a non-destructive fashion.



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