

Blending Modes

Welcome to the *Blending Modes tutorial*. This tutorial was designed to teach you how you can completely change the appearance of your layers, and images, simply by using different blending modes. If you need help with it, or find it confusing, don't hesitate to e-mail me, the information is at the bottom of the page.



Although I've said that blending modes can make your image look different, I have not told you how. Blending modes affect the selected layer, and also how that layer will react with all of the other layers below it in the layers stack. To the left, the blending mode being used is the default Normal mode, when layers are in this mode, they look normal, hence the name. In Normal mode, **no** interaction with other layers in the layers stack takes place. The only way this layer can interact with layer below it is by using the opacity slider.

Quick Tip!

Instead of always using the opacity slider to change the transparency of the layer, use the number keys on your keyboard. Typing "4", will set the opacity to 40%, "5" is 50%, and so on. Hitting "0" resets the opacity to 100%



Setting the layer to Dissolve mode, will randomly set a number of the layers pixels to 0% opacity and leave the other at 100%. This will create a dissolving effect, hence the name. If you look at the image to the left, you'll see that certain pixels were chosen, and others weren't, it's like that throughout the entire layer. The opacity of the letter "d" to the left is set to 80%.

When you set the opacity lower, Photoshop will continue randomly selecting pixels to cancel out (set to 0 transparency).



So far all the blending modes speak for themselves, that's also true for the Multiply mode.

Multiply mode takes the strength of the layer and multiplies it by two, giving it more contrast. darkening it up a bit)

Use the Multiply mode when you want to strengthen the appearance of the layer, this is a lot easier than making copies of layers and then merging them all together to get a stronger appearance. But multiply mode won't work that well with just solid colors, what is the result of red x 2, it's still red! (Unless the opacity is set to less than 100%)

Making things stronger will give more contrast to your image, which will attract the eye of the audience a lot easier. Take a look at the image to the left, which of the letter are your eyes more drawn towards?



Screen mode is used for highlighting, and making the layer appear lighter. Since highlights cannot be shown with black, no effect will appear by applying the Screen mode to an entirely black layer, or part of a layer.

An example of using Screen mode for highlights is the ePlastic tutorial at www.phong.com, it was used to add the glossy outcome to the letter "e".

Another way to look at highlights is if you were to shine a light on something, it would look lighter to you than it actually is, the same principle applies for the Screen blending mode.



Overlay mode will change the contrast and opacity of the layer to varying degrees depending on the lightness and darkness of that layer. So for example, we have a forest scene with dark greens, grays, and blacks, notice how the area behind the letter has a lot more contrast to it?

Overlay is often used for digital painting, where artists will sketch out their landscapes and characters, then scan them in, and use Overlay mode to view their art while painting behind it. This enables them to paint within the lines, and since black, while it isn't intolerable to Overlay mode, it isn't as easily "overlayed" as other colors, enabling the artists to see the outlines only.



Soft Light (left) and Hard Light (right) are used a lot for special effects, and like Overlay mode, the effects that they will produce on the layer vary according to the brightness of the layer itself.

You can produce a lot of burnt looking effects by using the Soft Light mode, like the Hard Light mode, it will blur the "light" in a very unique way, except it will appear much more transparent than Hard Light mode.

As you can see, Soft Light (left) produces a lot less contrast than Hard Light (right), hence their names!

For Soft Light and Hard Light certain grays will appear completely transparent for some odd reason.



Color Dodge (left) and Color Burn (right) work in exactly the same way as the Dodge and Burn tools in the toolbar! The only difference is that with the blending modes you effect the whole layer, and with the tools from the toolbar, you can specify where you want to add the effect by doing it manually. if you would like to read about the Dodge and Burn tools, click [here](#) to be taken to the tutorial.

Color Dodge will make the layer lighter, especially the areas that are already light. Notice the white dots on the rocks really brighten up after the Color Dodge mode is applied?

Color Burn (right) will darken the layer, especially the areas that are already dark, notice the dark areas by the tree at the bottom right of the picture? Now do you see how they are much darker behind the letter, this is caused by setting your layer to the Color Burn mode.



Lighten (top left) and Darken (top right) uses channels to figure out the lightness and darkness of the layer. these mode will use all three channels (Red, Green, Blue) to calculate the average Lightness (when in Lighten mode), or the average darkness (when in Darken mode), and display it on screen.

Difference (bottom left), and Exclusion (bottom right) are just slightly different blending modes, and like Lighten and Darken mode, they too use other parts of the image to calculate they're result, except instead of channels, it uses the objects in the layers below it.

Quick Tip!

Difference and Exclusion modes (depending on the layer below it) can sometimes create some cool disco looking effect, keep that in mind, it could come in handy!



Hue mode (top left) speaks for itself, in that it changes the hue of the image, without changing any of its brightness or light spots.

Saturation mode (top right) will completely saturate the area beneath it when the layer is white, black, gray, or any other solid color in entirety. The results are not so staggering, as you can see, when you use an image.

Luminosity mode (bottom left) is great for defining light and dark areas, sort of like channels, hence the name. Color mode (bottom right) is just Hue and Saturation mode in one.

Discussion

I hope this tutorial gave you a broader understanding of layers, and manipulating their look and feel. If you have any questions, or there are any steps that I can further elaborate on, don't hesitate to e-mail me using the information below. Due to the amount of e-mail I get, you'll get a quicker response if you use the discussion forum. Post your question in the tutorials forum. Click [here](#) to go to the discussion forum.

Dan Caylor

<http://www.thinkdan.com>

E-mail: dan@thinkdan.com

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