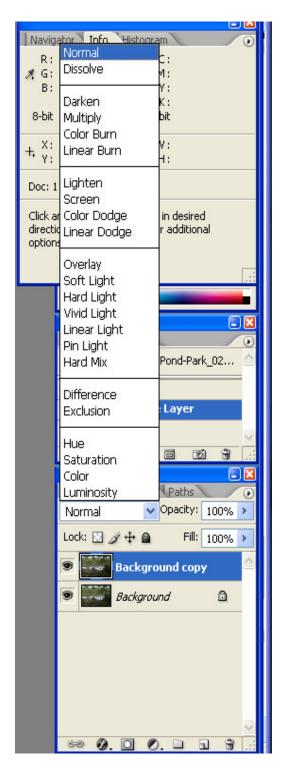
# Blending Modes for image Enhancement By: Martin Kesselman

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### **Using Blending modes:**



To see the available blending modes, highlight a layer with pixels in it and observe the mode indicated in the window at the top of the layers palette to the left of the word Opacity. This is set by default to "normal" when a new layer is created. Click the down arrow to the right of the window to see the blending mode drop down menu.

Blending modes are separated into a number of different categories by a thin horizontal line. The top section provides a "normal" mode and a "dissolve" mode. Normal displays fully the layer it is applied to. Dissolve is a word from the display of slides with two projectors, where one slide dissolves into the other (forget about "dissolve", there are better ways to blend one layer onto another). The second section follows the theme of the first item on the list "darken". All the remaining items in this section will result in a darkening. I use the "multiply" mode to darken since I feel it does a very nice controllable job. The third section follows the theme of the first item on the list "lighten". I use the "screen" mode to lighten. The fourth section is used for contrast affects, but it will provide lightening and darkening since that is also affecting the contrast. The fifth and sixth sections provides special functions.

### **Darken or Lighten:**

Simply place the pixels of an area of your image you wish to lighten or darken on the top layer and change the mode accordingly for the new layer. If the affect is too much, use the "opacity" adjustment (click arrow to right of word "opacity" in the layers palette) to reduce the affect. If it is not enough then create a copy of the layer so that it is repeated.

Tip: There are numerous ways to place pixels on it's own layer:

- 1-Make a selection (marching ants), go to layer>new>layer via copy
- 2-Make a selection (marching ants), press "CTL+c" to copy and then "CTL+v" to paste. A new layer with the selection in it is created and selected.
- 3-Use duplicate layer (CTL + j)

#### Use a mask:

The process is simple, however, to restrict the affect only to one part of the image use the masking ability of Photoshop. With the layer in use highlighted, click on the mask icon in the "layers" palette (the front-loader washing machine icon). This will add a mask to your layer that you can paint on in black & white or shades of gray to control how much of the affect is allowed to be seen (white-reveals, black–conceals).

To paint on the mask, first assure the mask is selected by clicking on the mask rectangle in the layer palette. A highlight edge will indicate it is selected. Assure you have default black and white colors by pressing "D" on the keyboard for default colors. You should see black and white for the foreground and background colors on your tool bar. If you want to change the entire mask from white to black (conceal/hide) press "CTL+i" (think of "i" for "invert" to help you remember it). This will allow you to do the minimum painting if you want to "reveal/show" only a small part of your image with the affect. To switch the foreground and background colors, press "x" or click on the curved arrows in the corner of the foreground/background tool box.

Use a soft edge brush and set the opacity to a small number like 10%. This will allow you to make small changes. The changes are cumulative, so you can draw over the same place to bring out the lightening or darkening affect carefully. You must release the mouse button to signal the end of a paint stroke for you to add a second stroke. Remember you can change your brush "size" using the left and right "hard bracket - []" keys on the keyboard (using SHIFT+hard bracket - {} will change the brush "hardness"). Reverse mistakes by painting with the opposite color or step back in edit or go back in the history palette.

Tip: You can undo your last step by using the "CTL+z" shortcut.

### Lighten or Darken Using Other Blending Modes; Overlay or Soft Light:

Try other blending modes like overlay or soft light which use 50% gray as a neutral density and white to lighten and black to darken. Set the layer to 50% by activating the new layer window before entering the adjustment layer. This is done by opening a new layer by holding the "alt" key while clicking the "create a new layer" icon (page on a page icon). This will open a new layer dialog window. Change the mode to "Overlay" and a check box will appear at the bottom to fill the layer with a 50% gray. Check the box and click OK. A new layer appears completely filled with 50% gray. The image does not change since this is considered neutral and does not affect the image below. Paint with white to lighten and black to darken. Use a soft brush at low opacity to blend the affect slowly. The same can be done with "soft light". Play with all these methods to find the one you like best.

Let's look at the remaining blending modes (descriptions are taken from Katrin Eisman's book "Photoshop Masking & Compositing". Additional remarks are by the writer.

## Comparative Group:

**Difference:** reveals identical pixel values as black, similar values as dark and opposite values as light to white. This is a useful mode to re-align an image layer if it was moved. The move tool can be stepped carefully using the arrow keys with the layer blending mode set to difference. The identical image pixels will turn black when perfectly aligned. An example of such a use would be the copying of a piece of a picture for enhancement, like a window area. The area is improved on its own layer and then must be placed over the original window to cover it. Do this by setting the blending mode to "difference" and aligning it as best as possible using the arrow keys. Then put the blending mode back to "normal".

**Exclusion:** Similar to difference but with less contrast. Blending with black produces no change and white inverts the compared values. This mode is not used very much for image enhancements. It does have its place for special affects.

# Image component group:

**Hue:** Combines the luminance and saturation of the underlying layer with the hue of the active layer. This mode is not used very much for image enhancements. It does have its place for special affects.

**Saturation:** Combines the hue and luminance of the underlying layer with the saturation of the active layer. This mode is not used very much for image enhancements. It does have its place for special affects.

**Color:** Reveals the color of the active layer and maintains the luminance values of the underlying layer. Use color blending mode with adjustment layers to assure that only color is affected and not luminosity. Address luminosity with an additional adjustment layer devoted just to luminosity (see luminosity below).

**Luminosity:** is the opposite of "color"; and maintains the luminosity information of the active layer in relationship to the color underneath. Use the Luminosity blending mode with a "levels" or "curves" adjustment layer that is addressing brightness issues only. Thus; any accidental affects that the adjustment might have to hue or saturation will be eliminated. Address color issues with an additional adjustment layer devoted just to color and set the blending mode to "color".