

# • Photoshop's Painting & Blending Options •

Following is a brief description of the Blending Options available in the Painting Tools Options palette or the Layers palette.

The information in this handout was lifted directly from Adobe's built-in help, which can be accessed anytime Photoshop is running by choosing "Help Contents" from the Help menu and then typing "Blend Modes" into the Keyword box.

Note that not all of these modes are available in all places. For example, the "behind" mode is only available in paint tools, not in layers.

When using these options, it is helpful to think of the effects in terms of the following three colors:

- The *base color* is the original color in the image •
  - The *blend color* is the color being painted or edited •
  - The *result color* is the color resulting from the blend •
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## **Normal**

Edits or paints each pixel to make it the result color. This is the default mode. (Normal mode is called Threshold when you're working with a bitmapped or indexed-color image.)

## **Dissolve**

Edits or paints each pixel to make it the result color. However, the result color is a random replacement of the pixels with the base color or the blend color, depending on the opacity at any pixel location. This mode works best with the paintbrush or airbrush tool and a large brush.

## **Behind**

Edits or paints only on the transparent part of a layer. This mode works only in layers with Preserve Transparency off and is analogous to painting on the back of transparent areas in a sheet of acetate.

## **Clear**

Edits or paints each pixel and makes it transparent. This mode is available for the line tool, the paint bucket tool, the Fill command, and the Stroke command. You must be in a layer with Preserve Transparency off to use this mode.

## **Multiply**

Looks at the color information in each channel and multiplies the base color by the blend color. The result color is always a darker color. Multiplying any color with black produces black. Multiplying any color with white leaves the color unchanged. When you're painting with a color other than black or white, successive strokes with a painting tool produce progressively darker colors. The effect is similar to drawing on the image with multiple magic markers.

## **Screen**

Looks at each channel's color information and multiplies the inverse of the blend and base colors. The result color is always a lighter color. Screening with black leaves the color unchanged. Screening with white produces white. The effect is similar to projecting multiple photographic slides on top of each other.

## **Overlay**

Multiplies or screens the colors, depending on the base color. Patterns or colors overlay the existing pixels while preserving the highlights and shadows of the base color. The base color is not replaced but is mixed with the blend color to reflect the lightness or darkness of the original color.

## Soft Light

Darkens or lightens the colors, depending on the blend color. The effect is similar to shining a diffused spotlight on the image.

If the blend color (light source) is lighter than 50% gray, the image is lightened, as if it were dodged. If the blend color is darker than 50% gray, the image is darkened, as if it were burned in. Painting with pure black or white produces a distinctly darker or lighter area but does not result in pure black or white.

## Hard Light

Multiplies or screens the colors, depending on the blend color. The effect is similar to shining a harsh spotlight on the image.

If the blend color (light source) is lighter than 50% gray, the image is lightened, as if it were screened. This is useful for adding highlights to an image. If the blend color is darker than 50% gray, the image is darkened, as if it were multiplied. This is useful for adding shadows to an image. Painting with pure black or white results in pure black or white.

## Color Dodge

Looks at the color information in each channel and brightens the base color to reflect the blend color. Blending with black produces no change.

## Color Burn

Looks at the color information in each channel and darkens the base color to reflect the blend color. Blending with white produces no change.

## Darken

Looks at the color information in each channel and selects the base or blend color—whichever is darker—as the result color. Pixels lighter than the blend color are replaced, and pixels darker than the blend color do not change.

## Lighten

Looks at the color information in each channel and selects the base or blend color—whichever is lighter—as the result color. Pixels darker than the blend color are replaced, and pixels lighter than the blend color do not change.

## Difference

Looks at the color information in each channel and subtracts either the blend color from the base color or the base color from the blend color, depending on which has the greater brightness value. Blending with white inverts the base color values; blending with black produces no change.

## Exclusion

Creates an effect similar to but lower in contrast than the Difference mode. Blending with white inverts the base color values. Blending with black produces no change.

## Hue

Creates a result color with the luminance and saturation of the base color and the hue of the blend color.

## Saturation

Creates a result color with the luminance and hue of the base color and the saturation of the blend color. Painting with this mode in an area with no (0) saturation (gray) causes no change.

## Color

Creates a result color with the luminance of the base color and the hue and saturation of the blend color. This preserves the gray levels in the image and is useful for coloring monochrome images and for tinting color images.

## Luminosity

Creates a result color with the hue and saturation of the base color and the luminance of the blend color. This mode creates an inverse effect from that of the Color mode.

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### • NOTE •

It's worth noting again here at the end of this handout that This handout was lifted directly from Adobe's built-in help, which can be accessed anytime Photoshop is running by choosing "Help Contents" from the Help menu and then typing "Blend Modes" into the Keyword box.

Don't forget about using this extensive online help system whenever you need some help remembering the minutia of what Photoshop can do.