Adobe Blending Modes – Jonathan Vaines 2020

Normal

Edits or paints each pixel to make it the result colour. This is the default mode. (Normal mode is called *Threshold* when you're working with a bitmapped or indexed-colour image.) This is the layer as you would normally see it.

Dissolve

Edits or paints each pixel to make it the result colour. However, the result colour is a random replacement of the pixels with the base colour or the blend colour, depending on the opacity at any pixel location.

Behind – Brush blend mode

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

Clear – Brush blend mode

Edits or paints each pixel and makes it transparent. This mode is available for the Shape tools (when fill region ⬜ is

selected), Paint Bucket tool 🖌️, Brush tool ✏️, Pencil tool ✏️, Fill command, and Stroke command. You must be in a layer with Lock Transparency deselected to use this mode.

Darken

Looks at the colour information in each channel and selects the base or blend colour—whichever is darker—as the result colour. Pixels lighter than the blend colour are replaced, and pixels darker than the blend colour do not change. Useful for removing light areas in hard contrast which are often found with hard processing or image resizing.

Multiply

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

Colour Burn

Looks at the colour information in each channel and darkens the base colour to reflect the blend colour by increasing the contrast between the two. Blending with white produces no change.

Linear Burn

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

Lighten

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

Screen

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

Colour Dodge

Looks at the colour information in each channel and brightens the base colour to reflect the blend colour by decreasing contrast between the two. Blending with black produces no change.

Linear Dodge (Add)

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

Overlay

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

Soft Light

Darkens or lightens the colours, depending on the blend colour. The effect is similar to shining a diffused spotlight on the image. If the blend colour (light source) is lighter than 50% grey, the image is lightened as if it were dodged. If the blend colour is darker than 50% grey, 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 colours, depending on the blend colour. The effect is similar to shining a harsh spotlight on the image. If the blend colour (light source) is lighter than 50% grey, the image is lightened, as if it were screened. This is useful for adding highlights to an image. If the blend colour is darker than 50% grey, 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.

Vivid Light

Burns or dodges the colours by increasing or decreasing the contrast, depending on the blend colour. If the blend colour (light source) is lighter than 50% grey, the image is lightened by decreasing the contrast. If the blend colour is darker than 50% grey, the image is darkened by increasing the contrast.

Linear Light

Burns or dodges the colours by decreasing or increasing the brightness, depending on the blend colour. If the blend colour (light source) is lighter than 50% grey, the image is lightened by increasing the brightness. If the blend colour is darker than 50% grey, the image is darkened by decreasing the brightness.

Pin Light

Replaces the colours, depending on the blend colour. If the blend colour (light source) is lighter than 50% grey, pixels darker than the blend colour are replaced, and pixels lighter than the blend colour do not change. If the blend colour is darker than 50% grey, pixels lighter than the blend colour are replaced, and pixels darker than the blend colour do not change. This is useful for adding special effects to an image.

Hard Mix

Adds the red, green and blue channel values of the blend colour to the RGB values of the base colour. If the resulting sum for a channel is 255 or greater, it receives a value of 255; if less than 255, a value of 0. Therefore, all blended pixels have red, green, and blue channel values of either 0 or 255. This changes all pixels to primary additive colours (red, green, or blue), white, or black.

Note:

For CMYK images, Hard Mix changes all pixels to the primary subtractive colours (cyan, yellow, or magenta), white, or black. The maximum colour value is 100.

Difference

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

Subtract

Looks at the colour information in each channel and subtracts the blend colour from the base colour. In 8- and 16-bit images, any resulting negative values are clipped to zero.

Divide

Looks at the colour information in each channel and divides the blend colour from the base colour.

Hue

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

Saturation

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

Colour

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

Luminosity

Creates a result colour with the hue and saturation of the base colour and the luminance of the blend colour. This mode creates the inverse effect of Colour mode.

Lighter Colour

Compares the total of all channel values for the blend and base colour and displays the higher value colour. Lighter Colour does not produce a third colour, which can result from the Lighten blend, because it chooses the highest channel values from both the base and blend colour to create the result colour.

Darker Colour

Compares the total of all channel values for the blend and base colour and displays the lower value colour. Darker Colour does not produce a third colour, which can result from the Darken blend, because it chooses the lowest channel values from both the base and the blend colour to create the result colour.