

A BEGINNER'S GUIDE TO ADOBE PHOTOSHOP®

LAYER BLENDING OPTIONS – BLEND IF

Blend If is an easily overlooked tool that is located under the **Blending Options** portion of the **Layer Style** menu (more on this below). **Blend If** can be used to control and fine tune how the data on two layers interacts/blends. There are separate controls for **This Layer** (the top layer of two, the *active* layer) and **Underlying Layer** (the bottom layer of two).

HOW BLEND IF WORKS

The image pixels on two adjacent layers can be combined/blended in many ways. For example, a **Blend Mode** can be applied to a layer to determine how the pixels in that layer interact (blend) with the pixels in the layer below it. Or, an **Adjustment Layer** can be inserted above a layer to determine how the pixels in the layer(s) below are displayed. And so forth... (This document will not attempt to list all the ways layers can interact/blend.)

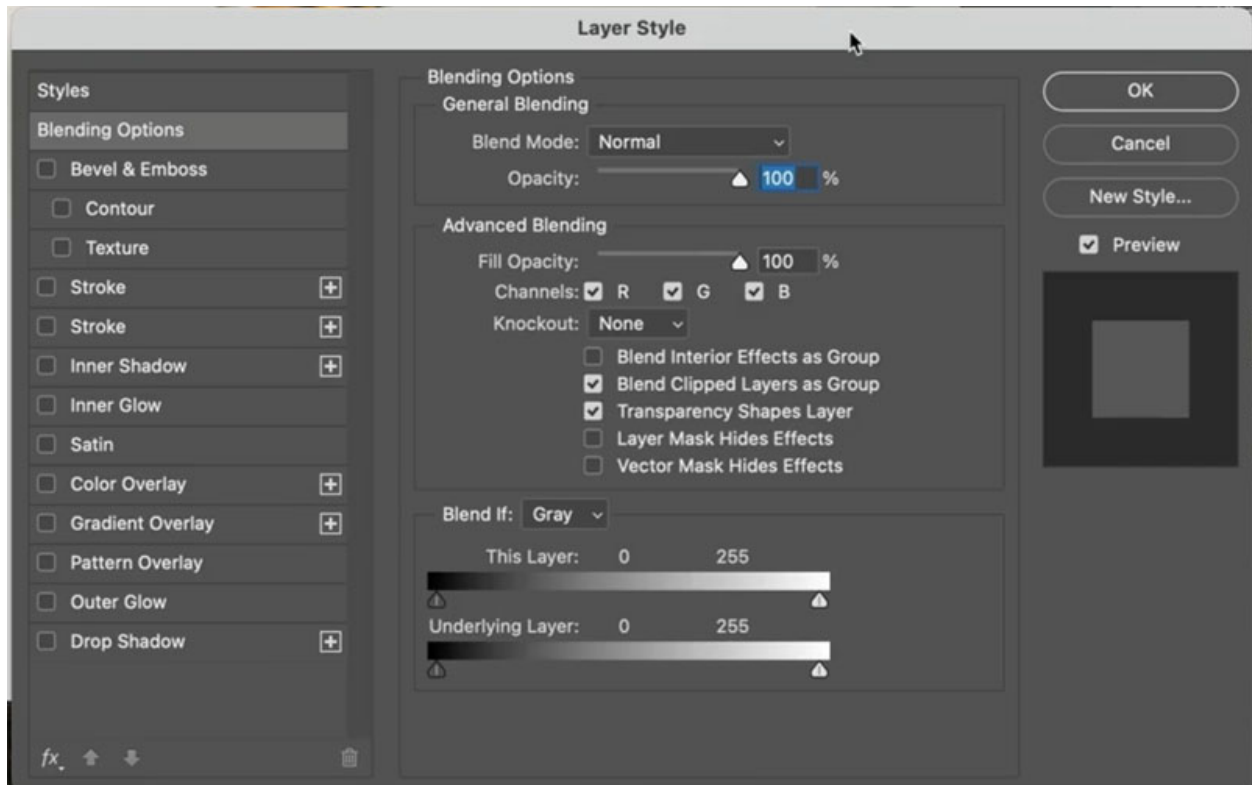
Blend If is a tool that provides control over *which pixels* in two adjacent layers will be “visible” and/or “hidden” during the interaction/blend. The “visibility” of pixels is controlled by draggable **Tone Range triangle icons** available in the **Tone Range sliders** (see below). These are used to set a Tone Range based on pixel *luminance value*. The range can be set between a value of 0 (pure black) and 255 (pure white).

ACCESSING BLEND IF

The **Blend If** controls are located under the **Blending Options** portion of the **Layer Style** menu. There are a few ways to activate the **Layer Style** menu:

- Double click on a **Layer Thumbnail**

- Right-click on a *Layer Thumbnail* and select **Blending Options**
- Activate (select) a layer and choose **Layer > Layer Style > Blending Options**
- Activate (select) a layer, click the "**add effects**" icon (*fx*), and choose **Blending Options**



The *Layer Style* menu with the **Blend If** controls at the bottom of the *Blending Options* section.

BLEND IF ELEMENTS

There are three elements in the **Blend If** controls:

- The **Blend If** drop-down determines which channel data will be impacted – Red, Blue, Green, or Gray (the default, all three RGB channels simultaneously).
- The Tone Range sliders for **This Layer** control which data in the top layer (the active layer) will be visible in the blend results, based on luminance values (see above)
- The Tone Range sliders for **Underlying Layer** control which data in the bottom layer (the layer below the active layer) will be visible in the blend results, based on luminance values (see above)

APPLYING BLEND IF

There are two *Tone Range triangle icons* for **This Layer** (the active layer) and two for **Underlying Layer** (the layer below the active layer). On the right is a draggable Tone Range triangle icon for **Light Tones** (pixels with high luminance values) and on the left is a draggable

Tone Range triangle icon for **Dark Tones** (pixels with low luminance values).

- Dragging the **This Layer - Light Tones** triangle to the left will hide (remove from the blend results) pixels in the top/active layer whose luminance value is within the range set by the slider. The default Light Tones luminance range always starts at 255 and below (default is all pixels).

Moving the Light Tones triangle from a value of 255 to 225, for example, sets the Light Tones range to start at 225, which will remove any pixels with a luminance value above that (226 to 255) from the results of the blend. As the triangle is dragged farther to the left a greater range of pixels will be removed (hidden).

- Dragging the **This Layer - Dark Tones** triangle to the right will hide (remove from the blend) pixels in the top/active layer whose luminance value is within the range set by the slider. The default Dark Tones luminance range always starts at 0 and above (default is all pixels).

Moving the Dark Tones triangle from a value of 0 to 25, for example, sets the Dark Tones range to start at 25, which will remove any pixels with a luminance value below that (0 to 24) from the results of the blend. As the triangle is dragged farther to the right a greater range of pixels will be removed (hidden).

- Dragging the **Underlying Layer - Light Tones** triangle to the left will hide (remove from the blend results) pixels in the bottom layer whose luminance value is within the range set by the slider. The default Light Tones luminance range always starts at 255 and below (default is all pixels).

Moving the Light Tones triangle from a value of 255 to 225, for example, sets the Light Tones range to start at 225, which will remove any pixels with a luminance value above that (226 to 255) from the results of the blend. As the triangle is dragged farther to the left a greater range of pixels will be removed (hidden).

- Dragging the **Underlying Layer - Dark Tones** triangle to the right will hide (remove from the blend) pixels in bottom layer whose luminance value is within the range set by the slider. The default Dark Tones luminance range always starts at 0 and above (default is all pixels).

Moving the Dark Tones triangle from a value of 0 to 25, for example, sets the Dark Tones range to start at 25, which will remove any pixels with a luminance value below that (0 to 24) from the results of the blend. As the triangle is dragged farther to the right a greater range of pixels will be removed (hidden).

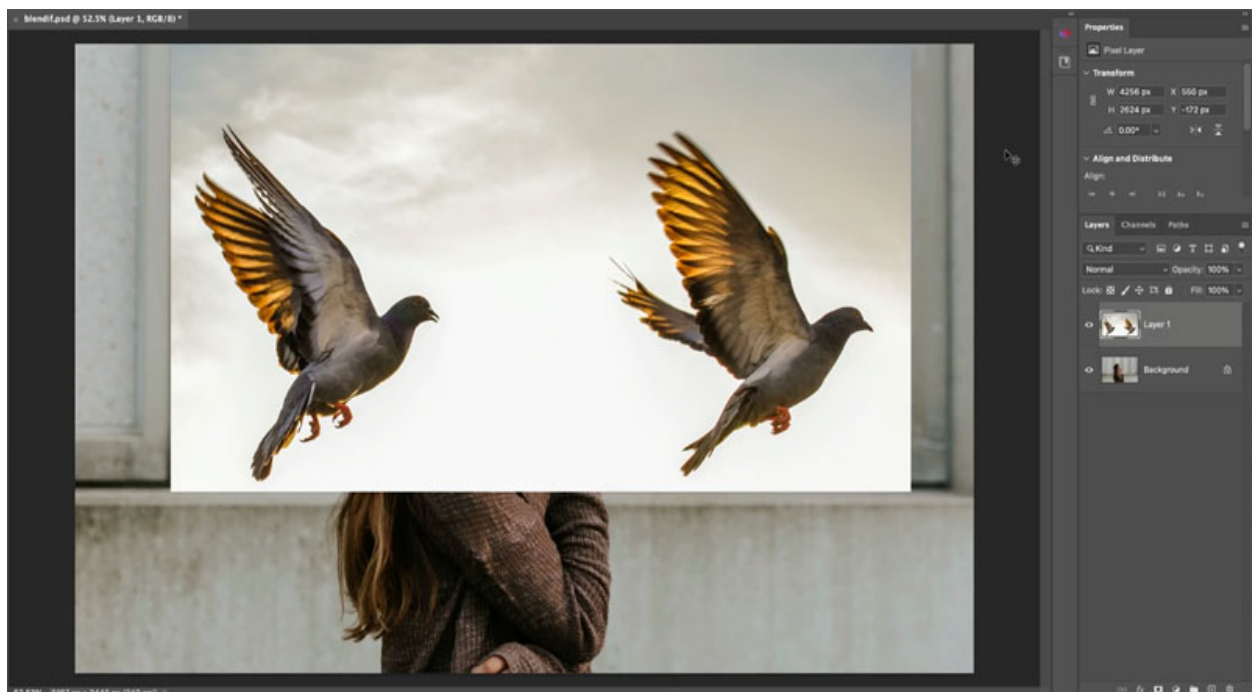
Softening Transitions

Dragging a Tone Range triangle may result in harsh/sharp transitions. These transitions can be “softened” as follows:

- Each of the Tone Range triangles can be “split” by holding Alt (Win) / Option (Mac) while dragging. The triangle becomes two half-triangles that can be moved separately. **Note:** Dragging a half-triangle onto its other half will “reunite/merge” them again.
- When a Tone Range triangle has been split, the two half-triangles define a Tone Range sub-set that “feathers” (softens/blurs) the effect. The feathering increases as the two half-triangles are dragged farther apart.

EXAMPLES of BLEND IF

Example 1: This example is based on a document with two layers. The bottom layer (“Background”) is an image of a Woman standing in front of a wall and the top layer (“Layer1”) is an image of two birds against a bright sky. The goal is to use the *Blend If* controls to create a final image with the birds isolated from their background (the bright sky) and appearing *behind* the woman but *in front* of the wall that is behind the woman.



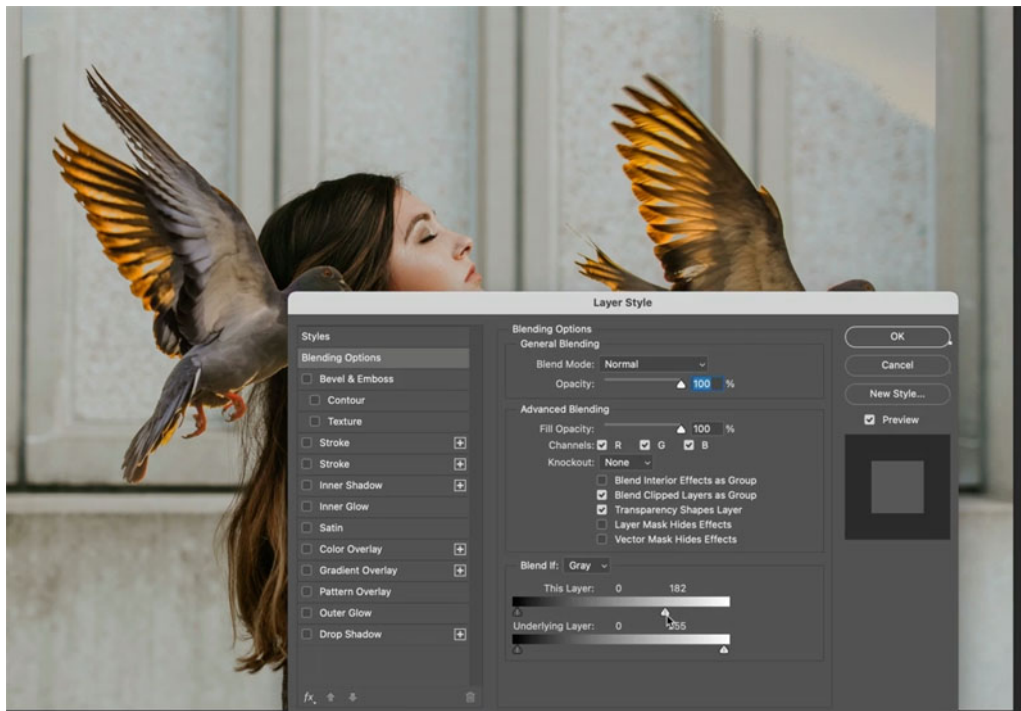
Two layers: “Background”, with an image of a woman, and “Layer 1”, with two birds

Step 1: Hide the Bright Sky from the Birds layer

The sky in “Layer 1” is lighter than the birds and lighter than the woman or the wall she stands before. With “Layer 1” active (selected) open the *Layer Style* menu. Then, move the **This Layer - Light Tones** triangle to the left to begin to hide the lighter portions of the sky. More of the sky will be hidden as the triangle is dragged farther to the left.



Dragging the **This Layer - Light Tones** triangle to the left begins to hide the sky !



Dragging the **This Layer - Light Tones** triangle farther to the left hides more of the sky

Step 2: Make the Birds appear to be behind the Woman:

The bright sky has been hidden and the birds now appear to be in front of the wall, but the bird on the left appears to be in front of the woman's hair.



The bright sky is hidden, but the birds appear to be in front of the woman

Drag the **Underlying Layer - Dark Tones** triangle to the right to bring the woman's hair forward.



The woman is above the bird, but the background on the bird layer is partially visible

Step 3: Adjust the transitions until the goal is met:

Adjust the positions of the **Underlying Layer - Dark Tones** triangle halves and the ***This Layer - Light Tones*** triangle halves until the results meet the goal. The final image shows the birds

isolated from their background (the bright sky) and appearing *behind* the woman but *in front* of the wall that is behind the woman.



The final image

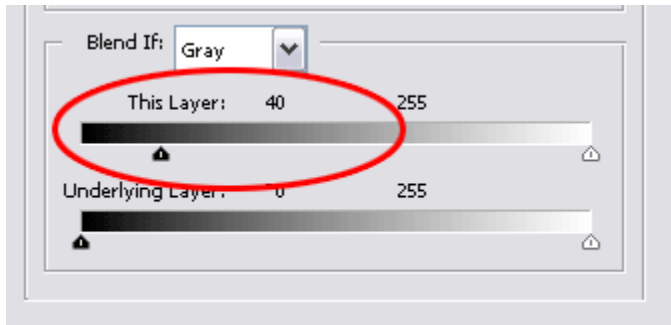
Example 2: This example is based on a document that has two layers. The bottom layer is an image of trees silhouetted against a colorful sunset sky. The top layer is an image of a full moon in a black night sky. The goal is to use the *Blend If* controls to create a final image with the moon appearing in the colorful sunset sky and *behind* the trees.



Trees silhouetted against a sunset sky, and a full moon in black night sky

Step 1: Hide the black night sky around the moon.

Select the Moon layer and double click its thumbnail to open the *Layer Style* menu. Then, drag the **This Layer - Dark Tones** triangle to the right until the black night sky around the moon disappears, leaving only the full moon visible above the trees and sunset sky.



Drag the **This Layer - Dark Tones** triangle to the right.

The night sky disappears around the moon

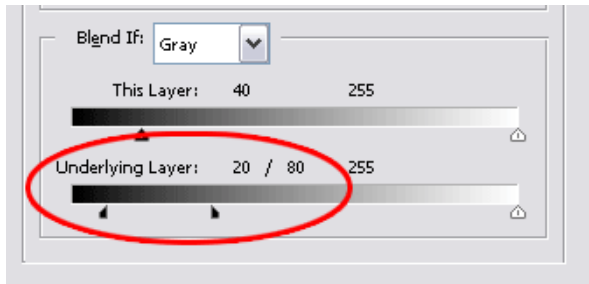
Step 2: Make the moon appear behind the trees.

Drag the **Underlying Layer - Dark Tones** triangle to the right to bring the dark pixels in the bottom layer (the silhouetted trees) forward, making the moon appear to be behind the trees. Zoom in on the moon to observe the harsh transition between the pixels of the trees and the full moon.



Harsh transition between the pixels of the trees and the full moon

Hold down the **Alt** key (Win) / **Option** key (Mac) and split the **Underlying Layer - Dark Tones** triangle. Leave the left half in position while dragging the right half of the triangle to the right, separating the two halves of the **Underlying Layer - Dark Tones** triangle, until the transition “feathers” and the transition appears smooth and natural.



Separating the two halves of the *Underlying Layer - Dark Tones* triangle, smoothing the transition

If desired, the Full Moon layer can be moved to reposition the moon behind the trees.



Full Moon layer repositioned to reveal more of the moon