



The Painting Tools, gradient tools, Paint Bucket Tool, and Fill command let you change the color of pixels and create colored areas in an image. You can select colors using the Color Palette, Swatches Palette, or Color Picker.

Painting involves changing the colors of pixels using a painting tool. You can apply colors gradually, with soft edges and transitions, and manipulate individual pixels using powerful filter effects.

Using the Painting Tools

To use the Brush or Pencil Tools - Photoshop provides the Brush tool and the Pencil tool to let you paint with the current foreground color. By default, the Brush tool creates soft strokes of color and the Pencil tool creates hard-edged, free-hand lines. However, you can change these default characteristics by resetting the tool's brush options. You can also use the Brush tool as an airbrush to apply sprays of color to an image.

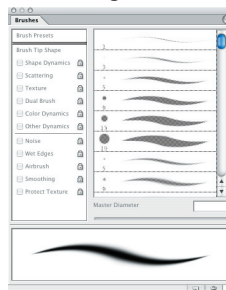
1. Specify a foreground color.
2. Select the Brush Tool or  Pencil Tool. 
3. Do the following in the options bar:
 - a) Choose a brush and set brush options.
 - b) Choose a blending mode from the Mode menu.
 - c) Specify an opacity by dragging the Opacity slider.
 - d) For the Brush Tool, specify a flow rate by dragging the Flow slider.
 - e) Click the Airbrush button to use as an airbrush.
 - f) For the Pencil Tool, select Auto Erase to paint the background color over areas containing the foreground color.
4. Do one or more of the following:
 - a) Drag in the image to paint.
 - b) To draw a straight line, click a starting point in the image, then hold down Shift, and click an ending point.
 - c) When using the Brush Tool as an airbrush, hold down the mouse button without dragging to build up color.

Working with Brushes - Working with brushes is an important part of using the painting and editing tools. The brush you select determines many characteristics of the resulting stroke. Photoshop provides a variety of preset brushes to fill a wide range of uses. In Photoshop, you can also create custom brushes using the Brushes Palette.

Using the Brushes Palette - The Brushes Palette lets you select preset brushes and design custom brushes.

To display the Brushes Palette, choose Brushes from the Window menu, or click the palette button on the right side of the Options Bar if you have a painting tool, erasing tool, toning tool, or focus tool selected.

To display options in the Brushes Palette, select an item name on the left side of the palette. The options for the selected item appear on the right side of the palette.



Selecting Preset Brushes

1. Click a brush in the Brushes Palette.
2. Specify a diameter for the brush by dragging the slider or entering a value. If the brush has a dual tip, both the primary and dual brush tips are scaled.
3. Click Use Sample Size to use the original diameter of the brush tip. (available only if the brush tip shape is based on a sample.)

Customizing Brush Tips - You can customize brush tips by editing their options and create new brush tip shapes by sampling pixels in an image. The brush tip you select determines the shape, diameter, and other characteristics of a brush mark.


1. Use any selection tool to select a part of an image to use as a custom brush. Feather should be set to 0 pixels if you want to create a brush with a sharp edge. The brush shape can be up to 2500 pixels by 2500 pixels in size.
2. Choose Define Brush Preset from the Edit menu.
3. Name the brush and click OK.

Setting Options for the Painting Tools

Selecting a Blending Mode - The blending mode specified in the options bar controls how pixels in the image are affected by a painting or editing tool. It's helpful to think in terms of the following colors when visualizing a blending mode's effect:

- a) The base color in the original color in the image.
- b) The blend color in the color being applied with the painting or editing tool.
- c) The result color is the color resulting from the blend.

Using the Eraser Tool - The Eraser Tool changes pixels in the image as you drag through them. If you're working in the background or in a layer with transparency locked, the pixels change to the background color; otherwise, the pixels are erased to transparency. You can also use the eraser to return the affected area to a state selected in the History Palette.

1. Select the Eraser Tool. 
2. Do the following in the Options Bar:
 - a) Choose a brush and set brush options. This option is not available for Block Mode.
 - b) Choose a mode for the Eraser: Brush, Pencil, or Block.
 - c) Specify an opacity to define the strength of the erasure. An opacity of 100% erases pixels completely. (Not available in Block Mode.)
 - d) In Brush Mode, specify a flow rate.
 - e) In Brush Mode, click the airbrush button to use the Brush as an airbrush.
 - f) To erase to a saved state or snapshot of the image, click the left column of the state or snapshot in the History Palette and then select Erase to History in the options bar.
3. Drag through the area you want to erase.


Using the Magic Erase Tool - When you click in a layer with the Magic Eraser Tool, the tool automatically changes all similar pixels. If you're working in the background, or in a layer with locked transparency, the pixels change to the background color; otherwise, the pixels are erased to transparency. You can choose to erase contiguous pixels only or all similar pixels on the current layer.

1. Select the Magic Eraser Tool. 

2. Do the following in the Options Bar:
 - a) Enter a tolerance value to define the range of colors that can be erased. A low tolerance erases pixels within a range of color values very similar to the pixel you click. A high tolerance erases pixels within a broader range.
 - b) Select Anti-aliased to smooth the edges of the area you erase.
 - c) Select Contiguous to erase only pixels contiguous to the one you click, or deselect to erase all similar pixels in the image.
 - d) Select Use All Layers to sample the erased color using combined data from all visible layers.
 - e) Specify an opacity to define the strength of the erasure. An opacity of 100% erases pixels completely.
3. Click in the part of the layer you want to erase.

Using the Background Eraser Tool - The Background Eraser Tool lets you erase pixels on a layer to transparency as you drag; this allows you to erase the background while maintaining the edges of an object in the foreground. By specifying different sampling and tolerance options, you can control the range of the transparency and the sharpness of the boundaries.

The background eraser samples the color in the center of the brush, also called the hot spot, and deletes that color wherever it appears inside the brush. It also performs color extraction at the edges of any foreground objects, so that color halos are not visible if the foreground object is later pasted into another image.

1. In the Layers Palette, select the Layer containing the areas you want to erase.
2. Select the Background Eraser Tool. 
3. Click the brush sample in the Options Bar and set brush options in the pop-up palette: Choose setting for the Diameter, Hardness, Spacing, Angle, and Roundness options.
4. Do the following in the Options Bar:
 - a) Choose a Limits Mode for erasing: Dicontiguous to erase the sampled color wherever it occurs under the brush, Contiguous to erase areas that contain the sampled color and are connected to one another, and Find Edges to erase connected areas containing the sampled color while better preserving the sharpness of shape edges.
 - b) For Tolerance, enter a value or drag the slider. A low Tolerance limits erasure to areas that are very similar to the sampled color.
 - c) Select Protect Foreground Color to prevent the erasure of areas that match the foreground color in the toolbox.
 - d) Choose a Sampling option: Continuous to sample colors continuously as you drag, Once to erase only areas containing the color that you first click, and Background Swatch to erase only areas containing the current background color
5. Drag through the area you want to erase.

Using the Auto Erase Option - The Auto Erase option for the Pencil Tool lets you paint the background color over areas containing the foreground color.

1. Specify foreground and background colors.
2. Select the Pencil Tool.
3. Select Auto Erase in the Options Bar.
4. Drag over the image.



If the center of the cursor is over the foreground color when you begin dragging, the area is erased to the background

color. If the center of the cursor is over an area that doesn't contain the foreground color when you begin dragging, the area is painted with the foreground color.

Using the Gradient Tool


The Gradient Tool creates a gradual blend between multiple colors. You can choose from preset gradient fills or create your own.

Applying a Gradient Fill - You fill an area with a gradient by dragging in the image. The starting point and ending point affect the gradient appearance, depending on the Gradient Tool used.

1. To fill part of the image, select the desired area (otherwise, the gradient fill is applied to the entire active layer).
2. Select the Gradient Tool. 
3. Choose a gradient fill in the Options Bar:
 - a) Click the triangle next to the gradient sample to pick a preset gradient fill.
 - b) Click inside the gradient sample to view the Gradient Editor. Select a preset gradient fill, or create a new gradient fill. Then click OK.
4. Select an option for applying the gradient fill  in the Options Bar:
 - a) Linear gradient to shade from the starting point to the ending point in a straight line.
 - b) Radial gradient to shade from the starting point to the ending point in a circular pattern.
 - c) Angle gradient to shade in a counter-clockwise sweep around the starting point.
 - d) Reflected gradient to shade using symmetric linear gradients on either side of the starting point.
 - e) Diamond gradient to shade from the starting point outward in a diamond pattern. The ending point defines one corner of the diamond.
5. Do the following in the Options Bar:
 - a) Specify a Blending Mode and Opacity for the paint.
 - b) To reverse the color order in the fill, select Reverse.
 - c) To create a smoother blend, select Dither.
 - d) To use a transparency mask, select Transparency.
6. Position the pointer in the image where you want to set the starting point of the gradient, and drag to define the ending point. To constrain the angle to a multiple of 45 degrees, hold down the shift key as you drag.

Using the Paint Bucket Tool

The Paint Bucket Tool fills adjacent pixels that are similar in color value to the pixels you click.

1. Specify a foreground color.
2. Select the Paint Bucket Tool. 
3. Specify whether to fill the selection with the foreground color or with a pattern.
4. Specify a Blending Mode and Opacity for the paint.
5. Enter the Tolerance for the Fill. Tolerance defines how similar in color a pixel must be to be filled.
6. To smooth the edges of the selection, select Anti-Aliased.
7. To Fill only pixels contiguous to the one you click, select Contiguous; leave unselected to fill all similar pixels.
8. To Fill pixels based on the merged color data from all visible layers, select All Layers.
9. Click the part of the image you want to Fill.

Filling & Stroking Selections & Layers

You can fill a selection or layer with the foreground color, the background color, or a pattern. You can also fill a shape using the Foreground Color, Gradient, or Pattern Overlay effects or the Solid Color, Gradient, or Pattern fill layers on the layers palette.

To fill a selection or a layer

1. Specify a foreground or background color.
2. Select the area you want to fill.
3. Choose Fill in the Edit menu, or Choose the Paint Bucket Tool from the Tool Box.
4. In the Fill dialog box, for Use, choose one of the following options or select a Custom Pattern:
 - a) Foreground Color, Background Color, Black, 50% Gray, or White to Fill the selection with the specified color.
 - b) Color to Fill with color selected from the Color Picker.
 - c) Pattern to Fill the selection with a pattern. Click the inverted arrow next to the pattern sample and select a pattern from the pop-up palette.
 - d) History to restore the selected area to a state or snapshot of the image.
5. Specify the Blending Mode and Opacity for the paint.
6. If you're working in a layer and want to fill only areas containing pixels, choose Preserve Transparency.
7. Click the OK button to apply the Fill.

Stroking a Selection or Layer - You can use the Stroke command to paint a colored border around a selection, layer, or path. If you want a quick way to create a Stroke on the current layer--without necessarily following the edge of the layer--use the Stroke command.

1. Specify a foreground color.
2. Select the area or layer you want to Stroke.
3. Choose Stroke in the Edit menu.
4. In the Stroke dialog box, specify the width of the border.
5. For Location, specify whether to place the border inside, outside, or centered over the selection or layer boundaries.
6. Specify an Opacity and a Blending Mode.
7. If you're working in a layer and want to Stroke only areas containing pixels, select the Preserve Transparency option.

A pattern is an image that is repeated, or tiled, during application. Photoshop comes with a variety of preset patterns. In Photoshop, you can create new patterns and save them in libraries for use with different tools and commands.

To define a preset pattern

1. Use the Rectangle Marquee Tool on any open image to select an area to use as a pattern. Feather must be set to zero pixels.
2. Choose Define Pattern from the Edit menu.
3. Enter a name for the pattern in the Pattern Name dialog.

Choosing Fore and Background Colors

Photoshop uses the foreground color to paint, fill and stroke selections and the background color to make gradient fills and fill in the erased areas of an image.

You can designate a new foreground or background color using the Eyedropper Tool, the Color Palette, the Swatches Palette, or the Adobe Color Picker.

The default Foreground color is white and the default Background color is black.

Creating and Managing Patterns

The current Foreground color appears in the upper color selection box in the toolbox; the current Background color appears in the lower box.



Click the Switch Colors icon (double-headed arrow) in the toolbox to switch the Fore and Background colors.

Click the Default Colors icon (black and white squares) to restore the default colors to the Fore and Background.

Using the Eyedropper Tool - The Eyedropper Tool samples color to designate a new Foreground or Background color. You can sample from the active image, or from anywhere else on the screen.

You can also specify the area sampled by the Eyedropper Tool. For example, you can set the Eyedropper to sample the color values of a 3x3 pixel area under the pointer. Modifying the sample size of the Eyedropper affects the color readouts displayed in the Info Palette.

1. Select the Eyedropper Tool.
2. To change the sample size of the Eyedropper, choose an option from the Sample Size menu.
3. To select a new Foreground color, click in the image. Click and drag to see the color change dynamically. To select a new Background color, Alt-click (win) or Option-click (mac) in the image. (Clicking and dragging will also dynamically change the color.)



Using the Color Palette - The Color Palette displays the color values for the current Fore and Background colors. Using the sliders in the Color Palette, you can edit the Fore and Background colors according to several different color models.



1. Click Color from the Window menu to display the Color Palette.
2. To change the color model of the sliders, choose a Sliders option from the Color Palette Menu.
3. To change the spectrum displayed in the color ramp, choose an option from the Color Palette Menu.
 - a) RGB, CMYK, and Grayscale display the spectrum of the specified model.
 - b) Current Colors displays the spectrum of colors between the current Fore and Background colors.
4. To edit the Fore or Background colors, make sure that its color selection box is active (outlined in black). To make the Fore or Background color selection active, click the box, then drag the sliders, or enter values next to the sliders.

Using the Swatches Palette - You can choose a Fore or Background color from the Swatches Palette.

Choose Swatches from the Window menu to display the Swatches Palette, or click the Swatches tab next to the Color tab if the Color Palette is already open.

Choose a display option from the Swatches Palette Menu: Small Thumbnail to display a small thumbnail of each swatch, or Small List to display the name and thumbnail of each swatch.

To choose a Foreground color, click a color in the Swatches Palette. To choose a Background color, Ctrl-click (win) or Command-click (mac) a color in the Swatches Palette.

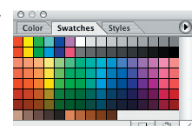


Image Operations

Transformations such as cropping, scaling, rotating, and distorting, let you change the geometry of an entire image or parts of an image. Retouching lets you correct the tone and focus of an image, remove dust and scratches, and clone pixels within or between images.

Changing the Size of the Work Canvas - The Canvas Size command lets you add or remove work space around an existing image. You can also use the command to crop an image by decreasing the canvas area.

Rotating and Flipping entire Images - The Rotate Canvas commands let you rotate or flip an entire image. The commands do not work on individual layers or parts of layers, paths, or selection borders.

Choose Rotate Canvas from the Image menu and choose one of the following commands from sub-menu:

- 180° to rotate by a half-turn.
- 90° CW to rotate a quarter-turn clockwise.
- 90° CCW to rotate a quarter-turn counter-clockwise.
- Arbitrary to rotate the image by an angle you specify.
- Flip Canvas Horizontal to flip along the vertical axis.
- Flip Canvas Vertically to flip along the horizontal axis.

Cropping Images - Cropping is the process of removing portions of an image to create focus or strengthen the composition. You can crop an image using the Crop Tool and Crop command.

1. Select the Crop Tool.
2. Drag over the part of the image you want to keep to create a marquee. Adjust the marquee by dragging it and/or grabbing the handles.
3. Press Enter (win) or Return (mac), click Commit in the Options Bar, or double-click inside the Crop area.

Transforming Perspective while Cropping - The Crop Tool in Photoshop has an additional option that allows you to transform the perspective in an image. This is very useful when working with images that contain keystone distortion.

Transforming Objects

You can scale, rotate, skew, distort, and apply perspective to entire layers, selected parts of layers, masks, paths, shapes, selection borders, and channels.

Specify what to Transform

- To transform an entire layer, make the layer active, with nothing selected.
- To transform part of a layer, select the layer, and the select part of the image on the layer.
- To transform multiple layers, link the layers together.
- To transform a layer or vector mask, unlink the mask, and select the mask thumbnail in the Layers Palette.
- To transform a selection border, make or load a selection. Then choose Transform Selection from the Select menu.

Setting the Reference Point

All transformations are performed around a fixed point called the reference point. By default, this point is at the center of the item you are transforming. However, you can change

the reference point or move the center point to a different location using the reference point locator in the Options Bar.

1. Select a transformation command - a bounding box appears in the image.
2. In the Options Bar, click on the reference point locator. Each square represents a point on the bounding box. -or-
 2. Drag the center point. The center point can be outside the item you want to transform.

Applying Transformations

The commands under the Transform sub-menu let you apply the following transformations to an item:

- Scaling enlarges or reduces relative to the reference point.
- Rotating turns around the reference point.
- Skewing lets you slant vertically or horizontally.
- Distorting lets you stretch an item in all directions.
- Applying perspective lets you apply one point perspective.

You can apply several commands in succession before applying the cumulative transformation.

1. Select what you want to Transform.
2. Choose Transform > Scale, Rotate, Skew, Distort, or Perspective from the Edit menu.
3. In the Options Bar, click a Reference Point.
4. Do one of the following:
 - a) For Scale, drag a handle on the bounding box. Hold Shift as you drag a corner handle to scale proportionally.
 - b) For Rotate, move the pointer outside the bounding border, then drag. Hold Shift to constrain to 15° increments.
 - c) For Skew, drag a side handle to slant the bounding box.
 - d) For Distort, drag a corner handle to stretch the bounding box.
 - e) For Perspective, drag a corner handle to apply perspective to the bounding box.
5. If desired, switch to a different type of transformation by choosing another item from the Transform sub-menu.
6. When you're finished press Enter (win) or Return (mac).


Using the Free Transform Command

The Free Transform command lets you apply transformations in one continuous operation.

1. Select what you want to Transform.
2. Choose Free Transform from the Edit menu.
3. In the Options Bar, click a Reference Point.
4. Do one of the following:
 - a) To Scale, drag a handle on the bounding box. Hold Shift as you drag a corner handle to scale proportionally.
 - b) To Rotate, move the pointer outside the bounding border, then drag. Hold Shift to constrain to 15° increments.
 - c) To Distort relative to the center point, press Alt (win) or Option (mac) and drag a handle.
 - d) To Distort freely, press Ctrl (win) or Command (mac) and drag a handle.
 - e) To Skew, press Ctrl-Shift (win) or Command-Shift (mac) and drag a side handle.
 - f) To apply Perspective, press Ctrl-Alt-Shift (win) or Command-Option-Shift (mac) and drag a corner handle.
 - g) To move an item, enter values for the new location of the reference in the X and Y text boxes in the Options Bar. Click the Relative Positioning button to specify the new position in relation to the current position.
5. When you're finished press Enter (win) or Return (mac).


Clone Stamp Tool

The Clone Stamp Tool takes a sample of an image, which can then apply over another image or part of the same image. You can also clone part of one layer over another layer. Each stroke of the tool paints on more of the sample.

1. Select the Clone Stamp Tool. 
2. Choose a brush tip and set brush options for the blending mode, opacity, and flow in the Options Bar.
3. Select Aligned in the Options Bar to sample pixels continuously, without losing the current sampling point, even if you release the mouse button. Deselect Aligned to continue to use the sampled pixels from the initial sampling point each time you stop and resume painting.
4. Select Use All Layers in the Options Bar to sample data from all visible Layers.
5. Set the sampling point by positioning the point in any open image and Alt-clicking (win) or Option-clicking (mac).
6. Drag over the area of the image you want to correct.


Pattern Stamp Tool

The Pattern Stamp Tool lets you paint with a pattern. You can select a pattern from the pattern libraries or create your own patterns.

1. Select the Pattern Stamp Tool. 
2. Choose a brush tip and set brush options for the blending mode, opacity, and flow in the Options Bar.
3. Select Aligned in the Options Bar to sample pixels continuously, without losing the current sampling point, even if you release the mouse button. Deselect Aligned to continue to use the sampled pixels from the initial sampling point each time you stop and resume painting.
4. Select a Pattern from the pattern palette in the Options Bar.
5. Select Impressionist to apply the pattern with that effect.
6. Drag in the image to paint with the pattern.

Healing Brush Tool


The Healing Brush Tool lets you correct imperfections, causing them to disappear into the surrounding image. Like the cloning tools, you use the Healing Brush Tool to paint with sampled pixels from an image or pattern. However, the Healing Brush Tool also matches the texture, lighting, transparency, and shading of the sampled pixels to the source pixels. As a result, the repaired pixels blend seamlessly into the rest of the image.

1. Select the Healing Brush Tool. 
2. Click the brush sample in the Options Bar and set brush options for the pop-up palette.
3. Choose a Blending Mode from the Mode pop-up menu in the Options Bar. Choose Replace to preserve noise, film grain, and texture at the edges of the brush stroke.
4. Choose a source to use for repairing pixels in the Options Bar: Sampled to use pixels from the current image, or Pattern to use pixels from a pattern. If you chose Pattern, select a pattern from the Pattern pop-up palette.
5. Select Aligned in the Options Bar to sample pixels continuously, without losing the current sampling point, even if you release the mouse button. Deselect Aligned to continue to use the sampled pixels from the initial sampling point each time you stop and resume painting.

6. Select User All Layers in the Options Bar to sample data from all visible Layers.
7. For the Healing Brush Tool in sampling mode, set the sampling point by positioning the pointer in any open image and Alt-clicking (win) or Option-clicking (mac).
8. Drag in the image. The sampled pixels are melded with the existing pixels each time you release the mouse button. Look in the status bar to view the status of the melding process.


Patch Tool

The Patch Tool lets you repair a selected area with pixels from another area or a pattern. Like the Healing Brush Tool, the Patch Tool matches the texture, lighting and shading of the sampled pixels to the source pixels. You can also use the Patch Tool to clone isolated areas of an image.

1. Select the Patch Tool. 
2. Drag in the image to select the area you want to repair, and select Source in the Option Bar. -or- Drag in the image to select the area from which you want to sample, and select Destination in the Options Bar.
3. Position the pointer inside the selection, and if Source is selected in the Options Bar, drag the selection border to the area from which you want to sample. When you release the mouse button, the originally selected area is patched with the sampled pixels. -or- If Destination is selected in the Options bar, drag the selection border to the area you want to patch. When you release the mouse button, the newly selected area is patched with the sampled pixels.


Color Replacement Tool

The Color Replacement Tool simplifies replacing specific colors in your image. You can paint over a targeted color -- for example, a person's red eyes in an image -- with a corrective color.


1. Select the Color Replacement Tool. 
2. Choose a brush tip in the Options Bar.
3. For the Sampling option, choose one of the following:
 - a) Continuous to sample colors continuously as you drag.
 - b) Once to replace the targeted color only in areas containing the color that you first click.
 - c) Background Swatch to erase only areas containing the current background color.
4. For the Limits option, select one of the following:
 - a) Discontiguous to replace the sampled color wherever it occurs under the pointer.
 - b) Contiguous to replace colors that are contiguous with the color immediately under the cursor.
 - c) Find Edges to replace connected areas containing the sampled color while preserving the sharpness of shape edges.
5. For tolerance, enter a value (0-255) or drag the slider.
6. To define a smooth edge to your corrections, select anti-aliased.
7. Choose a foreground color to replace the unwanted color.
8. Click the color you want to replace in the image.
9. Drag in the image to replace the targeted color.

Smudge, Blur, & Sharpen Tools


Smudge Tool - The Smudge tool simulates the actions of dragging a finger through wet paint. The tool picks up color where the stroke begins and pushes it in the direction you drag.

1. Select the Smudge Tool. 
2. Choose a brush tip and Blending Mode in the Options Bar.
3. Select User All Layers in the Options Bar to smudge using color data from all visible layers.
4. Select Finger Painting in the Options Bar to smudge using the foreground color at the beginning of each stroke.
5. Drag in the image to smudge the pixels.

Blur Tool - The Blur tool softens hard edges or areas in an image to reduce detail.

1. Select the Blur Tool. 
2. Choose a brush tip and set Options for the blending mode and strength in the Options Bar.
3. Select User All Layers in the Options Bar to smudge using color data from all visible layers.
4. Drag in the image to blur the pixels.



Sharpen Tool - The Sharpen tool focuses soft edges to increase clarity or focus.

1. Select the Sharpen Tool. 
2. Choose a brush tip and set Options for the blending mode and strength in the Options Bar.
3. Select User All Layers in the Options Bar to smudge using color data from all visible layers.
4. Drag in the image to sharpen the pixels.

Dodge, & Burn, & Sponge Tools

Used to lighten or darken areas of the image, the Dodge tool and the Burn Tools are based on a traditional photographer's technique for regulating exposure on specific areas of a print. Photographers hold back light to lighten an area of the print (dodging) or increase the exposure to darken areas on a print (burning).

Dodge & Burn Tools

1. Select the Dodge Tool  or the Burn Tool. 
2. Choose a brush tip and set brush options in the Options Bar.
3. Select one of the following in the Options Bar:
 - a) Midtones to change the middle range of grays.
 - b) Shadows to change the dark areas.
 - c) Highlights to change the light areas.
4. Specify the exposure for the Dodge Tool or the Burn Tool.
5. Click the airbrush button to use the brush as an airbrush.
6. Drag over the part of the image you want to lighten or darken.

Sponge Tool

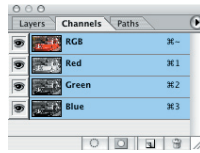
1. Select the Sponge Tool. 
2. Choose a brush tip and set brush options in the Options Bar.
3. Select one of the following in the Options Bar:
 - a) Saturate to intensify the color's saturation.
 - b) Desaturate to dilute the color's saturation.
4. Specify the flow for the Sponge Tool.
6. Drag over the part of the image you want to modify.

Each image in Adobe Photoshop has channels that store information about the image's color. Channels are grayscale images that store different types of information:

Color Information Channels - are created automatically when you open a new image. The image's color mode determines the number of color channels created. For example, an RGB image has four default channels: one for each of the red, green, and blue colors, plus a composite channel used for editing the image.

Alpha Channels - You use alpha channels to create and store masks, which let you manipulate, isolate, and protect specific parts of an image.

The Channels Palette - The Channels Palette lets you create and manage channels and monitor the effects of editing. The Palette lists all channels in the image composite channel first (for RGB, CMYK, and LAB images), then individual color channels and alpha channels. A thumbnail of the channel's contents appears to the left of the channel name; the thumbnail automatically updates as you edit the channel.



You can use the palette to view any combination of individual channels. For example, you can view an alpha channel and the composite channel together to see how changes made in the alpha channel relate to the entire image.

Choose Channels in the Window menu to show or hide the Channels Palette. Click in the eye column next to the channel to show or hide that channel.

- If more than one channel is selected, the channels always appear in color.
- In alpha channels, selected pixels appear as white; unselected pixels appear as black.
- If you display an alpha channel at the same time as color channels, the alpha channel appears as a translucent color overlay, analogous to a printer's rubylith or a sheet of acetate.

You can select one or more channels in the Channels Palette. The names of all active channels are highlighted. Any editing changes you make apply to the active channels.

Use a painting or editing tool to paint in the image. Paint with white to add the selected channel's color at 100% intensity. Paint with a value of gray to add the channel's color at a lower intensity. Paint with black to fully remove the channel's color.

Managing Channels - You can rearrange channels, duplicate a channel within or between images, split a channel into separate images, merge channels from separate images into one new image, and delete alpha channels when you are finished with them.

You cannot move or rename the default channels at the top of the palette, but you can rearrange and rename alpha channels to suit the way you work. Drag the channel up or down to change the order of alpha channels. Double-click the channel's name in the Channels Palette, and enter a new name.

Duplicating Channels - You might duplicate an image's channel to make a backup before editing the channel. Or you might duplicate alpha channels to a new image to create a library of selections to load into the current image one by one, thus keeping the file smaller.

- In the Channels Palette, select the channel to duplicate.
- Choose Duplicate Channel from the Channels Palette Menu.
- Type a name for the duplicate channel.
- For Document, choose a destination. To duplicate the channel in the same file, select the channel's current file. -or- Choose New to copy the channel to a new image, creating a multichannel image containing a single channel. Type a name for the new image.
- To reverse the selected and masked areas in the duplicate channel, select Invert.

Splitting Channels - You can split the channels of a flattened image into separate images. The original file is closed, and the individual channels appear in separate grayscale image windows. The title bars in the new windows show the original file name plus the channel abbreviation (win) or full name (mac). Any changes since the last save are retained in the new images and lost in the original. Choose Split Channels from the Channels Palette Menu to split the channels into separate images.

Merging Channels - Multiple grayscale images can be combined into a single image. Merging lets you combine separate grayscale images into a single color image.

The images you want to merge must be in Grayscale mode, have the same pixel dimensions, and be open. The number of grayscale images you have open determines the color modes available when merging channels. For example, you can't merge the split channels from an RGB image into a CMYK image, because CMYK requires four channels and RGB requires only three.

- Open the grayscale images containing the channels you want to merge, and make one of them active.
- Choose Merge Channels from the Channels Palette Menu.
- For Mode, choose the color mode you want to create.
- If necessary enter a number in the Channels text box.
- Click OK.
- For each channel, make sure the image you want is open. If you change your mind about image type, click Mode to return to the Merge Channels dialog box.
- If merging into a multichannel image, click Next and repeat step 6 to select the remaining channels.
- When you are finished selected channels, click OK.

The selected channels are merged into a new image of the specified type, and the original images are closed without any changes.

Deleting Channels - You may want to delete an alpha channel you no longer need before saving an image. Complex alpha channels can substantially increase the disk space required for an image.

- Select the channel in the Channels Palette.
- Drag the channel in the Palette to the Trash Button. -or- Click the Trash button at the bottom of the palette, then click Yes. -or- Choose Delete Channel from the Channels Palette Menu.