

 acdsee™ PHOTO EDITOR 11



 acdsee™

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Chapter 1: Getting Started



Welcome to ACDSee Photo Editor 11

Welcome to ACDSee Photo Editor, and congratulations on choosing the industry-leading digital photo editing software. ACDSee Photo Editor is the fast, powerful, and easy-to-use image editor that everyone from beginners to professionals can use and enjoy.

Photo Editor includes a wide variety of image processing tools you can use to create, edit, and touch-up your digital images. Use tools such as red eye reduction, crop, sharpen, blur, and photo repair to enhance or correct your images. The Patented Light EQ™ technology single-exposure HDR algorithms powering Photo Editor's Light EQ™ tool accurately and intelligently stretch the dynamic lighting range of your photos, making them incredibly realistic or atmospheric.

The user interface is completely customizable, and provides quick access to tools and features. You can customize the screen layout, toolbar display, and many other options to suit your preferences. Photo Editor contains extensive context-sensitive Help to assist you as you move through the application.

Photo Editor is a fast, powerful, and features an extensive list of keyboard shortcuts for quick editing. Photo Editor works on the image data already rendered to RGB. Edits are independently applied to the converted RGB data in the order that you do them. This chain editing gives you full control over the pixels, allowing the creative freedom to apply precise adjustments. This makes operations such as selections and blend modes possible.

Using ACDSee Photo Editor

You can use Photo Editor to edit the overall look of your images by changing the lighting and color, or you can crop, flip, resize, or rotate your images. You can add special effects, shapes, text, and much more. You can use selections to fix specific parts of your images. And you can also add final touches, such as red eye removal. You can also work with layers to add effects and shapes to your photos, perform photo manipulations, create composite images, work on a single element in an image without disturbing others, and much more.

In Photo Editor you can:

- Use the [Selection](#) tool or [Edit Brush](#) to apply edits to a specific part of the image.
- Use the [Layers pane](#) to create complex photo manipulations using layers, and add adjustment layers for non-destructive adjustments and effects.
- Use [Pixel Targeting](#) to selectively adjust pixels by color and tone.
- [Remove flaws](#), [red eye](#), or correct [skin tone](#) and [chromatic aberration](#).
- Add [watermarks](#), [borders](#), [vignettes](#), a [tilt-shift](#), [special effects](#), a [grain](#) effect, and [drawings](#).
- [Crop](#), [flip](#), [resize](#), [rotate](#), [liquify](#), and [correct perspective](#), [distortion](#), and [barrel and pincushion distortion automatically](#).
- Adjust lighting using the [Exposure](#), [Levels](#), [Auto Levels](#), [Tone Curves](#), [Light EQ™](#), [Dehaze](#), and [Dodge and Burn](#) tools.
- Adjust color using the [White Balance](#), [Color EQ](#), [Color Balance](#), [Convert to Black & White](#) or [Split Tone](#) tool.
- Add details to your image using [Sharpen](#), [Remove Noise](#), [Add Noise](#), the [Detail Brush](#), [Blur](#), or [Clarity](#) tools.

When you save a layered image, the Save Image As dialog opens with the file format set to .acdc by default. By saving in the .acdc file format, your layers will remain accessible should you re-open the image in the future.

To get started, see [Photo Editor Tools and Controls](#).

Chapter 2: Getting Help

Using the Quick Start Guide

The Quick Start Guide contains a set of links on the left side that you can click to get a tour of the main features in Photo Editor.

To Close the Quick Start:

Uncheck the **Always show at start-up** option in the bottom left corner of the dialog box, and click **Close**.

To Re-Open the Quick Start Guide:

On the Menu bar, click **Help | Quick Start Guide**.

To Use the Quick Start Guide for Quick Access to More Information:

Click the links on the left side of the Quick Start Guide or the **Next** button for a high-level tour.

Finding Other Resources and Support

The Help menu on the Photo Editor menu bar contains links to open plug-in help files and options that link you to the ACDSee Web site, where you can find updates, newsletters, and system requirements.

Other links take you to the support page, to the registration page, or the community home page where you can join the community and participate in the ACDSee forums.

The Help menu is also where you can convert a trial version of Photo Editor to a full version by entering a license code.

Click **Help** to see the following menu options:

- Plug-in Help
- [Manage acdID Account](#)
- Check for Updates and Messages
- Quick Start Guide
- [Product Support and Resources](#)
- [Customer Support](#)
- [ACDSee Products](#)
- [ACDSee Community](#)
- [Facebook](#)
- [Twitter](#)
- About ACDSee Photo Editor

Chapter 3: Editing

Photo Editor Tools and Controls

You can use the pixel-based editing tools, such as red eye removal, special effects, and many other tools, and combine them with the Selection tools, brushes, layers, and masks to fine-tune your image.

Editing an Image

To Edit an Image:

1. Choose **File | Open...**
2. Do one of the following:
 - On the Toolbar, click the icon of any of the menu groups mentioned below and choose a filter.
 - Choose **Filter**, then choose a filter from any of the menu groups.

You can choose any of the following:

- At the top of the panel, use the [Selections](#) or [Drawing tools](#).
- Open the [Layers pane](#) to work with layers.
- In the Repair group, click [Red Eye Reduction](#), [Skin Tune](#), [Chromatic Aberration](#), or [Repair tool](#).
- In the Add group, click [Watermark](#), [Borders](#), [Vignette](#), [Tilt-Shift](#), [Grain](#), or click [Special Effect](#) and select an effect.
- In the Geometry group, click [Rotate](#), [Flip](#), [Crop](#), [Liquify](#), [Perspective Correction](#), [Distortion Correction](#), [Lens Correction](#), or [Resize](#).
- In the Exposure/Lighting group, click [Exposure](#), [Levels](#), [Auto Levels](#), [Tone Curves](#), [Light EQ™](#), [Dehaze](#), [Dodge and Burn](#).
- In the Color group, click [White Balance](#), [Color EQ](#), [Color Balance](#), [Convert to Black & White](#), [Split Tone](#), or [Color LUTs](#).
- In the Detail group, click [Sharpen](#), [Blur](#), [Clarity](#), [Detail Brush](#), or click Noise to [remove](#) or [add](#) noise.

You have several options in saving your images. See [Saving Images](#) for more information.



You can apply adjustments to specific tones or colors with [Pixel Targeting](#).

To Create a New Image:

You can create a new, blank image.

1. Go to **File | New Image...** or press **Ctrl + N**.
2. In the New Image dialog, enter a name for your image and the dimensions. You can customize the unit of measurement with the drop-down menu.
 - ! Neither your width or height setting can exceed 16,000 pixels.
3. Next to Aspect Ratio, select an aspect ratio from the drop-down list. You can define your own ratio using the **Custom** option. You can also delete ratios by selecting them in the drop-down and pressing the **Delete** button.
4. Next to Resolution, use the Dots Per Inch field to specify a resolution.

5. From the Background Contents drop-down, select the color of your image's background.
6. From the Bit Depth drop-down, select whether your image will be 32 or 64-bit.
7. Press **OK**. The new image will open in the .acdc format.

Pasting into Photo Editor

You can copy images from elsewhere on your hard drive (**Ctrl + C**) and paste them into Photo Editor (**Ctrl + V**). If no image was open in Photo Editor, the pasted image will open. If an image was already open in Photo Editor, the copied image will be pasted on top of the existing layer(s).

You can make screen captures (**Print Screen**) and paste them into Photo Editor (**Ctrl + V**). If no image was open in Photo Editor, the pasted screen capture will open as a layer. If an image was already open in Photo Editor, the screen capture will be pasted on top of the existing layer(s).

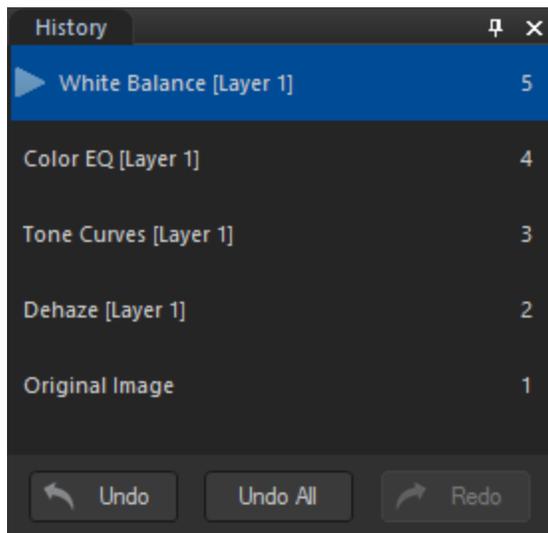
Undo and Redoing

Using the History Pane:

You can use the History pane to view the sequence of changes you have made to your image. You can also use the History pane to jump around in your editing sequence and revert back to a previously-applied adjustment. For example, if you applied a series of adjustments, such as color adjustments, followed by sharpening, and exposure tweaking, but you want to revert back several steps to the state your photo was in with just the color adjustment, you would use the History pane.

To open the History pane, click **Panes | History**.

To return to a specific adjustment, select your desired adjustment in the pane and double-click it. Or select **Undo All** to undo all of your adjustments.



Histogram and Image Viewing Controls

While editing an image, you can adjust the magnification with the zoom controls, located in the bottom right corner.

Histogram



Displays the histogram preview for the current image. The histogram provides a graphical representation of the intensity level of pixels within each color channel. Spikes at either end of the graph indicate clipped colors. Keeping the histogram open is particularly useful when adjusting exposure, as the histogram reflects all adjustments as you make them.

You can also display the Histogram by selecting **Panes | Histogram**.

Reset 	Click on the Reset button to reset the image to its default settings.
Display Full Screen 	Displays the image on a full screen. Press F to view full screen and to return.
Actual Size 	Returns the current image to its actual size.
Fit Image 	Reduces the image to fit within the viewing area.
Show Previous	Toggles the changes on or off, to compare the current image to the last saved version.
Zoom slider 	Increases the size of the image if you drag it to the right, decreases the size if you drag to the left.
Zoom drop-down list 	Displays a list of zoom sizes to select.

Viewing Images

You can view images you have opened during your current session and switch between them.

Choose **Panes | Filmstrip**.

Using Presets

Many Photo Editor tools and special effects allow you to save your settings as presets. This is convenient when you frequently use the same settings for a particular tool or effect.

For most tools, Photo Editor automatically saves the last option settings you applied to an image when you clicked Apply or Done. This preset is called Last Used.



The **Save Preset**  and **Delete** buttons are located at the top of a tool's panel.

To Save a Preset:

1. Select a tool and specify its settings.
2. Click the **Save Preset** button.
3. In the New Preset dialog box, enter a name for your preset, and then click **OK**.
The new preset will appear in the tool's Presets drop-down list.

To Use a Previously Saved Preset:

1. Select the tool for which you created the preset.
2. Click the **Presets** drop-down list and select the preset you want to apply.

To Delete a Preset:

1. Select the tool for which you created the preset.
2. Click the **Presets** drop-down list and select the preset you want to delete.

3. Click the **Delete** button.
4. In the Confirm Delete dialog box, click **Yes**.

Importing and Exporting Presets

You can share your presets with other users by exporting them. You can also import presets made by other users, or from your old computer.

To Export Presets:

1. Create presets as described above.
2. Choose **Tools | Export Filter Presets...**
3. In the Save As dialog, browse to specify the destination for your exported presets.
4. Enter a name in the field, and press **Save**.
5. Click **OK**.

To Import Presets:

1. Choose **Tools | Import Filter Presets...**
2. In the Open dialog, navigate to the location of your presets.
3. Select the preset(s) for import and press **Open**.
4. Click **OK**.

Using the Undo/Redo Button

You can undo and redo your changes when editing an image.

To Undo a Change:

Do one of the following:

- Click the **Undo** button found at the bottom of the Undo History pane.
- Use the keyboard shortcut **Ctrl + Z**.
- Choose **Edit | Undo**.

To Redo a Change:

Do one of the following:

- Click the **Redo** button found at the bottom of the Undo History pane.
- Use the keyboard shortcut **Ctrl + Y**.
- Choose **Edit | Redo**.

Restoring Originals

You can discard your changes and restore an image back to its original settings after saving and even exiting Photo Editor.



If you have committed changes to an image in an ACDSee Photo Studio product, you cannot restore to original in Photo Editor.

Restoring the Original Image

You can discard all your changes and revert to the original image.

To Revert an Image Back to the Original:

Choose **File** | **Restore to Original**.

Saving Images

Saving Images

When you have finished editing an image, you can choose from one of the options for saving your image, depending on what you want to do next.

To Save the Image or Discard the Changes:

1. Choose **File** | **Save** or **Save As...**

Saving Options

Save	Saves your changes.
Save as	<p>Saves a copy of your edited image with a new name or format.</p> <p>Depending on your file type, any of the following checkboxes appear in the bottom left corner of the Save as dialog box:</p> <ul style="list-style-type: none"> • Preserve Metadata: Retains metadata with the new image. • Embed Color Profile in Image: Retains color profile selected in Color Management with your new image.
Cancel	Remain on the same image in with your changes intact, without saving the image.
AutoSave	<p>You can enable AutoSave in order to avoid selecting a saving option each time you finish with an image. When AutoSave is enabled, pressing Done, or selecting another image from the Filmstrip will prompt ACDSee to automatically save your changes. You will no longer see the Save Changes dialog. To disable AutoSave, choose Tools Options... In the Options dialog, click Settings. Then clear the AutoSave all changes checkbox.</p> <p> AutoSave is not available for RAW images.</p>



Save is not available for RAW file formats because you cannot directly save changes to a RAW file.

To Discard Changes to the Image:

Do one of the following:

- Click the **Undo All** button in the Undo History pane.
- Choose **File** | **Restore to Original**.
- Choose **File** | **Close**, then press the **Discard** button in the Save Changes dialog box.
- Press **Esc**.

Applying Photoshop® Plug-ins

Photo Editor supports 64-bit Adobe® Photoshop® plug-ins. 32-bit Photoshop® plug-ins will not work in Photo Editor.



Not all plug-ins will work exactly as they do in Photoshop®.

To Apply a Photoshop® Plug-in:

With an image open, choose **Tools | Photoshop Plug-ins | [your plug-in]**.



You can undo the effects of your plug-in by pressing the Undo button at the bottom of the History pane.



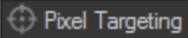
You cannot open the same plug-in in two Photo Editor windows at the same time.

Photoshop is a registered trademark of Adobe Inc.

Targeting Adjustments by Color or Tone

While tools allow you to make a variety of global adjustments to your images, and the Edit brush makes it possible to adjust specific sections of your image, Pixel Targeting allows you to target distinct tones, colors, and skin tones. You can select a number of adjustments and apply them to a photo's individual colors or tones, or just to skin tone, by using Pixel Targeting. For example, when you open an image in the Exposure tool, the exposure is adjusted over the entire image. However, if you want to only adjust the exposure of the blue sky in the image, you could use Pixel Targeting to target the color blue, and thereby only increase the exposure on the sky.

To Perform Targeted Adjustments with Pixel Targeting:

1. Open one of the following tools: Skin Tune, Chromatic Aberration, Vignette, any Special Effect, Tilt-Shift, Grain, Exposure, Levels, Auto Levels, Tone Curves, Light EQ™, Dehaze, White Balance, Color EQ, Color Balance, Convert to Black & White, Split Tone, Color LUTs, Sharpen, Blur, Noise, or Clarity.
2. At the top of the Context Bar, click the **Pixel Targeting** button. 
3. Configure the settings on the Pixel Targeting panel, as described below.
4. Adjust the settings on your selected tool. The adjustments will now affect your targeted color or tones.

The Pixel Targeting Panel

The Pixel Targeting panel consists of four sections: Targeted Tones, Targeted Colors, Skin Targeting, and the Target Mask.

Target Mask:

The Target Mask allows you to see the areas in the image that are targeted by displaying them in white. When no pixels are targeted, the Target Mask will appear completely black. Conversely, when all pixels are targeted, as is the case before any sliders have been altered on the Pixel Targeting panel, the entire Target Mask will appear completely white.

Targeted Tones:

The Targeted Tones sliders allows you to target tones of brightness for adjustment. To target one or more tones, you may find it easiest to press the Min button under the Targeted Tones section. This deselects all tones, and you can then select specific tones to target by moving their sliders up between 0 and 100, depending on your desired intensity.

Targeted Colors:

The Targeted Colors sliders allows you to target specific colors for adjustment. To target one or more colors, you may find it easiest to press the Min button under the Targeted Colors section. This deselects all colors, and you can then select specific colors to target by moving their sliders up between 0 and 100, depending on your desired intensity.

Skin Targeting:

The Target Skin slider allows you to specifically target skin tones for adjustment. To target skin tones, move the slider to the right between 0 and 100, depending on your desired intensity.

When you move the Skin Targeting slider, all other colors (except for skin tones), are excluded. You cannot then alter the green color slider, for instance. If you would like to target skin and another color, you will need to perform skin targeting, configure the tool as desired, and apply the tool by pressing **Apply**. Then use the Pixel Targeting panel to target the additional color(s).

To exclude skin tones from your adjustments, move the slider to the left between 0 and -100. You can use this method to ensure that, while applying adjustments with a variety of tools, the skin tones will remain untouched.

 You can right-click a slider to reset to the default value.

Pixel Targeting becomes even more powerful when paired with [Selections](#) or the [Edit Brush](#). These tools in combination with Pixel Targeting make it possible to target very precise areas, such as only the blue of a person's eyes, rather than all of the blue in the image.

 Click **Reset** to clear your changes and reset to default settings. 

 You can save your settings as a [preset](#) for future use. Using the Save Preset button on the Pixel Targeting panel will only save your pixel targeting settings, and not the settings on the tool you are using. Those must be saved separately.

Using the Edit Brush

While the tools allow you to make a variety of global adjustments, sometimes you may only want to adjust specific areas of your photos. For example, instead of blurring an entire photo, you may want to blur certain areas, such as the background. To do this, and other local adjustments, you can use the Edit Brush.

The Edit Brush allows you to selectively edit your photo by simply brushing on the effects. The Edit Brush is essentially creating a mask that is used to determine which pixels will be affected by the current settings of the chosen operation.



The Edit Brush button displays at the center of the top editing panel toolbar for all applicable tools.

To Use the Edit Brush:

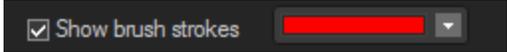
1. Select the tool you want to use.
2. Click the **Edit Brush** button to enter Brushing mode and open the Brush controls.
3. Specify the brush settings in the panel or on the fly as described in the table below.
4. Start painting the effects on your photo.
5. Adjust the sliders to get the effect you want.
6. Press **Done** to apply your brush strokes.



Or, toggle

Edit Brush Controls

Add brush stroke	Brush while holding the left mouse button down.
Erase brush stroke	Brush while holding the right mouse button down.

Nib Width	Adjusts the size of the brush. You can use the mouse wheel to adjust nib width or adjust the Nib Width slider.
Feathering	Adjust the slider to control the softness of the transition between the brush strokes and the image. Use Shift + mouse wheel to adjust the amount of feathering or adjust the Feathering slider.
Pressure	Adjust the slider to control the strength of the brush.
Alternating between Brush mode and cursor-applied tools	For filters that involve drawing or clicking on the image, such as Light EQ™ and White Balance, hold down the Alt key to switch from Brush mode to using the tool.
Clear all brush strokes	 Removes all brush strokes from the image.
Invert all brush strokes	 Toggle this option to invert brushed strokes. This makes brushed areas no longer brushed and untouched areas brushed. This is useful if you want the majority of the image brushed and a small section untouched. Simply brush only the small area you don't want affected and invert the brush strokes.
Load last applied brush strokes	 Applies effects to the area most recently brushed and applied.
Smart Brushing	See Smart Brushing section below.
Show brush strokes	 When this option is checked, your brush strokes will be displayed in the color shown. This is helpful when brushing a complex area with a subtle effect, as it can be difficult to tell if you have missed a spot. Alternatively, hold down the S key to see your brush strokes on the image.

 When you click the Edit brush and enter Brushing mode, you need to apply brush strokes in order to see any of your adjustments.

 To exit Brushing mode, toggle the Edit brush button. 

 You can undo and redo each brush stroke individually using the Undo and Redo buttons at the bottom of the Filter Menu.

 You can also use the Edit Brush with [Blend Modes](#) and [Selections](#) to alter the way the effect is applied.

The Edit Brush is enabled in many of the editing tools and special effects filters. When it does not make sense to have this option, it is omitted. The Edit Brush is not available in the following tools: Crop, Resize, Lens Distortion Correction, Perspective Correction, Rotate, Flip, Watermark, Text, Red Eye Reduction, Repair Tool, and Selections.

Smart Brushing

You can use the Smart Brush to target your brushing to specific colors, brightness values, or a combination of color and brightness. The Smart Brush only affects pixels similar in value to the pixel in the center of the brush stroke, and allows you to apply adjustments to those pixels.

To Use the Smart Brush:

1. Select the tool you want to use.

2. Click the **Edit Brush** to enter Brushing mode and open the Brush controls. Or, toggle the Brush panel open and closed with the **B** key.



Or, toggle the

3. Select an option from the Smart Brushing drop-down menu:

Color

Uses the color of pixels similar in value to the pixel in the center of the brush stroke to determine if they should be brushed on, depending on the Tolerance slider setting.

Brightness

Uses the brightness of pixels similar in value to the pixel in the center of the brush stroke to determine if they should be brushed on, depending on the Tolerance slider setting.

Magic

Uses a combination of the color and brightness values similar to the pixel in the center of the brush stroke to determine which pixels should be brushed on, depending on the Tolerance slider setting.

4. Use the Tolerance slider to increase or decrease the range of pixels affected by the Smart Brush.
5. Place your cursor over the color or brightness you wish to select and begin painting on the effect.
6. Adjust the sliders to get the effect you want.
7. Press **Done** to apply your brush strokes.



Hold down **Shift** to temporarily disable the Smart Brush.



You can erase brush strokes by right-clicking and brushing over your strokes.

To Turn off Smart Brushing:

Select **Off** from the Smart Brushing drop-down menu.

Using the Gradient Tool

While the tools allow you to make solid, global adjustments, sometimes you want these effects to gradually progress over your photo. For example, instead of applying a blur across an entire photo, you may want a blur that advances across the image, or advances over a section of the image. Use the Gradient tool to gradually progress an effect across an image.

Gradient Tool

The Gradient tool button displays at the center of the top Editing panel toolbar for all applicable tools.

To Use the Gradient Tool:

1. Select the tool you want to use.
2. Click the **Gradient** tool button  to enter Gradient mode. Or, toggle the Gradient panel open and closed with the **G** key.
3. Specify the gradient settings in the panel or on the fly, as described in the table below.
4. Position the guides on your photo. Inside the guide boxes, the gradient is transitioning. On either side of the boxes, the effect being applied by the Gradient tool is at full strength or not applied at all. To make this clearer, check the **Show gradient mask** checkbox. Move the boxes to define where the effect will begin or end. Hold down the **Shift** key while positioning the effect to lock to the nearest 45° angle, for straightness.

- Adjust the sliders to get the effect you want.
- Press **Apply** or **Done**.

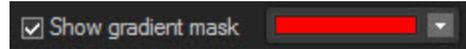
Gradient Tool Options

Invert gradient



Toggle this option to invert the gradient. By pressing the Invert button after applying a gradient beginning at the top of the image, the gradient would now begin at the bottom, and vice versa.

Show gradient mask



When this option is checked, your gradient mask will be displayed in the color shown. Alternatively, hold down the **S** key to see the mask on the image. Click the drop-down arrow to select another display color.

Alternating between the Gradient tool and cursor-applied tools

For filters that involve drawing or clicking on the image, such as Light EQ™ and White Balance, hold down the **Alt** key to switch from Gradient mode to using the tool.



To exit Gradient mode, toggle the Gradient tool button.



To maintain your gradient mask while switching to [Edit Brush mode](#), hold down **Shift** and click the Edit Brush button. This allows you to add to the gradient mask or erase parts of it that you don't want.



The Gradient tool is enabled in many of the editing tools and special effects filters. When it does not make sense to have this option, it is omitted. The Gradient tool is not available in the following tools: Detail Brush, Dodge and Burn, Resize, Lens Distortion Correction, Perspective Correction, Crop, Rotate, Drawing Tools, Vignette, Borders, Watermark, Text, Repair Tool, Red Eye Reduction, and Selections.

Using the Radial Gradient Tool

While the tools allow you to make a variety of adjustments, sometimes you want these effects to draw attention to a specific area of your photo. For example, instead of applying sharpening across an entire photo, you may want to only sharpen the center subject. Use the Radial Gradient tool to apply effects around, or directly to, a center point.

Radial Gradient Tool

The Radial Gradient tool button displays at the top of the Editing panel toolbar for all applicable tools.

To Use the Gradient Tool:

- Select the tool you want to use.
- Click the **Radial Gradient** tool button  to enter Radial Gradient mode. Or, toggle the Radial Gradient panel open and closed with the **R** key.
- Specify the Radial Gradient settings in the panel or on the fly, as described in the table below.
- Position the guides on your photo. Inside the circle, the image is unaltered. At the perimeter of the circle, the effect being applied by the Radial Gradient is transitioning between not applied at all (inside), and full strength (outside). To make this clearer, check the **Show gradient mask** checkbox. Hold down the **Shift** key while positioning the effect to change the radial gradient to a perfect circle.

5. Adjust the sliders to get the effect you want.
6. Press **Done**.

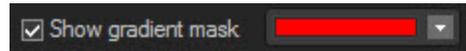
Gradient Tool Options

Invert gradient



Toggle this option to invert the radial gradient. By pressing the Invert button, the effects will be applied to the center of the image (inside the circular guides), and outside of the radial gradient will be unaltered.

Show gradient mask



When this option is checked, your radial gradient mask will be displayed in the color shown. Alternatively, hold down the **S** key to see the mask on the image. Click the drop-down arrow to select another display color.

Alternating between the Radial Gradient Tool and cursor-applied tools

For filters that involve drawing or clicking on the image, such as Light EQ™ and White Balance, hold down the **Alt** key to switch from Radial Gradient mode to using the tool.



To exit Radial Gradient mode, toggle the Gradient tool button.



To maintain your radial gradient mask while switching to Edit Brush mode, hold down **Shift** and click the Edit Brush button. This allows you to add to the gradient mask or erase parts of it that you don't want.



The Radial Gradient tool is enabled in many of the editing tools and special effects filters. When it does not make sense to have this option, it is omitted. The Radial Gradient tool is not available in the following tools: Detail Brush, Dodge and Burn, Resize, Lens Distortion Correction, Perspective Correction, Crop, Rotate, Drawing Tools, Vignette, Borders, Watermark, Text, Repair Tool, Red Eye Reduction, and Selections.

Using Blend Modes and Opacity

When using a tool, at the top there are blend mode and opacity tools. These tools give you creative control and let you combine the two to create a new image. You can apply blend modes and opacity to an entire image or to a selected part of an image.

Opacity

The Opacity slider changes the opacity of the edited image. It gives you control of how much of the edit should be visible on the image.

Blend Modes

The ability to control how the edits and the image merge means that other blend modes besides opacity can be used to affect the final image.

Normal	Pixels in the edited image are combined with those in the original. Only opacity affects this blend.
Screen	Combines the edited image color with the inverse of the original photo color, resulting in a color that is the same or lighter.
Multiply	Combines the edited image color with the original photo to produce a darker color.

	Multiplying any color with black produces black; multiplying any color with white leaves the color unchanged.
Dodge	Combines the edited image color with the original pixels in the photo to produce a lighter color.
Burn	Combines the edited image color with the original pixels in the photo to produce a darker color.
Overlay	Preserves the shadows and highlights of the lower layers while applying either Multiply or Screen blend mode based on the original image area's color values.
Difference	Subtracts the edited image color from the color of the original photo. Any white in the edited image produces a true negative of the color in the image, while black produces no effect.
Darken	Applies pixels in the edited image that are darker than the original image. Pixels in the edited image that are lighter than the original image disappear (based on RGB values).
Lighten	Applies pixels in the edited image that are lighter than the original image. Pixels in the edited image that are darker than the original image disappear (based on RGB values).
Hard Light	Adds strong highlights or shadows by applying Multiply or Screen based on the original image area's color values.
Soft Light	Adds soft highlights or shadows by darkening or lightening based on the original image area's color values.
Hue	Applies the hue value of colors in the edited image to the color of the original image areas.
Saturation	Applies the saturation value of colors in the edited image to the color of the original image areas.
Color	Applies the hue and saturation of the edited image to the image. This blend does not affect the luminance of the original image.
Luminosity	Applies the lightness value of colors in the edited image to the color of the original image areas.
Dissolve	Applies some pixels from the edited image layer onto the original image, resulting in specks of color. The Opacity slider controls the amount of speckling.
Exclusion	Like Difference, but with less contrast, Exclusion subtracts the blend color from the color of the underlying photo. Any white in the blend color produces a true negative of the color in the image, while black produces no effect.
Vivid Light	Combines the blend color with the underlying pixels in the photo by increasing or decreasing contrast to produce a lighter or darker color, as determined by the blend color.
Pin Light	When the light source is lighter than 50% gray, the pixels darker than the light source are replaced. Pixels lighter than the light source remain the same. When the light source is darker than 50% gray, the pixels lighter than the light source are replaced. Pixels darker than the light source remain the same.
Linear Light	Dodges or burns by lightening or darkening the brightness value, depending on the blend color.
Hard Mix	Applies red, green, and blue channel values of the blend color to the RGB values of the image.
Subtract	Subtracts the blend color from the image (base) color in each channel.
Divide	Divides the blend color from the image (base) color.
Darker Color	From the blend color and the image (base) color, the lower channel values are chosen.
Lighter Color	From the blend color and the image (base) color, the higher channel values are chosen.



You can use the [Edit Brush](#)



to paint an effect onto specific areas of your image, and then set the blend mode and opacity slider to change the way the effect is applied.

The blend mode and opacity controls apply to many of the editing tools and special effects filters. When it does not make sense to have these controls, they are omitted. The blend mode and opacity controls are not on the following tools: Crop, Resize, Lens Distortion Correction, Perspective Correction, Rotate, Flip, Watermark, Text, Red Eye Reduction, Repair Tool, Selections.

Adding Rulers and Guidelines

You can use rulers and guidelines to accurately place layers, text, and objects.

To Turn on Rulers:

Choose **View | Rulers** or press **Ctrl + T**.

To Customize Ruler Units of Measure:

Right-click a ruler and choose a new unit of measure from the context menu.

To Draw Guidelines:

With Rulers enabled, click a ruler and drag the guideline to your desired location on the image.



You can move guidelines you have already placed by enabling the Move tool.



To Enable Snapping to Guidelines:

You can snap layers, objects, and text layers to guidelines for precise positioning. When snapping is enabled, you can move the edge of a layer near a guideline and it will snap to the guideline.

Choose **View | Snap to Guidelines** or press **Ctrl + Shift + G**. You can use this keyboard shortcut to enable or disable snapping.

To Remove Guidelines:

Choose **View | Clear all Guidelines** or press **Ctrl + Shift + ;**.

To Lock Guidelines in Place:

Choose **View | Lock Guidelines** or press **Ctrl + Alt + ;**.

To Hide Guidelines:

Choose **View | Hide Guidelines** or press **Ctrl + ;**. You can use this keyboard shortcut to hide or show guidelines.

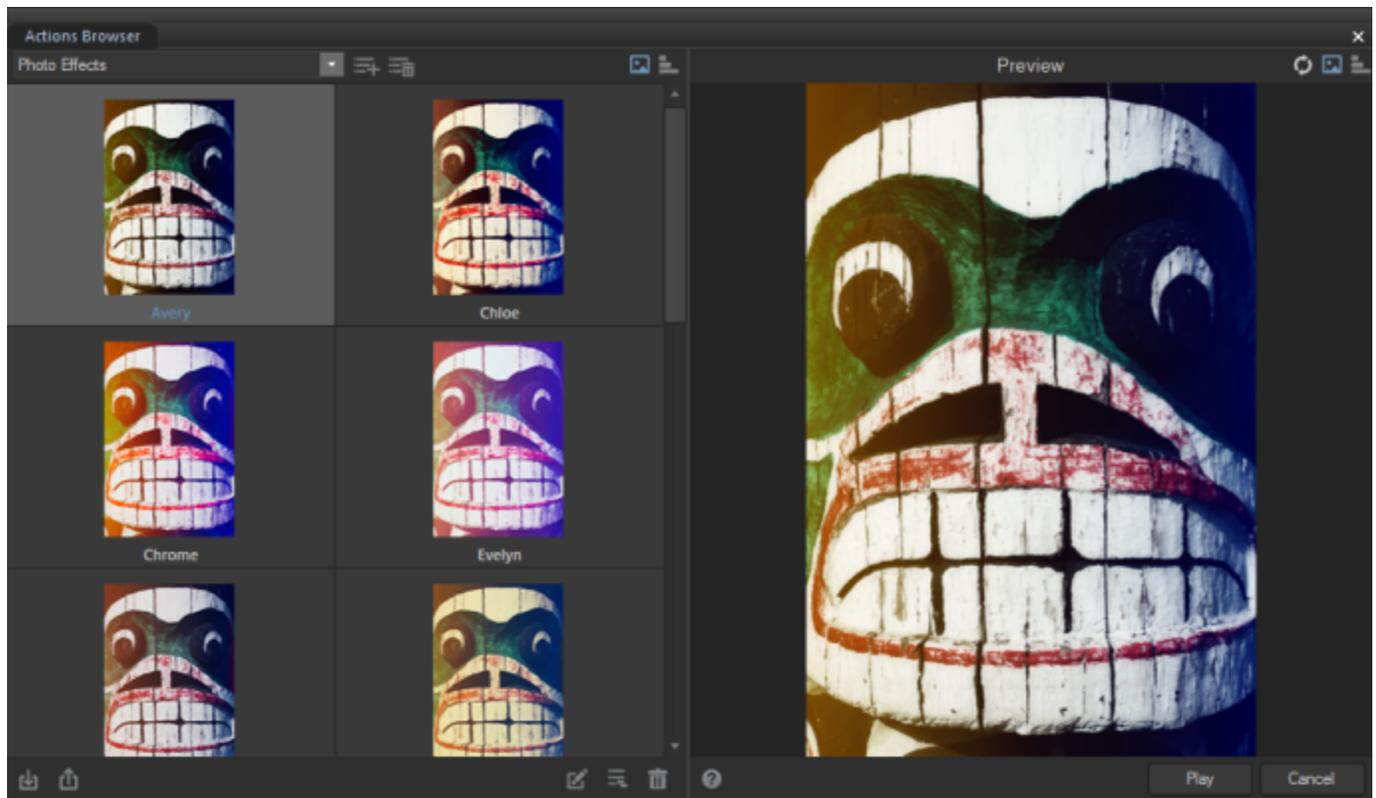


You can customize the Rulers and Guidelines options. See [Setting the Rulers and Guidelines Options](#).

Recording and Applying Adjustments with ACDSee Actions

ACDSee Actions allow you to record all of your adjustments and then apply them to other images by "playing" them back. In addition, after applying a recording with adjustment layers, you can open the image in Photo Editor and continue tweaking and adjusting the adjustment layers in the Layered Editor.

You can also apply pre-loaded default actions for quick adjustments. Actions can be organized into existing [categories](#), or you can create your own.



For quick access, you can use the **Record**, **Stop**, and **Play** buttons on the Toolbar.    Or you can use the **Toggle Actions Browser** button to open the ACDSee Actions window.  You can also tear off this ACDSee Actions bar and move it anywhere on your screen(s).

To Record Your Adjustments:

1. On the Toolbar, press the **Record** button.  The Recording Action pane will appear and list your adjustment steps as you make them.
2. Make any adjustments you desire.
3. Press the **Stop** button in the Toolbar to stop the recording at any time.  If you pressed the Stop button by accident, press **Cancel** to continue recording.
4. In the Save Action dialog box, enter a name for your recording.
5. Select a category for your action from the drop-down menu, or enter a name to create a new category.
6. Press **Save**. Your recording will now be available in the Actions Browser under the category you chose (or created).

To Preview a Recording:

1. Do one of the following:
 - Click **Panes | Actions Browser**.
 - Click **Tools | Browse Actions...**
 - Press the **Toggle Actions Browser** button in the Toolbar. 
2. In the Actions Browser, choose a category from the drop-down menu.
3. Select the thumbnail of the recording you wish to preview from the left column of the Actions Browser.
4. Do one of the following:
 - View a preview of how your current image would appear with your recording applied in the Preview column.
 - Toggle the **Preview** button in the top right corner to view the adjustment steps of the selected action.



Preview Image



Preview Steps

To Delete a Recording:

-  Note that you cannot undo deleting a recording. Your deleted recording will not appear in your system's Recycle bin.

1. Select the recording in the left column of the Actions Browser.
2. Do one of the following:
 - Right-click and choose **Delete**.
 - Press the **Delete** button. 

To Rename a Recording:

1. Select the recording in the left column of the Actions Browser.
2. Do one of the following:
 - Right-click and choose **Rename**.
 - Press the **Rename** button. 
3. Enter a new name in the Name field.
4. Press **OK**.

Applying Recordings

You can apply your recordings to other images. You can also apply any of the pre-loaded default actions, which are organized into categories in the Actions Browser.

When applied to images that are a different size than the one used in the recording, actions that involve drawings, geometry, or the layering of images will be scaled to the target image proportionally using a percentage of the width and height independently. However, crop size is absolute, (based on the number of pixels). Crop position is relative, also based on the number of pixels.

For best results with tools from the Geometry group, apply your recordings to similarly sized images.

To Apply a Recording:



Recordings are applied in the same order they were recorded in.

1. Do one of the following:

- Choose **Panes | Actions Browser**. In the Actions Browser, select your desired category from the drop-down menu. Select the recording from the left column. Press the **Play** button.
- Choose **Tools | ACDSee Actions | <your desired category> | <your desired action>**.
- Choose **Tools | Browse Actions**. In the Actions Browser, select your desired category from the drop-down menu. Select the recording from the left column. Press the **Play** button.
- Press the **Toggle Actions Browser** button.  In the Actions Browser, select your desired category from the drop-down menu. Select the recording from the left column. Press the **Play** button.



You can apply a recording to a singular image layer by selecting the layer in the Layered Editor and pressing the **Play** button in the Actions Browser.



If you begin recording after adjustment layers are added, the recording can only be applied to a target image that has the same adjustment layers already added to it.



If you record adding a layer to a single layered image, and then try to apply this recording to a multi-layered target image, the layer will be added on top of all of the other layers.



If you record adjusting specific adjustment layers of a multi-layered image, the recording can only be applied to a target image with the same adjustment layer. For example, if your recording contains a sharpening adjustment layer as its third layer and you adjust it, your target image must also have a sharpening adjustment layer as its third layer.



If you record making global adjustments to a single layered image, then add layers, and then apply the recording to a multi-layered target image, the target image will be flattened. The global adjustments will be applied to the whole image, and then the layers will be added on top of that.

Managing Action Categories

Actions can be organized into existing categories, or you can create your own. You can delete categories, as desired.



Actions saved under the category "HDR Presets" will become available as presets in the HDR dialog.

Managing Recording Categories

You can add and delete recording categories.

To Add a Category:

1. In the Actions Browser, click the **Add a New Category** button. 
2. In the Add a new Category dialog, enter a name for your new category.
3. Press **OK**.

To Delete a Category:

In the Actions Browser, click the **Delete Category** button. All actions from this category will be moved to Uncategorized. 

To Move a Recording to a New Category:

1. Select the recording in the left column of the Actions Browser.
2. Do one of the following:
 - Click the **Move to Category** button. 
 - Right-click and choose **Move to Category** from the context menu.
3. In the Move to Category dialog, select a category from the drop-down menu.
4. Press **OK**.

Sharing Actions

You can import and export actions. Exporting actions will allow you to share them as convenient, compressed packages. You can select which actions to export, or export them all at once. Alternatively, you can simply share individual actions by navigating to their location and using your desired sharing method, such as email.



You cannot import and export the pre-loaded actions that come with ACDSee.

To Export Recordings:

1. Open the **Actions Browser**. See "Applying Recordings" on page 25.
2. Click the **Export Actions** button. 
3. In the Export ACDSee Actions dialog, click the plus **+** signs to expand the tree, and toggle the checkboxes on and off to select which actions to export. Or enable the **Select All** checkbox to export all actions.
4. Choose a destination for your exported actions.
5. Enter a name for your exported actions in the Export package name field.
6. Enable the **Include categories with export** checkbox to maintain your category structure in the exported package.
7. Press **OK**.

To Import Recordings:

1. Open the **Actions Browser**. See "Applying Recordings" on page 25.
2. Click the **Import Actions** button. 
3. Navigate to the location of your actions.
4. Enable the **Include categories with import** radio button to maintain any included category structure upon import.
5. Enable the **Import actions only** radio button to ignore any included category structure upon import. Select a category for your imported actions. Alternatively, you can enter a name in the field to create a new category in which to place your imported actions.
6. Press **OK**.

To Share a Recording:

1. Navigate to C:\Users\\AppData\Local\ACD Systems\Actions\
2. Select and copy your desired recording.
3. Share the .acda file using the method of your choice. For example, you can attach it to an email.

Chapter 4: Editing - Using Layers

Using Layers

You can use the Layers pane to add effects and shapes to your photos in layers, perform photo manipulations, create composite images, and much more. Layers allow you to work on a single element of an image without disturbing others. Layers can be as transparent or opaque as you desire. This allows you to stack layers to achieve the level of visibility you want for the elements you add on each layer. You can also hide layers.

You can use layers in conjunction with image effects and adjustment tools, drawing tools, text, and more. Effects and adjustments will be applied to the layer selected in the Layers pane. You can also create a blank image and layer other elements on top of it.

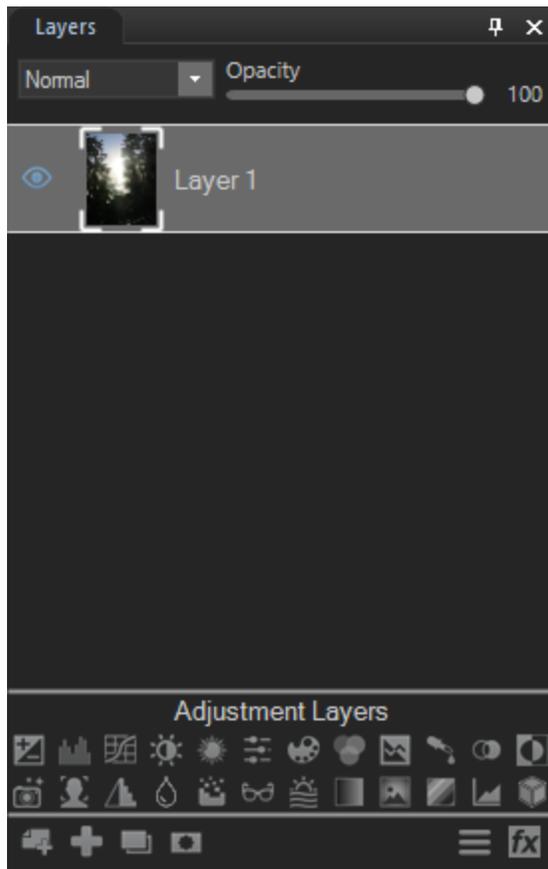
 Geometry adjustments are applied to all layers.

 You have the option of adding watermarks to a new layer.

To Open the Layers Pane:

With an image open, go to **Panes | Layers**.

In the Layers pane, you will see Layer 1 with your image on it. At this point, you have the option of editing the photo, or adding additional layers containing other photos or drawing elements, such as shapes. You can also create a [mask](#) to hide or reveal portions of the layers below.



To Add a Layer:

Do one of the following:

- Press the **Add blank layer** button at the bottom of the Layers pane.
- Go to **Layer | Add Blank Layer**.



To edit a layer, select the layer in the Layers pane.

To Add Another Image to the Layers Pane:

Do one of the following:

- Press the **Add a File as a Layer** button at the bottom of the Layers pane.
- Go to **Layer | Add a File as a Layer**.
- Select an image thumbnail from the Filmstrip and drag it into the Layers pane.
- Right-click an image thumbnail from the Filmstrip and choose **Add Image as a New Layer** from the context menu.



To Set Layer Visibility:

To show or hide all layers, do one of the following:

- Choose **Layer | Show All Layers** or press **Shift + J**.
- Choose **Layer | Hide All Layers** or press **Shift + Y**.

To show or hide individual layers, select the layer and press the **Show/Hide Layer** button.

Show Layer



Hide Layer



To Delete a Layer:

Select the layer and press the **Delete Layer** button.



To Duplicate a Layer:

Select the layer you would like to duplicate and press the **Duplicate** button.



To Move a Layer:

In the Layers pane, select the layer and drag it up or down.

To Name a Layer:

1. To rename a layer from "Layer 1", etc, select the layer and right-click.
2. Choose **Rename Layer** from the context menu.
3. In the Rename Layer dialog, enter a name for your layer and press **OK**.

To Merge a Layer:

You can merge a layer with the layer below.

1. Select the top layer, or a layer above another.

2. Press the **Merge Layer Down** button. 

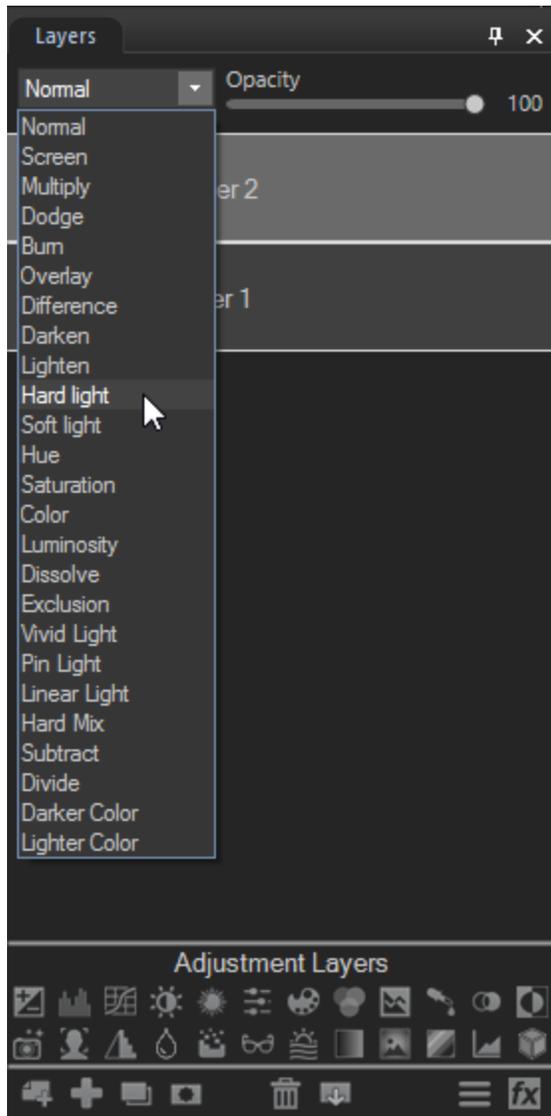
To Flatten an Image:

To merge all layers into a single image, do the following:

Choose **Layer | Flatten Image**.

To Change a Layer's Blend Mode and Opacity:

Blend modes describe how the layers blend together. Blending sticks with the layer it was applied to, regardless of the layer order being changed. Opacity describes how transparent the layer is.



1. Select the layer.
2. Select a **Blend Mode** from the drop-down menu at the top of the Layers pane.
3. Move the **Opacity** slider at the top of the Layers pane.

Saving Layered Images:

When you save a layered image, the Save Image As dialog opens with the file format set to .acdc by default. By saving in the .acdc file format, your layers will remain accessible should you re-open the image in Photo Editor in the future.



The .acdc file format will not be displayed in the Save Image As dialog by default if you have flattened or merged all layers.

This file format saves in 8 bits per channel by default for all bit depth images. You can choose to save in 16 bits per channel for images that already have 16 bits per channel data, such as RAW files, 64-bit TIFF files, etc. This will allow for a higher quality image, but will also create a larger file size. To save in 16 bit, choose the **16 bit per channel data** checkbox in the Save Image As dialog box. If you try to use this option to save images that have lower than 16 bits per channel data, it will still save as 8 bits per channel.

To Create a New Image:

You can create a new, blank image.

1. Go to **File | New Image...** or press **Ctrl + N**.
2. In the New Image dialog, enter a name for your image and the dimensions. You can customize the unit of measurement with the drop-down menu.



Neither your width or height setting can exceed 16,000 pixels.

3. Next to Aspect Ratio, select an aspect ratio from the drop-down list. You can define your own ratio using the **Custom** option. You can also delete ratios by selecting them in the drop-down and pressing the **Delete** button.
4. Next to Resolution, use the Dots Per Inch field to specify a resolution.
5. From the Background Contents drop-down, select the color of your image's background.
6. From the Bit Depth drop-down, select whether your image will be 32 or 64-bit.
7. Press **OK**. The new image will open in the .acdc format.

To add a layer mask, see [Using Masks with Layers](#).

Using Adjustment Layers

You can use the Adjustment Layers section of the Layers pane to non-destructively adjust and add effects to your images. Adjustment layers stack in the Layers pane, allowing you to return to individual layers at any time and continue making adjustments to each effect. Each adjustment layer includes a mask by default.

By saving an image with adjustment layers as a .acdc file, you can re-open it and still adjust each effect individually at any time.



For best results, make all global adjustments prior to adding adjustment layers.

To Add an Adjustment Layer:

With an image open, do one of the following:

- Select an adjustment layer icon from the bottom of the Layers pane.
- Select an adjustment layer from the Add adjustment layer menu at the bottom of the Layers pane. 

The adjustment layer will be added above your image in the Layers pane. The settings for your adjustment layer will appear at the bottom of the panel. Configure the settings as described below.

To Apply an Adjustment Layer to a Particular Image:

If you have multiple images in the Layers pane, you can restrict adjustment layers to a specific image.

To apply an adjustment layer only to the closest image layer below it, enable the **Clipping** button.



Clipping off



Clipping on

You can apply multiple adjustment layers to one particular image layer by enabling all of their Clipping buttons.

Adjustment Layers and Settings

Exposure Adjustment Layer Options

Exposure Drag the slider to the right to increase exposure, or drag to the left to decrease exposure.

Contrast Drag the slider to the right to increase contrast, or drag to the left to decrease contrast.

Levels Adjustment Layer Options

- Use the buttons on the right of the Levels panel to select Luminance, Red, Green, or Blue as the channel to adjust.
- Use the arrows at the bottom of the panel to adjust the shadows, midtones, and highlights. Move the shadows arrow to define the blackest area of the image. Move the midtones arrow to define the midtone. Move the highlights arrow to define the whitest area of the image.

Curves Adjustment Layer Options

Use the buttons on the right of the Curves panel to select the RGB, Red, Green, or Blue color channel to adjust.

See [Adjusting Tone Curves](#).

Light EQ™ Adjustment Layer Options

Brighten Drag the slider to increase the brightness of dark areas in your image.

Darken Drag the slider to decrease the brightness of light areas in your image.

White Balance Adjustment Layer Options

Temperature Adjusts the warmth of the correction, from blue to yellow.

Tint Adjusts the tint of the correction, from magenta to green.

Vibrance Adjustment Layer Options

Vibrance Drag the slider to the right to increase vibrance, or to the left to decrease vibrance. Increasing vibrance does not affect skin tone in an image. This is unlike saturation, which intensifies all colors equally.

Saturation Drag the slider to the right to increase saturation, or to the left to decrease saturation.

Hue Adjusts the hue of the image. Drag the slider to the right to increase or drag to the left to decrease hue.

Lightness Adjusts the image brightness. Drag the slider to the right to increase or drag to the left to decrease the image's brightness.

Color EQ Adjustment Layer Options

Choose the Saturation, Hue, or Brightness tab and adjust colors individually by dragging the sliders.

Vibrance	Drag the slider to adjust the vibrance of the image without affecting skin tones.
Saturation	Adjusts from saturation to grayscale.
Hue	Changes the color's hue.
Brightness	Adjusts the light or dark tones in the image.

RGB Adjustment Layer Options

Adjust the Red, Green, or Blue sliders to balance or heighten the RGB channels in the image.

Split Tone Adjustment Layer Options

Highlights Hue	Drag the slider to the right to select a highlight color.
Highlights Saturation	Drag the slider to the right to increase saturation of the specified color in the highlights of the image.
Shadows Hue	Drag the slider to the right to select a shadow color.
Shadows Saturation	Drag the slider to the right to increase saturation of the specified color in the shadows of the image.
Balance	Drag the slider to the right to emphasize the highlight color; drag the slider to the left to emphasize the shadow color. For example if the slider is set to the maximum at 50, then full emphasis is applied to the highlight color; if the slider is set to the minimum -50, then full emphasis is applied to the shadow color.

Add Color Adjustment Layer Options

- Select a color to add to your image.
- Use the Density slider to specify the strength of the added color.

Black & White Adjustment Layer Options

Adjust the Red, Green, or Blue sliders to add color back into the black and white image.

Brightness	Adjusts the brightness of the colors in the image.
-------------------	--

Negative Adjustment Layer

The Negative adjustment layer creates a negative out of your image. There are no settings for this adjustment layer.

Photo Effect Adjustment Layer Options

Select a photo effect from the drop-down menu to change the look and feel of your image.



You can use your mouse wheel to quickly scroll through the photo effects.

Skin Tune Adjustment Layer Options

Smoothing	Refines skin by suppressing texture detail.
Glow	Increases the brightness of skin while subtly smoothing.
Radius	Specifies the scale of the texture detail that is affected by the effect. A lower value enhances small details, while a large value enhances larger details.

Sharpen Adjustment Layer Options

Strength	Specifies the strength of the sharpening applied by increasing contrast around edges.
Radius	Controls the number of pixels to adjust around each edge. Higher values increase the number of sharpened pixels and tend to bring out coarser detail, while lower values reduce the number of sharpened pixels and tend to bring out finer detail.
Detail	Suppresses the halo, (the light border that forms around edges with extreme sharpening), by reducing its intensity. The higher the value, the stronger the reduction.
Threshold	Specifies how different the pixel lightness values within an edge must be before the pixels within the edge are sharpened. Higher values sharpen only stronger edges but minimize the appearance of noise. Lower values sharpen both strong and weaker edges, but can increase the appearance of noise. We recommend you set the threshold to enhance edges while keeping background noise to a minimum.

Blur Adjustment Layer Options

Select the Gaussian or Directional button to select the type of blur.  

Gaussian	Produces an even, smooth blur.	
	Strength	Specifies the strength of the blur. Move the slider to the right to intensify the effect.
Directional	Produces a blurring effect that gives the illusion of movement.	
	Strength	Specifies the strength of the blur. Move the slider to the right to intensify the effect.
	Angle	Specifies the direction of the blur effect.

Noise Reduction Adjustment Layer Options

Luminance	Removes the random variations of brightness in the noise.
Color	Reduces the random variations of color in the noise.

Clarity Adjustment Layer Options

Clarity	Drag the slider to the right to enhance texture in the image. Drag the slider to the left to smooth out texture in the image.
Orton	Drag the slider to enhance local contrast while subtly smoothing texture.
Soft Light	Drag the slider to increase brightness while subtly smoothing texture.
Tonal Width	Drag the slider to control the amount shadow and highlights are affected by the Clarity, Orton, and Soft Light sliders. Choose a value of 0 to restrict the adjustments to midtones. Choose a value of 100 to apply the adjustments equally in all tones.
Radius	Drag the slider to control the scale of the texture detail being affected. Choose a value of 0 to enhance small details, or a value of 100 to enhance larger details.
Enhanced edge processing	Select this checkbox to reduce the appearance of halos around edges with enhanced texture, and to minimize the softening of edges when texture is smoothed.

Dehaze Adjustment Layer Options

Drag the slider to adjust the strength of the contrast, detail, and color correction.

Gradient Map Adjustment Layer Options

Shadows	Specify the color to be added to the dark parts of your image.
Highlights	Specifies the color to be added to the light parts of your image.

Vignette Adjustment Layer Options

Strength	Specifies the size and intensity of the vignette.
Distance	Specifies the size of the clear area around the focal point in the portrait. Drag the slider to the left to reduce the size of the clear area. Drag the slider to the right to increase the size of the clear area.
Shape	Specifies the shape of the frame.

Posterize Adjustment Layer Options

See [Applying a Posterize Effect](#).

Threshold Adjustment Layer Options

Use the slider to select a brightness level. All pixels brighter than that brightness will become white, and every darker pixel will become black.

Color LUTs Layer Options

Select a Color LUT from the drop-down menu. Or press the **Import LUTs** button to import a new LUT to your list.

Using Masks with Layers

Layer masks allow you to control a layer's level of transparency. While it is easy to control the opacity of a layer globally using the Opacity slider, layer masks are useful when you want to target a particular part of a layer. Use layer masks to hide or reveal portions of the layer beneath. Layer masks are effective for combining multiple images into a single image or for making localized adjustments.

The easiest way to understand layer masks may be to think of them in the following ways:

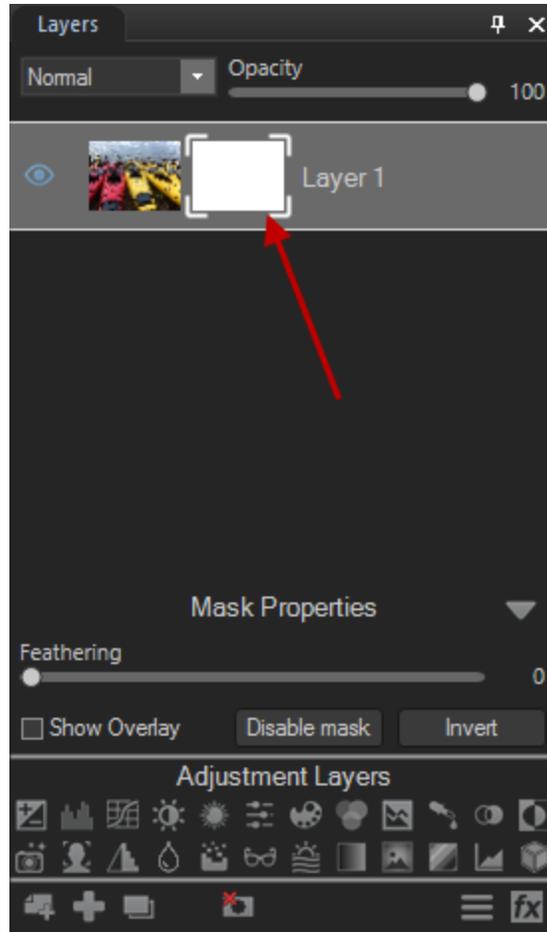
A white layer mask completely covers the layer below it. If you draw on the white layer mask with a black brush, "holes" appear in the mask through which you can see the layer below. A black layer mask, on the other hand, is transparent and shows the entire layer below. If you draw on the black layer mask with a white brush, you will cover parts of the layer below.

To Create a Layer Mask:

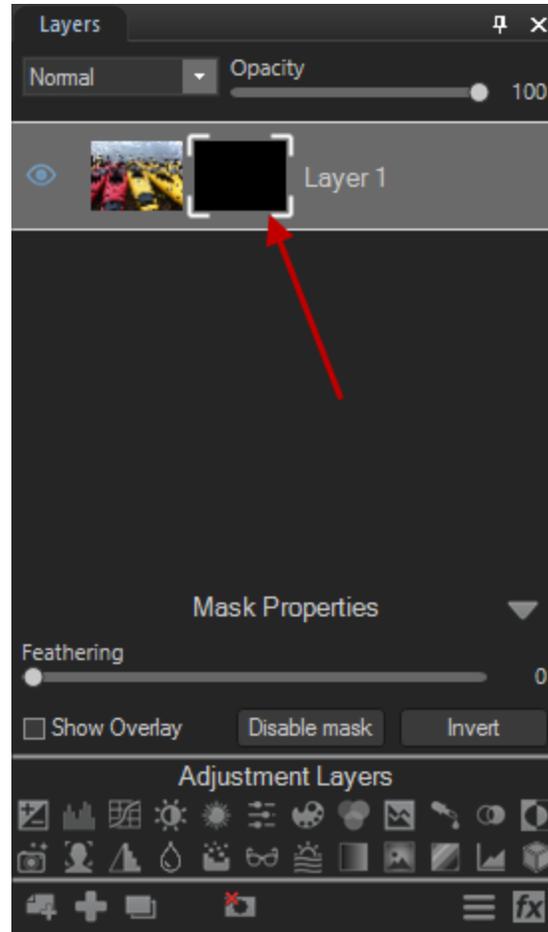
Do one of the following:

- In the Layers pane, right-click the layer you want to add a layer mask to and select **Set Mask White** or **Set Mask Black**.
- Go to **Layer | Mask | Set Mask White** or **Set Mask Black**.
- At the bottom of the Layers pane, press the **Add layer mask** button. 

The layer mask will appear as a white or black box in the Layers pane next to the thumbnail of the image on the layer you selected. To perform actions to the layer mask, you must select it in the Layers pane. You can alter the opacity of the layer mask by dragging the Opacity slider at the top of the Layers pane. You can apply any adjustment to the layer mask by selecting it and entering the tool.



Selected white layer mask



Selected black layer mask

To Disable a Mask:

You can disable a mask without deleting it. You can even disable it, save your layers as a .acdc file and exit Photo Editor, then reopen it at a later date and enable your mask again.

1. Select the mask in the Layers pane.
2. Do one of the following:
 - Right-click on the mask and choose **Disable mask** from the context menu.
 - In the Layers pane, press the **Disable mask** button.
 - Choose **Layer | Mask | Disable Mask**.
 - Press **Ctrl + Shift + M**.

To Enable a Mask:

1. Select the mask in the Layers pane.
2. Do one of the following:
 - Right-click on the mask and choose **Enable mask** from the context menu.
 - In the Layers pane, press the **Enable mask** button.

- Choose **Layer | Mask | Enable Mask**.
- Press **Ctrl + Shift + M**.

Mask Properties

You can adjust the properties of each layer mask on each layer individually using the Mask Properties panel. The adjustments you make are non-destructive, meaning that you can adjust them at any time throughout the editing process.

To Access the Mask Properties Panel:

Select the mask in the Layers pane. The Mask Properties will appear at the bottom of the pane, above Adjustment Layers.

You can make the following adjustments to your layer mask:

Feathering	You can non-destructively feather your mask to avoid sharp edges or a stark contrast between the mask and the layer. Move the slider to blur the edges of the mask.
Invert	You can non-destructively invert your mask. This will turn a white mask black, and a black mask white.

Displaying a Mask Overlay:

You can make your mask easier to see by enabling the **Show Overlay** checkbox in the Mask Properties panel.

To Customize the Mask Overlay:

1. Right-click on the mask in the Layers pane and choose **Mask Overlay Options...** from the context menu.
2. In the Mask Overlay Options dialog, select one of the following overlay options:

Mask Highlighted	This option highlights your mask in the color of your choosing. Select a color from the drop-down menu. You can customize the transparency of the mask overlay by using the Opacity slider.
Mask Exposed	This option highlights the non-masked areas of your layer in the color of your choosing. Select a color from the drop-down menu. You can customize the transparency of the unmasked area by using the Opacity slider.

3. Press **OK**.



The mask overlay is only visible when the layer is selected.

To Edit a Layer Mask:

Select the layer mask in the Layers pane, then choose any adjustment, or drawing or selection tool.

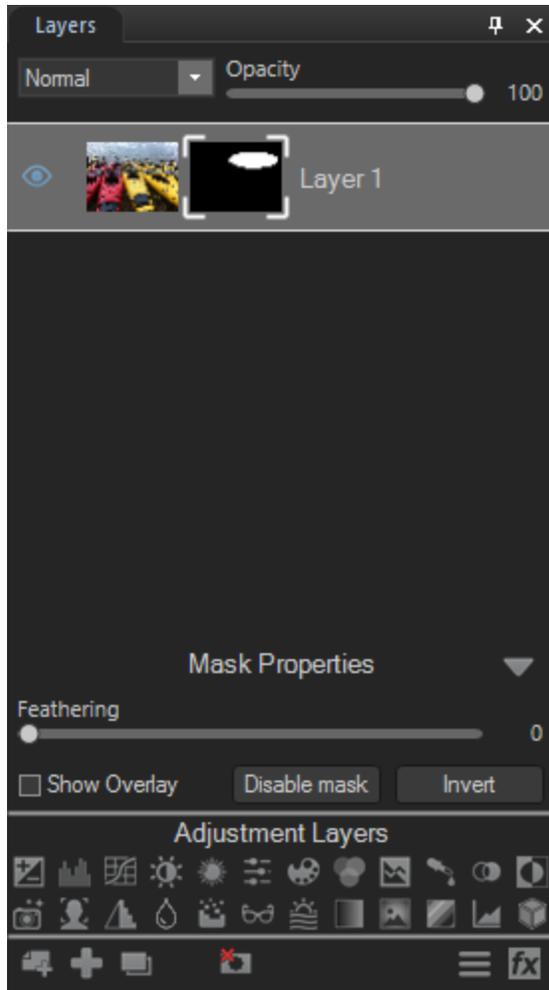
Mask Flexibility

You can create or modify selections from masks.

To Create a Layer Mask From a Selection:

You can make a layer mask from a selection.

1. Make a selection.
2. Go to **Layer | Mask | From Selection**.



Or:

1. Make a selection.
2. Press the **Add layer mask** button. Or add any adjustment layer by selecting one of the icons from the bottom of the Layers pane. A mask will automatically be made from the selection.

Or:

1. Make a selection.
2. Right-click the layer and choose **Mask From Selection** from the context menu.

To Add a Mask to a Selection:

1. With the mask selected in the Layers pane, make a selection.
2. Right-click the mask and choose **Add Mask To Selection**.

To Subtract a Mask from a Selection:

1. With the mask selected in the Layers pane, make a selection.
2. Right-click the mask and choose **Subtract Mask From Selection**.

To Select the Area Common to the Mask and the Selection:

1. With the mask selected in the Layers pane, make a selection.
2. Right-click the mask and choose **Intersect Mask With Selection**.

To Delete Selected Mask Pixels:

See [Using Selections](#).

Creating Layer Masks From Specific Colors and Tones

You can create masks from specific targeted colors and/or tones—and even skin tones.

To Create a Layer Mask by Targeting Colors or Tones:

1. Select your layer and set a white or black mask, as described above.
2. Right-click the mask and choose **Pixel Targeting...** from the context menu.
3. On the Pixel Targeting panel, configure the settings as described below.
4. Press **OK**. The mask will be created from the targeted color(s) and/or tone(s).

The Pixel Targeting Panel

The Pixel Targeting panel consists of four sections: Targeted Tones, Targeted Colors, Skin Targeting, and the Target Mask.

Target Mask:

The Target Mask allows you to see the areas in the image that are targeted by displaying them in white. When no pixels are targeted, the Target Mask will appear completely black. Conversely, when all pixels are targeted, as is the case before any sliders have been altered on the Pixel Targeting panel, the entire Target Mask will appear completely white.

Targeted Tones:

The Targeted Tones sliders allow you to target tones of brightness for the mask. To target one or more tones, you may find it easiest to press the Min button under the Targeted Tones section. This deselects all tones, and you can then select specific tones to target for the mask by moving their sliders up between 0 and 100, depending on your desired intensity.

Targeted Colors:

The Targeted Colors sliders allow you to target specific colors for the mask. To target one or more colors, you may find it easiest to press the Min button under the Targeted Colors section. This deselects all colors, and you can then select specific colors to target for the mask by moving their sliders up between 0 and 100, depending on your desired intensity.

Skin Targeting:

The Target Skin slider allows you to specifically target skin tones for the mask. To target skin tones, move the slider to the right between 0 and 100, depending on your desired intensity.

When you move the Skin Targeting slider, all other colors (except for skin tones), are excluded. You cannot then alter the green color slider, for instance.

To exclude skin tones from your mask, move the slider to the left between 0 and -100.

Creating Layer Masks From Images

You can copy color images and paste them as grayscale (luminance) masks on other layers, including adjustment layers.

To Create a Mask from an Image:

1. Do one of the following:
 - Right-click an image in the Layers pane and choose **Copy** from the context menu.
 - With an image selected in the Layers pane, choose **Edit | Copy**.
2. Select a layer in the Layers pane and do one of the following:
 - Right-click the layer and choose **Paste as Mask** from the context menu.
 - Choose **Edit | Paste as Mask**.
 - Choose **Layer | Mask | Paste as Mask**.

Adding Text as Layers

You can use the Text tool to add text as a layer. You can customize the font, size, color, style, and justification, and insert metadata. You can also adjust the opacity of the text to create a watermark effect, which is useful for placing copyright information on your photos.

You can save your image with text layers as a .acdc file format. By saving in this format, your layers will remain editable should you re-open the image in Photo Editor in the future.

 You can add [layer effects](#) to text layers.

To Add Text as a Layer:

1. Select the **Text** tool from the Toolbar. 
2. Click in your desired area of the image. A text box is added to the image and a text layer appears on top in the Layers pane.
3. Click and drag the text marquee to reposition it anywhere on your image, or drag the marquee's handles to resize it. In the Context bar, you can also choose or enter a specific point size in the Size drop-down menu.

 Press **Shift** while resizing to transform without maintaining aspect ratio.

4. Type the text you want to add in the text box. Each time you click to add another text box, a new text layer will be added to the Layers pane. You can select any text box and its layer will become selected in the Layers pane.
5. In the Context bar, use the drop-down menus to specify the font you want to use, the formatting options, such as italics or justification, and the color of the text.
6. At the top of the Layers pane, drag the **Opacity** slider to specify the transparency of the text.
7. At the top of the Layers pane, select an option from the **Blend Mode** drop-down list to specify how you want the text to blend into the underlying image.

 You cannot enter a filter while a text layer is selected. This will prompt a warning asking you if you would like to rasterize your text layer. After you rasterize the text layer it will no longer be editable.

 While you cannot merge text layers with other text layers, you can merge text with regular image layers. This action will rasterize your text. After you rasterize the text layer it will no longer be editable.

 You can add adjustment layers above text layers and clip them directly to text layers. See [Using Adjustment Layers](#).



You can add a mask to a text layer. However, should you move the text layer, the mask will not move with it.



You can modify a text layer, including customizing style settings, by selecting the text layer.

Typical keyboard shortcuts, such as **Ctrl + C**, **Ctrl + V**, **Ctrl + A**, etc, will work in text boxes. You can also use **Home**, **End**, **Ctrl + Home**, and **Ctrl + End** to move your cursor to the beginning or end of the text.

You can use **Ctrl + Z** to undo recent changes when editing within a text box. However, using the Undo/Redo buttons will undo and redo entire text actions, such as adding a text box.

You can apply any Alt codes in text boxes. You can use the following keyboard shortcuts to add copyright information to your images:

® (Registration symbol)	Alt + 0174
© (Copyright symbol)	Alt + 0169
™ (Trademark Symbol)	Alt + 0153

Rasterizing Text

There are certain situations when you may want to manually rasterize text, such as attaching masks to text. You can also select multiple text layers and rasterize once, rather than rasterizing layer by layer.

To Rasterize Text:

With your text layer(s) selected, do one of the following:

- Choose **Layer | Rasterize Text Layer**.
- Press **Ctrl + Shift + T**.
- Right-click your text layer in the Layers pane and choose **Rasterize Layer** from the context menu.

To Add Metadata as Text to an Image:

1. Select the **Text** tool from the Toolbar. 
2. In the Context bar, click the **Ins** button.
3. In the Choose Properties dialog box, click the plus + signs to expand the tree and toggle the checkboxes to select your metadata preferences.
4. Press **OK**. Your selected metadata will be added as a text layer.



When playing a recorded action that includes metadata added as a text layer, the result will include metadata from the original image from which it was recorded, rather than from the image upon which the action is being played.

Resizing the Canvas

You can use the Resize Canvas tool to crop or to expand the size of your canvas to fit layered content or to add solid backgrounds.

Resizing by Dragging

Using this method, you can resize the canvas in the following ways:

- By dragging the edges of your photo to expand the canvas to your desired size.
- By specifying an exact size for the canvas using pixels, inches, centimeters, or a percentage.
- By applying a ratio to constrain the canvas proportions.

To Resize the Canvas by Dragging:

1. Select the **Resize Canvas** tool from the Toolbar. 
2. Position your cursor over the edge or corner of your image until it changes into a double-pointed arrow.
3. Drag the canvas' border to the desired size.
4. In the Context bar, press the **Commit** button.

For more information on the Resize Canvas tool's options available in the Context bar, see [Resize Canvas](#).



You can use the Arrow keys to move the canvas around pixel by pixel.

Resizing and Positioning

Using this method, you can resize the canvas in the following ways:

- By specifying an exact size for the canvas using pixels, inches, centimeters, or a percentage.
- By applying a ratio to constrain the canvas proportions.

To Resize and Position the Canvas:

1. Choose **Tools | Resize Canvas**.
2. In the Resize Canvas dialog, configure the settings as described below.
3. Press **OK**.

Resize Canvas Options

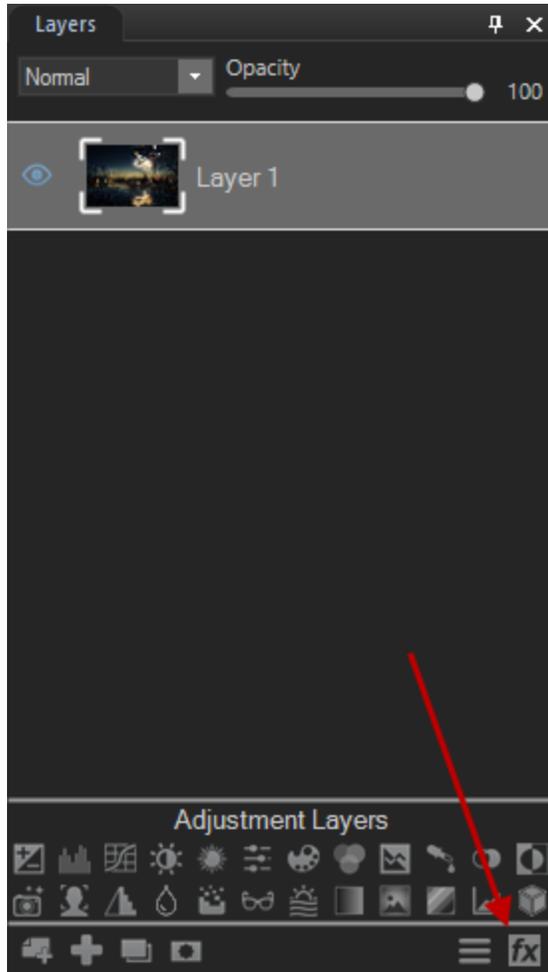
Current Dimensions	Displays the current file size and dimensions of your layer.
New Dimensions	Type your desired canvas size in the Width and Height fields. You can customize the unit of measurement with the drop-down menu. As you alter the size, the file size will update next to New Dimensions.
Anchor	Use the Anchor buttons to lock your layer to a specific region, such as the top left corner. The canvas will expand around it.
Aspect Ratio	Select a ratio from the drop-down list. You can define your own ratio using the Custom option. You can also delete ratios by selecting them in the drop-down and pressing the Delete button.
Resolution	Use the Dots Per Inch field to specify a resolution.
Background Color	Select a background color for your canvas.
Opacity	Adjust the transparency of your canvas with the Opacity slider.



When you resize the canvas on an image with multiple layers, the background color is only added to the selected layer.

Applying Layer Effects

You can add effects that appear between layers. You can add layer effects to regular image and text layers. However, you cannot add them to the bottom layer, regardless of the type of layer, or to any adjustment layer. You can save your image with layer effects as a .acdc file format. By saving in this format, your layer effects will remain editable should you re-open the image in Photo Editor in the future.



To Add Layer Effects:

1. In the Layers pane, select the layer to which you wish to add effects.
2. Do one of the following:
 - At the bottom of the Layers pane, press the **Layer Effects** button. 
 - In the Layers pane, right-click the layer and select **Layer Effects** from the context menu.
 - Go to **Layer | Layer Effects**.
 - Press **Ctrl + Alt + X**.
3. In the Layer Effects dialog, enable the checkboxes of your desired effects. Configure the settings as described below.

4. Press **Close**. Closing the Layer Effects dialog does not remove or disable your layer effects. By saving your layered image as a .acdc file, you can re-open it in Photo Editor and continue to edit your layer effects at any point in the future.

Layer Effects Options

Inner Glow	Thickness	Specifies the thickness of the glow effect. Drag the slider to set the thickness.
	Blur	Blurs the edges of the glow. Drag the slider to determine how much blur is applied.
	Opacity	Specifies the opacity of the glow. Type a number from 1 to 99 or drag the slider to adjust the opacity of the glow. The higher the opacity, the more visible the glow is.
	Blend Mode	Specifies how the effect blends with the layer. Select a blend mode from the drop-down menu.
	Color	Specifies the color of the glow. Click the color picker to select a different color. See Using the Color Dialog Box .
Inner Shadow	Blur	Blurs the edges of the shadow. Drag the slider to determine how much blur is applied.
	Distance	Specifies the size of the shadow according to the angle setting. Drag the slider to adjust how far the shadow encroaches on your layer.
	Opacity	Specifies the opacity of the shadow. Type a number from 1 to 99 or drag the slider to adjust the opacity of the shadow. The higher the opacity, the more visible the shadow is.
	Blend Mode	Specifies how the effect blends with the layer. Select a blend mode from the drop-down menu.
	Angle	Specifies the angle of the shadow. Type a number from 1 to 360 or drag the arrow to adjust the angle.
Bevel	Color	Specifies the color of the shadow. Click the color picker to select a different color. See Using the Color Dialog Box .
	Elevation	Specifies the visibility of the bevel effect. As you reduce the Elevation slider, the layer darkens, making the effect stand out more.
	Radius	Specifies how spread out the bevel is.
Light Source	Light Source	Specifies an imaginary light source. Click and drag the glow on the ball to reposition the imaginary light source.
	Thickness	Specifies the thickness of the outline effect. Drag the slider to set the thickness.
Outline	Blur	Blurs the edges of the outline. Drag the slider to determine how much blur is applied.
	Opacity	Specifies the opacity of the outline. Type a number from 1 to 99 or drag the slider to adjust the opacity of the outline. The higher the opacity, the more visible the outline is.
	Color	Specifies the color of the outline. Click the color picker to select a different color. See Using the Color Dialog Box .
	Strength	Specifies the strength of the blur. Move the slider to the right to intensify the effect.
Blur	Blur	Blurs the edges of the shadow. Drag the slider to determine how much blur is applied.
	Distance	Specifies the size of the shadow according to the angle setting. Drag the slider to adjust how far the shadow encroaches on your

	layer.
Opacity	Specifies the opacity of the shadow. Type a number from 1 to 99 or drag the slider to adjust the opacity of the shadow. The higher the opacity, the more visible the shadow is.
Angle	Specifies the angle of the shadow. Type a number from 1 to 360 or drag the arrow to adjust the angle.
Color	Specifies the color of the shadow. Click the color picker to select a different color. See Using the Color Dialog Box .

 When you clip an adjustment layer to a text or image layer with layer effects applied to it, the layer effects will not be affected.



When rasterizing a text layer with layer effects applied, you can choose not to rasterize its layer effects. This will allow you to continue to edit the layer effects after.

Copying and Pasting Layer Effects:

You can copy layer effect settings from one layer to another.

1. Configure your desired layer effects settings in the Layer Effects dialog.
2. Press the **Copy** button.
3. Select another image or text layer. You cannot choose the bottom layer.
4. In the Layer Effects dialog, press the **Paste** button.

To Reset All Layer Effects Settings:

In the Layer Effects dialog, press the **Reset** button.



Retouching with Frequency Separation

You can use Frequency Separation to get rid of imperfections while retaining detail. By separating images into high frequency and low frequency layers, you can smooth out flaws without losing texture.

To Apply Frequency Separation:

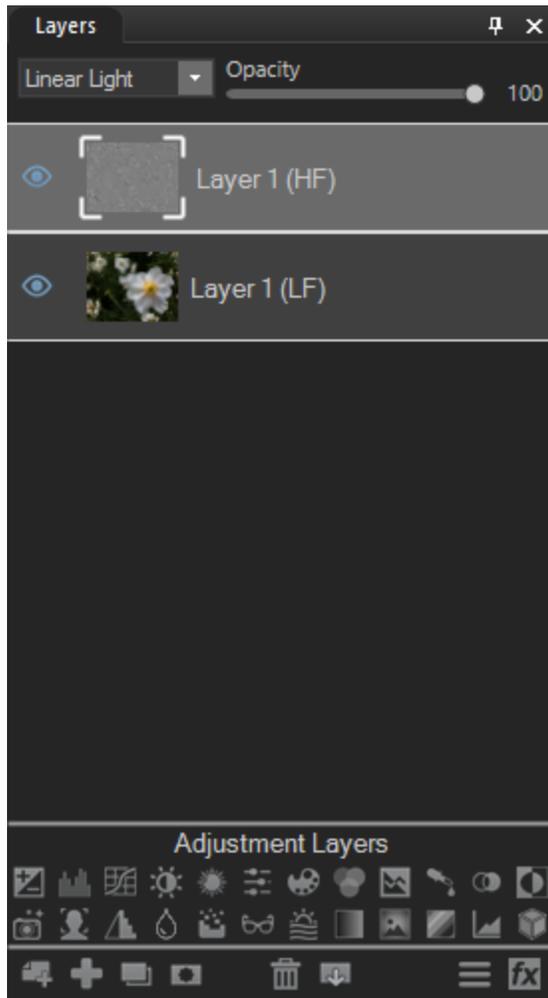
1. With your image selected in the Layers pane, do one of the following:
 - Right-click the layer and choose **Frequency Separation**.
 - Select **Layer | Frequency Separation**.
 - Press **Ctrl + Shift + F**.
2. On the Frequency Separation pane, adjust the Blur Radius slider to determine how much detail is visible in the high frequency layer, and, by contrast, to determine the blur level of the low frequency layer. You can toggle your view of each layer using the High Frequency and Low Frequency radio buttons. Please note that these buttons do not impact the Blur Radius setting.



It is recommended that you choose a setting in which the details just become visible in the high frequency layer.

3. Press **Done**.

Your image is now separated into two layers: high frequency (HF) and low frequency (LF). The low frequency layer contains the tones, colors, and shadows of the image, and will appear blurry on its own. This is because the texture information is stored on the high frequency layer.



Retouching Images

By isolating adjustments to one layer or the other, you can repair flaws while maintaining a natural look. You can approach retouching with Frequency Separation in two ways.

Low Frequency Layer

You can use blurring on your low frequency layer to smooth out lighting inconsistencies and splotchiness. With the low frequency layer selected, use the Detail Brush or Blur tool, or apply blurring to specific areas by using a selection tool or brush.

High Frequency Layer

You can use cloning on the high frequency layer to even texture and correct detail-related flaws. With the high frequency layer selected, use the Repair tool to apply cloning.



Tip: You can increase sharpening by duplicating the high frequency layer one or more times.

Merging with Focus Stacking

You can use focus stacking to merge a series of images with different focal distances. By combining multiple images with different areas in focus, you can create a new image with a greater depth of field.

To Use Focus Stacking:

 Your selected images must have the same dimensions.

1. Open the first image in your series.
2. At the bottom of the Layers pane, press the **Add a File as a Layer** button. 
3. In the Import image as layer dialog, select the remaining images in your series. Ensure that you do not select the first image a second time.
4. In the top left corner, press the **Commit** button.

 You must arrange the images according to the order of their focal distance. This means that the area that is in focus in each photo must move consistently in one direction, be it from front to back, or back to front, or right to left, or left to right. Use rearranging in the Layers pane, culling, renaming, or Ctrl + click to achieve this order of selection, as necessary.

5. Choose **Layer | Focus Stack...**
6. A warning dialog will pop up. In the Layers pane, your layers must be arranged according to their focal distance. If the layers are arranged according to focal distance, press **Proceed**. If the layers are not arranged properly, press **Cancel**, and rearrange the order in the Layers pane.
7. In the Focus Stack dialog, configure the settings as described below.
8. Press **OK**. If you have disabled **Keep Layer Stack**, all other layers will be removed and the focus stack layer will be the only remaining layer in the Layers pane. If you have enabled **Keep Layer Stack**, the focus stack layer will appear as the top layer in the Layers pane.

Focus Stacking Options

Merge	<p>All Layers: Performs focus stacking using all layers in the Layers pane.</p> <p>Selected Layers: Performs focus stacking on the selected layers in the Layers pane.</p> <p> Focus stacking cannot be performed on a single layer.</p>
Auto-Align Layers	Aligns the images in the stack. For best results, keep this option enabled.
Keep Layer Stack	<p>Disable this option to delete all other layers, keeping only the resulting focus stack layer.</p> <p> If you have accidentally disabled this option and deleted all other layers, press Ctrl + Z after the command has run.</p>

 The Focus Stack command will ignore all masks, text layers, and adjustment layers.

 Running the Focus Stack command on large images will require a significant amount of memory.

Creating an HDR Image

High-dynamic-range imaging (HDR) is a technique used in digital image processing to combine a series of images with different exposures to produce one image with an optimal overall range. You can use the HDR tool to create a new image with a greater dynamic range of luminosity. Ideally, the images you use with the HDR tool will include a well-balanced range of highlights and shadows. See below for additional tips on achieving the best results.

 In some cases, the HDR dialog's preview may not accurately reflect the HDR image it creates. This is because the image is scaled down for the preview.

To create an HDR image, your set of images must have the following attributes defined in their EXIF data:

- an f-stop/number
- an ISO value
- a shutter speed/exposure value

Shooting Photos for HDR

You will have a higher chance of generating quality results if you follow these instructions when shooting your images for HDR:

- Use the shutter speed to vary exposures. That said, varying the aperture setting changes the depth of field, leading to poor quality results. Similarly, varying the ISO or aperture may generate noise or vignettes. Set your ISO to its lowest value.
- Generally, do not use your camera's auto-bracket feature as the exposure changes are not significant enough.
- Ensure that the scene you are shooting does not include features in motion. HDR is meant for photos of the same scene with exposure variances.
- Keep the camera stable using a tripod.
- Use your camera's timer to avoid camera shake.
- Keep the focus and zoom constant between images.
- Shoot in RAW rather than JPEG. This will provide for greater range and flexibility.
- Ensure there is detail in the deep shadows of your darkest exposure.
- Ensure no area of the image is blown out in your lightest exposure.
- Ensure the set of images is "balanced" (i.e. the middle image of the set has well-exposed midtones).
- Using a quantity of photos higher than suggested in the table below can result in unwanted artifacts due to improper alignment and ghosting.

Camera Bracket Settings	Optimum Number of Exposures for Creating HDR Images
-1.0 to +1.0	3
-2.0 to +2.0	5
-3.0 to +3.0	7

To Create an HDR Image:

1. Open the first image in your series.
2. At the bottom of the Layers pane, press the **Add a File as a Layer** button. 

3. In the Import image as layer dialog, select the remaining images in your series. Ensure that you do not select the first image a second time.
4. In the top left corner, press the **Commit** button.
5. Choose **Layer | HDR...** or press **Ctrl + Shift + D**.
6. In the HDR dialog, configure the settings as described below.
7. Press **OK**. If you have disabled **Keep Layer Stack**, all other layers will be removed and the HDR layer will be the only remaining layer in the Layers pane. If you have enabled **Keep Layer Stack**, the HDR layer will appear as the top layer in the Layers pane.

HDR Options

Merge	<p>All Layers: Merges all layers in the Layers pane.</p> <p>Selected Layers: Merges the selected layers in the Layers pane. If only one layer is selected, ACDSee will perform the command on that one layer, which will not generate any results.</p>
Auto-Align Layers	Aligns the images in the stack. For best results, keep this option enabled.
Keep Layer Stack	<p>Disable this option to delete all other layers, keeping only the resulting HDR layer.</p> <p> If you have accidentally disabled this option and deleted all other layers, press Ctrl + Z after the command has run.</p>

 The HDR command will ignore all masks, text layers, and adjustment layers.

 Running HDR on large images will require a significant amount of memory.

Using Auto-Align

You can use Auto-Align to align layers for the purpose of creating composites. By stacking, aligning, and masking sets of nearly-identical images in the Layers pane, you can omit unwanted areas while exposing select areas to create one optimal version of the image.

After aligning, you can use [layer masks](#) to create an ideal composite.

To Align Multiple Layers:

1. **Shift-click** or **Ctrl-click** to select multiple images in the Layers pane.
2. Choose **Layer | Auto-Align Layers**.

 The Auto-Align command will only align vertically. Therefore, attempting to align panoramas or dissimilarly-sized images will yield undefined results.

 Running the Auto-Align command on large images will require a significant amount of memory.

Using Auto-Blend

You can use Auto-Blend to merge stacks of images in two different ways:

Focus Stack: You can blend using [focus stacking](#). This will merge images with different focal distances to create a new image with a greater depth of field.

HDR: You can blend using [HDR](#). This will merge images with different exposures to create a new image with an optimal dynamic range.

 Focus Stacking and HDR will ignore all masks, text layers, and adjustment layers.

 Running HDR or Focus Stacking on large images will require a significant amount of memory.

To Auto-Blend Using Focus Stacking:

1. Open images in the [Layers pane](#).
2. In the Layers pane, **Ctrl + click** to select specific layers or **Shift + click** to select a range of layers.
3. Choose **Layer | Auto-Blend Layers...**
4. In the Auto-Blend dialog, select **Focus Blend**.
5. Press **OK**.
6. A warning dialog will pop up. If you have selected your images according to the order of their focal distance, press **Proceed**. If your image selection is not in order, press **Cancel** and change your order of selection, whether by culling, renaming, or ctrl-clicking. The focus blended layer will appear as the top layer in the Layers pane.

To Auto-Blend Using HDR:

1. Open images in the [Layers pane](#).
2. In the Layers pane, **Ctrl + click** to select specific layers or **Shift + click** to select a range of layers.
3. Choose **Layer | Auto-Blend Layers...**
4. In the Auto-Blend dialog, choose **HDR Blend**.
5. Press **OK**. The HDR blended layer will appear as the top layer in the Layers pane.

Chapter 5: Editing - Selection Tools

Using Selections

Use Selections to isolate an area of a photo in order to apply edits or filters to only that area, rather than the whole photo. There are six different selection tools and each selects an area of a photo in a unique way. The controls available change depending on which tool you select.

To Use a Selection Tool:

1. On the Toolbar, select the button for one of the following selection tools: Brush selection tool, Polygon selection tool, Rectangular selection tool, Elliptical selection tool, Lasso selection tool, Magic wand selection tool. See below for more detailed steps for using these tools.

You can use Selections with the following Edit tools:

- Repair: Skin Tune, Chromatic Aberration
- Add: Vignette, Special Effects, Tilt-Shift, Drawing tools, Grain
- Exposure/Lighting: Exposure, Levels, Auto Levels, Tone Curves, Light EQ™, Dehaze, Dodge and Burn
- Color: White Balance, Color EQ, Color Balance, Convert to Black and White, Split Tone
- Detail: Sharpen, Blur, Noise, Clarity, Detail Brush

The Selection Tools

-  **Freehand Lasso:** Click the left mouse button and drag the cursor to draw around the area that you wish to select. As you draw, a line appears showing where you have drawn. When you release the mouse, the end of the line joins to the start automatically to complete the selection. The whole selection animates and looks like marching ants.
-  **Magic Wand:** Click on any area of the image and all the pixels the same color are included in the selection. You can choose whether to select only the same color pixels that are actually touching the one you clicked, or all the pixels in the photo that are similar. You can increase the threshold to include more pixels in the selection. The lower the threshold, the more similar a pixel has to be to the one clicked in order to be included. The greater the threshold, the more different a pixel can be and still be in the selection.
-  **Rectangular or Elliptical:** Click and drag either a rectangle or an ellipse that begins where you first click and ends when you release the mouse.
-  **Polygon:** Click on any area of the image to begin the selection. As you move your mouse, the selection will follow your cursor. To change the direction of the selection line, click the left mouse button. Double-click to complete the selection.
-  **Brush:** You can use the Brush selection tool to target your selection based on color, brightness, or a combination of both color and brightness. Select Color, Brightness, or Magic from the drop-down menu in the Context bar to define your selection. Then align the center of the brush with the color, brightness, or combination that you wish to target and begin brushing. You can increase the Tolerance to include a wider

range of pixels in your selection. The lower the Tolerance, the more similar a pixel has to be to the one clicked in order to be included. You can erase the selection by right-clicking.

Overlay Options

You can customize the look of your selection based on the visualization best suited to your selection task.

To Customize the Selection Overlay:

1. Choose **Select | Overlay Options...**
2. In the Overlay Options dialog, select one of the following overlay options:

Marching Ants

This option outlines the selection with animated dashes.

Selection Highlighted

This option highlights your selection in the color of your choosing. Select a color from the drop-down menu. You can customize the transparency of the color overlay by using the Opacity slider.

Selection Exposed

This option highlights the non-selected areas of your image in the color of your choosing. Select a color from the drop-down menu. You can customize the transparency of the non-selected area by using the Opacity slider.

3. Press **OK**.

Using the Selection Tools

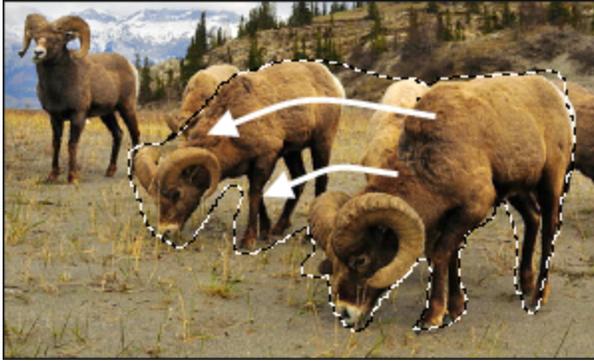
To Use the Lasso:

1. Select the **Lasso** button.
2. On the image, click and hold down the left mouse button as you draw around the area you want to select.
3. Release the mouse button to complete the selection.



4. To clear the selection, click anywhere on the image (for the Lasso , Rectangular, or Elliptical selection).
5. To add to an existing selection, hold down **Shift**, or press the **Add to selection** button in the Context bar, and draw a shape that includes any part of the original selection line. 

When you release the mouse, the original selection expands to include the outer edge of your addition.



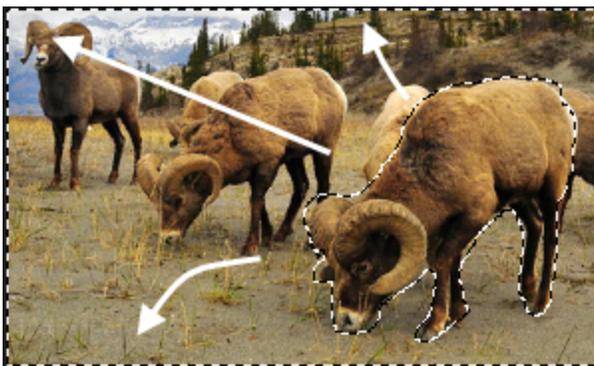
6. To add multiple areas into your selection, hold down **Shift**, or press the **Add to selection** button in the Context bar and draw around any part of the image. 

As long as you do not touch the line of any other selection, you can add several separate areas to a selection.



7. To subtract from a selection, hold down **Ctrl**, or press the **Subtract from selection** button in the Context bar, and draw a shape that includes part of the original selection, or encircles it completely. 
8. If you wish to apply edits or effects to the outside areas of the image, you need to click **Select | Inverse** to reverse the selected area.

Now the selection includes all the outside areas of the image with the central area outside the selection.



 You can preview the selection mask by holding down the Preview button: 

You can select an editing tool or a special effect to [apply to the selection](#).

To Use the Magic Wand:

1. Select the **Magic Wand** button.
2. Click any color in the image.
3. Do any of the following:
 - Slide the **Threshold** slider to adjust the number of pixels to be included or excluded. The Threshold slider sets how similar a pixel needs to be to the one you clicked in order to be included in the selection.
 - Click the **Connected** checkbox if you want to include only pixels that are touching the one you clicked.
 - Hold down **Shift** and click around the selection to include more pixels.
 - Hold down **Ctrl** and click around the selection to remove pixels from the selection.
4. From the Wand type drop-down list, select one of the following:
 - **Brightness**: Selects pixels similar in brightness to the area of the image you clicked.
 - **Color**: Selects pixels similar in hue and brightness to the area of the image you clicked.

 Color is generally your best option.
 - **RGB**: Selects pixels with red, green, and blue combination similar to the area of the image you clicked.

 You can preview the selection mask by holding down the Preview button: 

You can select an editing tool or a special effect to [apply to the selection](#).

To Use the Rectangular or Elliptical Selection Tool:

1. Select either the **Rectangular** or **Elliptical** button.
2. Click and drag to draw the selection on the image.
3. Do any of the following:
 - To add to an existing selection, hold down **Shift**, or use the **Add to selection** button , and drag another selection that includes any part of the original selection line. Release the mouse and the selection now includes the additional area.
 - To add multiple areas to your selection, hold down **Shift** and drag as many as you want.
 - To subtract from an existing selection, hold down **Ctrl**, or use the **Subtract from selection** button , and drag another selection that intersects with the one you want to reduce. Release the mouse and any part that was inside the new selection is removed.

 You can preview the selection mask by holding down the Preview button: 

You can select an editing tool or a special effect to [apply to the selection](#).

To Use the Polygon Selection Tool:

1. Select the **Polygon** button.
2. Click anywhere on the image to start your selection.
3. Click again to change the direction of the selection line.
4. Double-click to complete the selection.

5. Do any of the following:

- To add to an existing selection, hold down **Shift**, or use the **Add to selection** button , and drag another selection that includes any part of the original selection line. Double-click and the selection now includes the additional area.
- To add multiple areas to your selection, hold down **Shift** and drag as many as you want.
- To subtract from an existing selection, hold down **Ctrl**, or use the **Subtract from selection** button , and drag another selection that intersects with the one you want to reduce. Double-click and any part that was inside the new selection is removed.



You can preview the selection mask by holding down the Preview button: 

You can select an editing tool or a special effect to [apply to the selection](#).

To Use the Brush Selection Tool:

1. Select the **Brush Selection** button.
2. Select an option from the Smart Brushing drop-down menu:

Color	Selects pixels based on how similar they are to the color value of the pixel in the center of the brush, depending on the Tolerance setting.
Brightness	Selects pixels based on how similar they are to the brightness value of the pixel in the center of the brush, depending on the Tolerance setting.
Magic	Selects pixels based on how similar they are to the combination of the color and brightness values in the center of the brush, depending on the Tolerance setting.

3. Use the Tolerance slider to increase or decrease the range of pixels selected.
4. Place your cursor over the color or brightness you wish to select, and click and/or drag on the image to create a selection.



To remove areas from your selection, right-click and drag over the area you want to deselect.



To use the brush as a regular selection tool, hold down **Shift** while brushing.

You can select an editing tool or a special effect to [apply to the selection](#).



You can right-click a slider to reset to the default value.

Combining the Tools

You can use the Selection tools separately or in combination. For example, you can use the Magic Wand to select most of a particular color, then switch to the Freehand Lasso to add to, or subtract from, the selection. Or you could use the Rectangular selection to select a large general area, then refine it using the Freehand Lasso.

To Combine Selection Tools:

1. Choose a tool and make a selection.
2. Switch to another tool.
3. Press the **Add to selection** button. 
4. Make another selection.

Saving Selections as Presets:

You can save your settings as a preset for future use. After you have made a selection, click **Select | Save Selection...**

To use a previously saved selection, click **Select | Load Selection...**

To delete a saved selection, click **Select | Manage Selections...**

To Cut and Paste Selections:

1. Make a selection.
2. Do one of the following:
 - Press **Ctrl + C** or **Ctrl + X**.
 - Go to **Edit | Copy**.
3. Do one of the following:
 - Press **Ctrl + P**.
 - Go to **Edit | Paste**.

Your selection will paste onto a new layer above the selected (active) layer in the Layered Editor.

To Delete Selected Pixels:

You can delete selected areas of images or masks. To retrieve your deleted pixels, use the Undo button.

1. Make a selection.
2. Click **Select | Delete Selected Pixels**.

 You can also delete pixels by pressing **Alt + Delete**.

To Create a Layer Mask from a Selection:

See [Using Masks with Layers](#).

To Add or Subtract a Mask from a Selection:

See [Using Masks with Layers](#).

To Intersect a Mask with a Selection:

See [Using Masks with Layers](#).

Targeting Selections

You can target selections to specific color tones and brightness values, as well as skin tones.

To Select Pixels by Color or Tone:

1. Click **Select | Pixel Targeting...**
2. On the Pixel Targeting panel, configure the settings as described below.
3. Press **OK**. Your targeted color(s) or tone(s) will be selected.

The Pixel Targeting Panel

The Pixel Targeting panel consists of four sections: Targeted Tones, Targeted Colors, Skin Targeting, and the Target Mask.

Target Mask:

The Target Mask allows you to see the areas in the image that are targeted by displaying them in white. When no pixels are targeted, the Target Mask will appear completely black. Conversely, when all pixels are targeted, as is the case before any sliders have been altered on the Pixel Targeting panel, the entire Target Mask will appear completely white.

Targeted Tones:

The Targeted Tones sliders allow you to target tones of brightness for selection. To target one or more tones, you may find it easiest to press the Min button under the Targeted Tones section. This deselects all tones, and you can then choose specific tones to target for selection by moving their sliders up between 0 and 100, depending on your desired intensity.

Targeted Colors:

The Targeted Colors sliders allow you to target specific colors for selection. To target one or more colors, you may find it easiest to press the Min button under the Targeted Colors section. This deselects all colors, and you can then choose specific colors to target for selection by moving their sliders up between 0 and 100, depending on your desired intensity.

Skin Targeting:

The Target Skin slider allows you to specifically target skin tones for selection. To target skin tones, move the slider to the right between 0 and 100, depending on your desired intensity.

When you move the Skin Targeting slider, all other colors, (except for skin tones), are excluded. You cannot then alter the green color slider, for instance.

To exclude skin tones from your selections, move the slider to the left between 0 and -100.

Luminosity Selection

You can create a selection based on the brightness in the image. The brighter a pixel is, the stronger the selection will be on that pixel.

To Select Pixels by Brightness:

Click **Select | Luminosity Selection**.

Applying Edits or Effects to Selections

You can use the Selections tools to isolate an area of an image. Once selected, you can apply many of the editing tools, such as color and exposure, or any of the special effects filters, to the selected area. An active selection in an image looks like a line of marching ants.

To Apply an Edit or Effect to a Selection:

1. Use the [Selections tools](#) to create a selection.
2. Select a tool to use from any of the following groups:
 - Exposure/Lighting
 - Color
 - Detail
 - Add (Special Effects)

 Ensure that the **Use Selection** button is toggled on.
3. Use the tool to edit the image.

Use Any of These Special Selections Options:

Show/Hide Selection 	Click to show or hide the marching ants around the selection. Hiding the selection line makes it easier to judge the effect of various effects.
Use Selection 	Click to use the selection or apply the edit or effect to the whole image. This control means you can edit just the selection, then deselect Use Selection and apply another edit to the whole image without clearing the selection.
Invert Selection 	Click to invert the selection.
Feathering	Drag to increase or decrease the blurring between the edge of the selection and the edit or effect. Feathering prevents an unnatural or sharp transition between the selection and the rest of the image as it blends the edges. This control also makes it unnecessary for your selection to be perfectly on the edge of the area you want to select.

Using the Smart Erase Tool

You can remove unwanted objects from your images by selecting or brushing them and using the Smart Erase function. Smart Erase will analyze the image and predict how to best fill in the brushed or selected area. This is based on what the image would most likely look like without the selected or brushed object(s).

 Smart Erase will not work as intended if you select or brush more than 25% of the image.

To Erase and Fill a Selection:

1. On the Toolbar, choose a selection tool.
2. Select the area of the image you would like filled.
3. Click **Select | Smart Erase**. The fill will be applied.
4. Repeat steps until the desired look is achieved.

 If you are using the Brush Selection tool, you must have the Strength slider set to 50 or more.

To Erase and Fill Using the Smart Erase Brush:

1. On the Toolbar, select the **Smart Erase Brush** from the Toolbar. 
2. Brush over the area you would like filled. When you release the mouse button, the fill will be applied.
3. Repeat steps until the desired look is achieved.

Chapter 6: Editing - Repair Tools

Reducing Red Eye

You can use the Red Eye Reduction tool to correct red eye in digital photographs.

To Correct Red Eye:

1. Do one of the following:
 - Click **Filter | Repair | Red Eye Reduction**.
 - On the Toolbar, click the Repair icon and choose **Red Eye Reduction** from the menu.
2. Use the Zoom tools in the bottom right corner to enlarge and center the eye you want to correct.
3. Click within the red portion of the eye.
4. In the Red Eye Reduction group, adjust the sliders as described below.

Red Eye Reduction Options

Size	Drag the slider to the right to increase the size of the area being darkened, or to the left to decrease.
Darkening	Drag the slider to the right to intensify the fill color, or to the left to lighten.



You can right-click a slider to reset to the default value.



Scroll with your mouse to adjust the size of the area you would like to darken at anytime.



You can show or hide the outline of the darkened area by toggling the **Show Outline** checkbox.



Use the **Delete** key to remove the currently selected red eye adjustment.

Removing Flaws

You can use the Repair Tool to remove flaws, such as:

- Skin blemishes
- Telephone wires and other unwanted objects
- Flash flares from snowflakes or windows
- Lens scratches and water drops

There are four options available for the Repair Tool: Smart Erase, the Healing Brush, Blended Cloning, and the Cloning Brush.

Heal: When you select the Healing Brush, the Repair Tool copies pixels from one area of a photo to another, but it analyzes the pixels in the source area before copying them. It also analyzes the pixels in the target area, and then blends the pixels of both source and target, to match the surrounding area. This ensures that the lighting and color of the replacement pixels integrate with the surrounding area. The Healing Brush works particularly well with photos that involve complicated textures, like skin or fur.

Clone: When you select the Cloning Brush, the Repair Tool copies the exact pixels from one area of a photo to another, creating an identical image area. The Cloning Brush is more effective for photos that have strong, simple textures or uniform colors, as it is more difficult to identify the copied pixels in the finished photo.

Blended Clone: When you select the Blended Clone tool, the Repair Tool copies the exact pixels from one area of a photo to another, but it analyzes the pixels in the target area and blends them with the copied pixels.

Smart Erase: For information on Smart Erase, see the [Smart Erase](#) section below.

You can save your settings as a [preset](#) for future use.

To Remove Flaws from a Photo:

1. Do one of the following:
 - Click **Filter | Repair | Repair Tool**.
 - On the Toolbar, click the Repair icon and choose **Repair Tool** from the menu.
2. Select one of the following:
 - **Heal:** Copies the pixels from the source area to the target area, and blends pixels into the surrounding image area.
 - **Clone:** Copies the pixels from the source area to the target area.
 - **Blended Clone:** Copies the pixels from the source area to the target area, then analyzes the pixels in the target area and blends them with the copied pixels.
 - **Smart Erase:** Analyzes pixels and fills in the brushed area based on what the image would most likely look like without the brushed object. See the "Smart Erase" on page 63 section below.
3. Drag the **Nib Width** and **Feathering** sliders as described in the table below.
4. Right-click the image to set a source location. Pixels will be copied from this location and used in the target location.
5. Click and drag over the area that you want to cover. If you selected the healing brush, Photo Editor analyzes and replaces the pixels when you release the mouse button. If you selected the blended clone tool, Photo Editor analyzes, replaces, and blends the pixels when you release the mouse button.
6. Do one of the following:
 - Click **Done** to apply your changes and close the tool.
 - Click **Cancel** to discard all changes and close the tool.



Click **Reset** to reset the sliders. If you saved your changes, you cannot reset your settings.



Scroll with your mouse to adjust the brush size on the fly, or press the **Shift** key while you scroll to adjust feathering.

Repair Tool Options

Nib Width	Sets the width of the brush. The maximum brush width is relative to the size of your image.
Feathering	Sets the amount to feather on the edge of the brush to prevent sharp transitions between the original and healed part of the photo. Feathering is set as a percentage of the nib width, not as a specific number of pixels. This means that you do not have to adjust the feathering when you reset the Nib Width, as it automatically adjusts to a percentage of the new nib width. This option is not available with the Blended Clone tool.
Pressure	After setting a source point for the Clone tool, adjust the slider to control the strength of

the effect being applied.

Show preview in cursor

Enable this checkbox to display a preview of your selected source point in the cursor.



You can right-click a slider to reset to the default value.

Smart Erase

You can remove unwanted objects from your images by brushing them and using the Smart Erase function. Smart Erase will analyze the image and predict how to best fill in the brushed area. This is based on what the image would most likely look like without the brushed object(s).

1. Do one of the following:
 - Click **Filter | Repair | Repair Tool**.
 - On the Toolbar, click the Repair icon and choose **Repair Tool** from the menu.
2. Select **Smart Erase**.
3. Drag the Nib Width slider or adjust your mouse wheel to set the width of the brush.
4. Brush over the area you would like filled. When you release the mouse button, the fill will be applied. Repeat until your desired look is achieved.

Adjusting Skin Tone

You can use the Skin Tune tool to even skin tone and smooth away blemishes and flaws.

To Correct Skin Tone:

1. Do one of the following:
 - Click **Filter | Repair | Skin Tune**.
 - On the Toolbar, click the Repair icon and choose **Skin Tune** from the menu.
2. On the Skin Tune panel, adjust the settings as described below.
3. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Skin Tune Options

Smoothing	Refines skin by suppressing texture detail.
Glow	Increases the brightness of skin while subtly smoothing.
Radius	Specifies the scale of the texture detail that is affected by the effect. A lower value enhances small details, while a large value enhances larger details.

Correcting Chromatic Aberration

Chromatic aberration is a lens artifact that can result in fringes in high contrast areas of some photos. The camera lens can cause different wavelengths of light to focus differently, which appears in photos as colored fringing or

colored lines on the borders of high contrast areas. Purple fringing can also occur when there is a bright spot of light in front of the lens.

This zoomed-in image shows an example of blue/yellow fringing.



You can use the Chromatic Aberration tool to reduce the appearance of colored fringes. This can be especially useful for photos with architectural details. For best results, it's recommended that you use the Chromatic Aberration sliders first, and then the Defringe sliders.

To Reduce Fringing in Your Image:

1. Do one of the following:
 - Click **Filter | Repair | Chromatic Aberration**.
 - On the Toolbar, click the Repair icon and choose **Chromatic Aberration** from the menu.
2. Adjust the sliders as described below.
3. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

Chromatic Aberration Options

Fix Red/Cyan	Adjust the red and cyan channels to reduce red/cyan fringing.
Fix Blue/Yellow	Adjust the blue and yellow channels to reduce blue/yellow fringing.
Defringe strength	Adjust the amount of fringe color you want to remove from high contrast edges. A setting of zero means that defringing is off.
Defringe radius	Adjust the number of pixels surrounding an edge that will be defringed.
Color	Adjust the color to remove from high contrast edges.



You can use the [Edit Brush](#)



to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)



to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Chapter 7: Editing - Add Tools

Adding Drawings to Your Image

You can use the Drawing Tools to add lines and shapes, such as squares, circles, and arrows to your image. You can also adjust the width, feathering, and blending of your brush, which is useful for creating subtle and dramatic drawings.

To Draw on Your Image:

1. On the Toolbar, select from the following tools:

	Tool	Instructions
	Hand	Use the Hand tool to exit out of any other drawing or selection tool. If you have a scrollable image, the Hand tool also allows you to pan it.
	Move	Use the Move tool to move image and text layers, and selections, as well as to rotate and resize layers. You can also move and rotate objects, such as circles, lines, etc, that you have created on their own respective layer. (See To Add a Layer .) Select the Move tool, then click and drag the layer. If moving an object on its own respective layer, select the layer, then click the object on the image and drag it to your desired location.



You can use the Arrow keys to move layers pixel by pixel.

Use the Snap to buttons in the Context bar to snap the image, text, or object to the left, right, top, bottom, center, and respective corners. You can also enable the **Show Grid** button in the Context bar to display a grid over your image. This is useful when making precise placements.

To ensure that your layer's aspect ratio is maintained while resizing, click the **Lock Aspect Ratio** checkbox in the Context bar and drag from the corners of your layer. The Lock Aspect Ratio checkbox is enabled by default.

To rotate images, text, or objects, hover your cursor over the rotation handle at the center of the image, text, or object until your cursor becomes a circular arrow. You can then drag your cursor clockwise or counterclockwise. You can also lock your rotation to each 45° angle by holding down the **Shift** key while rotating.



You can use the Move tool to move Guidelines. See [Adding Rulers and Guidelines](#).

To commit your move, press the **Commit** button in the Context bar. To discard your move and revert back to your image's original position, press the **Discard** button.

You can move a layer outside of the image area, commit it, then press the Move tool button again and move it back into the image area without a loss of image data. You can even retrieve your moved layer after saving your file as a .acdc, closing it, and re-opening it at a later date. However, there are some adjustments that will trigger the loss of image data if applied to the moved layer. These adjustments are called destructive operations.

The following are destructive operations:

- Repair tool
- Add Watermark (when added without checking the **Add watermark as new layer** checkbox)
- Add Border

- Add Vignette
- Add Tilt-Shift
- Rotate
- Crop
- Perspective Correction
- Lens Correction
- Resize
- Dodge and Burn
- Detail Brush
- Blur
- Flip
- The following Special Effects:

Bathroom Window	Granite	Scattered Tiles
Blinds	Grunge	Sheet Metal
Blue Steel	Jiggle	Shift
Bob Ross	Lomo	Slant
Bulge	Mirror	Solarize
Cartoon	Oil Paint	Somber
Childhood	Old	Stained Glass
Clouds	Orton	Sunspot
Collage	Outline	Swirl
Contours	Pixel Explosion	Topography
Crosshatch	Pixelate	Water
Dauber	Purple Haze	Water Drops
Dramatic	Radial Waves	Waves
Furry Edges	Rain	Weave
Gloom	Ripple	Wind

- Adjustments applied using their Auto button (may have mixed results)
- Selections
- Drawing tools
- Adding or modifying masks



Recording a non-destructive operation and playing it back will result in a destructive operation.



We recommend applying destructive operations to the layer you want to move prior to moving it.

The following are non-destructive operations that will not trigger the loss of image data if applied to the moved layer:



If you do not have enough space on your hard drive, even non-destructive operations will become destructive.

- Red Eye
- Watermark (when added with the **Add watermark as new layer** checkbox checked)
- Exposure
- Levels
- Auto Levels
- Tone Curves
- Dehaze
- White Balance
- Black and White
- Split Tone
- Skin Tune
- Sharpen
- Noise
- Clarity
- Light EQ
- Adjustment Layers
- Duplicate Layers
- Blend Modes
- Opacity
- Brushing in compatible layers
- Pixel Targeting
- Selections in compatible layers
- The following Special Effects:

Convolution	Edge Detect	Sepia
Photo Effect	Glowing Edges	Seventies
Posterize	Sobel	Crayon Drawing
Threshold	Gradient Map	Emboss
Colored Edges	Negative	Pencil Drawing



Resize Canvas

You can use the Resize Canvas tool to expand the size of your canvas to fit layered content or add solid backgrounds.

You can resize the canvas in the following ways:

- Drag the edges of your photo to expand the canvas to your desired size.
- Specify an exact size for the canvas using the fields in the Context bar. From the drop-down menu, select your desired units.
- Apply a ratio to constrain the canvas proportions. On the Context bar, choose a ratio from the **Aspect ratio not preserved** drop-down menu. You can define your own ratio using the **Custom** option. You can also delete ratios by selecting them in the drop-down and pressing the **Delete aspect ratio** button. 

In the Context bar, you can:

- Toggle the **Show Grid** button.
- Select a color for your canvas.
- Adjust transparency using the Opacity slider.

Resize your canvas as desired, then press the **Commit** button in the Context bar.

 When you resize the canvas on an image with multiple layers, the resizing is performed on the selected layer.

 You can use the Arrow keys to resize the canvas pixel by pixel.

	Text	See Adding Text as Layers .
	Rectangle	Drag over the image to create rectangle. Press Shift as you draw to create a square. To fill your shape with color, ensure that the Fill checkbox is selected.
	Ellipse	Drag over the image to create an ellipse. Press Shift as you draw to create a circle. To fill your shape with color, ensure that the Fill checkbox is selected.
	Line	Drag over the image to draw a straight line. Press Shift as you draw to create a vertical or horizontal line.
	Arrow	Drag over the image to create an arrow. Press Shift as you draw to create a vertical or horizontal arrow.
	Polygon	Click to set the corner points of a polygon, then double-click to connect the start and end points to complete the polygon. To fill your shape with color, ensure that the Fill checkbox is selected.
	Curve	Drag over the image then release. Next, move your mouse to create the curve and click to set.
	Brush	<p>Drag over the image to draw a free-flowing line. Left-click with your mouse to draw with the foreground color, and right-click to draw with the background color.</p> <p> Use the mouse wheel to adjust nib width or use the Nib Width slider at the top of the panel, near the Opacity slider.</p> <p> Use Shift + mouse wheel to adjust the amount of feathering or adjust the Feathering slider at the top of the panel, near the Opacity slider.</p> <p> You can undo and redo each brush stroke individually using the Undo and Redo buttons at the bottom of the Filter Menu.</p>
	Fill	Select the Fill button, and click on a pixel to shade every pixel of that same color value with your selected color. Your selected color is defined in the color box, as described below. Use the Threshold slider to adjust the number of pixels to be included or excluded. The Threshold slider sets how similar a pixel needs to be to the one you clicked in order to be included in the selection. Enable the Connected checkbox in the Context Bar to fill all of the connected pixels

		of the same color.
	Gradient	Use the Gradient tool to draw gradients across your image, or use the radial option to draw a gradient around an area. Select the Gradient tool, then configure your color, opacity and blend mode using the Context bar. For a radial gradient, select the Radial Gradient button in the Context bar. Then draw your gradient by dragging across the image. To discard your gradient, press the Discard button in the Context bar. Rearrange your gradient as desired, then press the Commit button in the Context bar. You can undo your commit by pressing Ctrl + Z , selecting Edit Undo , or by using the History Window .
	Eraser	Use the Eraser tool to erase pixels. To erase pixels on a layer to reveal the layer beneath, select the second layer or higher in the Layered Editor and drag your cursor over the pixels you would like to erase on the image. This tool modifies the alpha channel value of the pixels.
	Eye Dropper	Use the Eye Dropper tool to select colors from your images. Click a color in the image, which will appear in the color boxes at the top right of the panel. You can then apply this color using the drawing tools, such as the Brush tool. You can select the background color (bottom of the color boxes) by right-clicking on your image. You can select a color from outside of the application by left-clicking on your image and dragging your cursor to the color outside of the application. When you release your mouse button, the color will be selected and shown in the color boxes at the top right of the panel.

2. Select from one or more of the following options (**Note:** options vary depending on the tool selected):

	Option	Instructions
	Color	<p>Select a color by clicking the color boxes at the top right of the panel to open the Foreground or Background Color dialog, which displays a dialog of swatches to choose from. If you are drawing a solid shape, such as a rectangle, the top (foreground) color box defines the color for the outline of the shape. The bottom (background) color box defines the color that fills the center of the shape. If you want your shape to be a solid color, set both color boxes to match.</p> <p> You can reset to black and white by pressing the reset button directly next to the color boxes.</p> <p> You can also access the color palette on the fly by using the Color pane at the top of the Layered Editor.</p> 
	Nib Width	Drag the Nib Width slider to set the diameter of the brush measured in pixels. You can also adjust the nib width with the mouse wheel or

	by right-clicking on the image to reveal the Nib Width sliders.
Feathering	Select the Nib Width button to reveal the Feathering slider. Drag the Feathering slider to set the blurring radius of the brush. You can also right-click on the image to reveal the Nib Width and Feathering slider. Or, you can also hold down Shift while using the mouse wheel to adjust the feather radius, represented by the dotted circle.
Spacing	Drag the Spacing slider to set how far apart each brush segment will be. This slider specifies the percentage of the size of the nib width, which determines how smooth or choppy the strokes will appear. Use Auto Spacing: Select the Use Auto Spacing checkbox to allow ACDSee to choose a spacing percentage based on the nib width and feathering settings, which will create a smooth-looking stroke.
Fill	Select the Fill checkbox to fill the shapes you draw with the selected color.
Opacity	Drag the Opacity slider to specify the transparency of the brush strokes.
Blending	Select an option from the Blending drop-down menu to affect how your brush strokes blend with your image as you draw.

3. Drag over the image to draw.



You can right-click a slider to reset to the default value.

Adding a Watermark to an Image

You can use the Watermark tool to add a watermark to a photo. You can move the watermark to any position on the photo. You can also change the opacity of the watermark and blend the watermark into the image.

You can save your settings as a [preset](#) for future use.

You will need to create a watermark image before you can add the watermark to your photos.

To Add a Watermark to an Image:

1. Do one of the following:
 - Click **Filter | Add | Watermark**.
 - On the Toolbar, click the Add icon and choose **Watermark** from the menu.

A watermark displays in the center of the photo by default.

2. Click **Browse**, select your watermark, and then click **Open**.
3. Click and drag the watermark to reposition it anywhere on your image, or click **Center** to quickly position the watermark image in the center.
4. Drag the marquee handles to resize the watermark image.
5. Select **Maintain aspect ratio when resizing** if you want to resize the watermark image without distorting it.
6. Select **Apply Alpha Channel** to apply the alpha channel if it is present in the watermark.
(Only TIF and ICO watermark files can have an alpha channel.)
7. Select **Apply Transparency** to make a color in the watermark transparent.

The default color is white. You can enter the RGB value of the color. If you do not know the RGB value, move your mouse over the watermark preview thumbnail on the Edit panel, and then click on the color that you want to make transparent.

8. Select an option from the **Blending Mode** drop-down list to specify how you want the watermark to blend into the underlying image.
9. Drag the **Opacity** slider to specify the transparency of the watermark.
10. Select the **Add watermark as a new layer** checkbox if you would like your watermark to appear as a new layer in the Layered Editor.
11. Do one of the following:
 - Click **Apply** to add the watermark to your image, and keep the Watermark tool open.
 - Click **Done** to add the watermark to your image, and leave the tool.
 - Click **Cancel** to discard your changes and leave the tool.



You can right-click a slider to reset to the default value.

Adding Borders

You can use the Borders tool to add one or more borders and edge effects to your images. You can set the size of each side of the border, change the color and texture of the border or pick up a color from within the image by clicking on that color in the image.

There are libraries of edges and textures to get you started, but you can save your own textures or edges to the ACDSee folder so that they appear in the library for you to use.

You can also use Edge blur to soften the edges or blend the image into the background texture. You can also add a third dimension to your images using the Drop Shadow and Raised edge effects.

Using combinations of multiple borders and edge effects can add to the mood and atmosphere of a photo, emphasize contrast, and enhance color.

You can save your settings as a [preset](#) for future use.

To Add a Border to an Image:

1. Do one of the following:
 - Click **Filter | Add | Borders**.
 - On the Toolbar, click the Add icon and choose **Borders** from the menu.
2. Create the border by selecting its size, color, texture, edge, or edge effects as described in the Borders options below.
3. Do one of the following:
 - Click **Done** to apply your changes and close the Border tool.
 - Click **Cancel** to discard all changes and close the tool.
4. To add another border, restart the border tool and repeat these steps.

Border Options

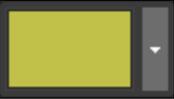
Eyedropper



Picks up the color beneath the cursor when you click on the image. The border changes to the clicked color, which also appears in the Color box on the Borders pane so that you can adjust it if you open the Color dialog box.



The eyedropper is not available when you are using a texture.

<p>Border</p>	<p>Size</p> <p>Sets the size of all the sides of the border simultaneously. Drag the slider left and right to adjust the width of the border. You can also type in a different number or use the up and down arrows to change the size of the border.</p> <p>The text below the Size field shows the final size of your image with the border added. The final size changes dynamically as you adjust the size of the border.</p>
	<p>Advanced size controls</p> <p>Opens a fly-out of advanced size controls. Use the sliders, up- and down-arrow keys, or type in a number, to set the size of each side of the border individually. For example, you can set the bottom border to be larger to include a space for copyright information. Click on the arrow beside the Size slider to open the advanced size controls menu.</p>
	<p>Color box</p> <p>Activates when you select the Color radio button.</p> <p>Do any of the following:</p> <ul style="list-style-type: none"> Click on a color in the image to make the border that color. The clicked color appears in the Color box. Click on the color in the middle of the Color box to open the Colors dialog, where you can adjust the color in multiple ways. Click the down-arrow beside the box and hover over the quick-color box until you find a color you like. When you click inside the quick color box, the picked color appears in the Color box and the border changes to the selected color.
	<p>Texture box</p> <p>Activates when you select the Texture radio button.</p> <p>Do any of the following:</p> <ul style="list-style-type: none"> Click the side arrow to open the texture library and view thumbnails of textures to select. Click the forward and back arrows to browse through the textures one at a time, without opening the library.
<p>Edge</p> 	<p>Straight</p> <p>Sets the edge of the border to be a straight line.</p> <p>Irregular</p> <p>Activates when you select the Irregular radio button.</p> <p>Do any of the following:</p> <ul style="list-style-type: none"> Click the side arrow beside the edge box to open the edge library and view thumbnails of edges to select. Click the forward and back arrows to

		browse through the edges one at a time, without opening the library.
	Edge blur	Blurs the edges of the edge of the image into the border. Drag the slider to the right to increase the blur, or to the left to decrease the blur.
Edge effects	Drop shadow	<p>Adds a drop shadow to the image that appears to lift it off the page. The drop shadow appears behind the image, between it and the border. You can adjust the depth of the blur on the edge of the shadow, and the transparency of the shadow, which affects how much of the border shows through the shadow. You can also change the direction of the imaginary source of light by dragging the glow on the Light Source ball.</p> <ul style="list-style-type: none"> • Blur: Adjusts the blur on the edge of the shadow when you drag the slider. • Opacity: Adjusts the transparency of the drop shadow when you drag the slider.
	Raised	<p>Adds a raised edge to the image that appears to raise it above the border, giving it a 3D look. The raised effect is applied to the image, between it and the border. You can change the direction of the imaginary source of light of the raised edge by dragging the glow on the Light Source ball. You can also adjust the size, strength, and color of the raised edge in the following ways:</p> <ul style="list-style-type: none"> • Size: Drag the slider to the right to increase the size of the raised edge so that it appears higher. The greater the size the more rounded the effect. • Strength: Drag the slider to the right to increase the 3D effect of the raised edge. • Colored: Select this option to apply the border color to the raised edge.
Light Source		Activates when you click either the Drop shadow or Raised checkboxes. Click and drag the glow on the ball to reposition the imaginary light source for the 3D effect of the Drop shadow or Raised edge effects.



You can right-click a slider to reset to the default value.

Adding Your Own Textures or Edges

It is possible to add custom textures and edges to the libraries in the Borders tool. If you make your own edges or textures, or own a collection from the Internet, you can add them to the texture and edge libraries. You can also delete existing files from the libraries to make room for others.

The textures or edges have to be in the following file formats with these extensions:

- BMP
- EMF
- GIF
- JPG

- GIF
- PNG
- TIF

Textures

As the textures are tiled, it is important to use an image that can be seamlessly repeated. The files are used at their full resolution, not scaled up or down. For example, if your texture image is 100 x 100 pixels and you are creating a bordered image that is 1000 x 1000 pixels, then your texture file will be tiled 10 times. If you use a texture file that is 1000 x 1000 pixels, then there would just be the one texture tile for the whole border.

To Add Your Own Textures to the Texture Library:

1. In Photo Editor, close the Borders tool if it is open.
2. Copy and paste your texture files into this folder:
C:\Program Files\Common Files\ACD Systems\borders\textures
3. Do one of the following:
 - Click **Filter | Add | Borders**.
 - On the Toolbar, click the Add icon and choose **Borders** from the menu.
4. Select the Texture radio button and then click the arrow on the right side of the texture box to open the texture library.
Thumbnails of the textures display for you to select.

Edges

Edge files are grayscale images that are resized to fit the image. The image file shows through any areas in the edge file that are white, and does not show through any black areas. Pixels that are tones of gray in the edge file show through with relative opacity depending on how close the pixels are to black or white (in other words, the darker the gray pixel, the less it shows through).

To Add Your Own Edges to the Edges Library:

1. In Photo Editor, close the Borders tool if it is open.
2. Copy and paste your edge files into this folder:
C:\Program Files\Common Files\ACD Systems\borders\edges
3. Do one of the following:
 - Click **Filter | Add | Borders**.
 - On the Toolbar, click the Add icon and choose **Borders** from the menu.
4. Select the **Irregular** radio button and then click the arrow on the right side of the edge box to open the edge library.
Thumbnails of the edges display for you to select.



If you open an image with borders already applied, another border will be applied to the image.

Adding a Vignette

You can use the Vignette effect to add a frame around a subject, such as a person or a bouquet of flowers. You can change the focal point in the portrait. You can also control the appearance of the border.

You can save your settings as a [preset](#) for future use.

To Apply a Vignette Effect:

1. Do one of the following:
 - Click **Filter | Add | Vignette**.
 - On the Toolbar, click the Add icon and choose **Vignette** from the menu.
2. Set the options as described below.
3. Do one of the following:
 - Click **Done** to apply your changes and close the tab.
 - Click **Cancel** to discard all changes and close the tab.

Vignette Options

Horizontal	Specifies the focal point of the portrait on the horizontal axis. A value of 500 places the center in the middle of the photo.
Vertical	Specifies the focal point of the portrait on the vertical axis. A value of 500 places the center in the middle of the photo.
Clear zone	Specifies the size of the clear area around the focal point in the portrait. Drag the slider to the left to reduce the size of the clear area. Drag the slider to the right to increase the size of the clear area.
Transition zone	Specifies the width of the transition area between the clear zone and the frame. Drag the slider to the left to narrow the transition area. Drag the slider to the right to widen the transition area.
Stretch	Stretches the vignette horizontally to make the shape elliptical rather than round.
Shape	Specifies the shape of the frame: <ul style="list-style-type: none"> • Round: Select Round if you want the frame to be round. • Rectangular: Select Rectangular if you want the frame to be square.
Show outline	Select Show outline if you want to display an outline that shows the outside edge of the clear zone and the inside edge of the frame.
Frame	Applies the following special effects to the vignette frame area around the focal point: <ul style="list-style-type: none"> • Color: Changes the color of the frame area to the color you select in the color picker. • Saturation: Removes color from the people or objects in the vignette frame so they are gray scale. • Blur: Blurs the vignette frame area. • Clouds: Applies a Clouds effect to the frame area. • Edges: Applies an Edges effect by tracing the lines and details of people or objects with neon colors. • Radial Waves: Creates the appearance of waves radiating from the focal point into the frame area. • Radial Blur: Creates a Radial Blur that rotates and stretches the frame area.

- **Zoom Blur:** Applies a Zoom Blur to the frame area.
- **Crayon Edges:** Applies the Crayon Edges effect by tracing the lines and details around people or objects with crayon.
- **Dauber:** Creates the impression that the people or objects around the focal point were painted with a brush.
- **Pixelate:** Applies a pixel effect to the frame.
- **Old:** Applies an aging effect to the frame to make it look like an old photo.
- **Glowing Edges:** Applies glowing edges to all the strong lines in the frame area.
- **Ripple:** Adds ripples to the frame so that it looks like liquid ripples moving outwards from the focal area.

Frame settings

The settings that display below the Frame drop-down list change depending on the frame you select. For example, if you select **Color** in the **Frame** drop-down list, a color picker displays so that you can select the color for the vignette. Similarly, if you select **Blur** in the **Frame** drop-down list, a slider appears that you can use to change the amount of blur surrounding the photo. For some choices, like Edges, there are no settings to apply.



You can right-click a slider to reset to the default value.

Adding a Grain Effect

You can use the Grain effect to give your images a stylized look, like old film grain. The Grain tool can also be used in combination with other effects to achieve a general vintage look.

You can save your settings as a [preset](#) for future use.

To Apply a Grain Effect:

1. Do one of the following:
 - Click **Filter | Add | Grain**.
 - On the Toolbar, click the Add icon and choose **Grain** from the menu.
2. Set the options as described below.
3. Do one of the following:
 - Click **Done** to apply your changes and close the tab.
 - Click **Cancel** to discard all changes and close the tab.

Grain Options

Amount	Specifies the strength of the grain.
Smoothing	Specifies the smoothness of the grain.
Size	Specifies the size of the grain.



You can right-click a slider to reset to the default value.



You can use the [Edit Brush](#)



to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Adding a Tilt-Shift Effect

You can use the Tilt-Shift effect to create emphasis on specific subjects in your photos, or make your photos look like miniature landscapes.

To Use the Tilt-Shift Effect:

- Do one of the following:
 - Click **Filter | Add | Tilt-Shift**.
 - On the Toolbar, click the Add icon and choose **Tilt-Shift** from the menu.
- On the Tilt-Shift panel, set the options as described below.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Tilt-Shift Options

Use the guides on the image to place the effect. The inside boxes represent the points where the focus is transitioning to blur. Complete blur occurs at the outside boxes. Move the boxes to define where the effect will begin or end. Hold down the **Shift** key while positioning the effect to lock to the nearest 45° angle, for straightness.

Blurring	Select the type of blur you want from the Blur drop-down menu. <ul style="list-style-type: none"> Lens Blur Gaussian Blur See Blur Types for more information.
Amount	Specifies the amount of blur applied.
Bokeh Frequency	Specifies how often the bokeh shapes occur.
Bokeh Brightness	Specifies how bright the bokeh shapes appear.
Bokeh Sides	Defines the number of sides the bokeh shape will have.
Saturation	Drag the slider to the right to intensify the effect.



You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

About Special Effect Filters

You can use filters to add unique effects to your images. Photo Editor includes more than 40 special effect filters, such as Crosshatch, Pencil Drawing, and Solarize.

To Access the Special Effects Filters:

In the Add group, click **Special Effect**.

For more information about each effect, click the **Help** button to view a Help file page specific to that effect.

Applying a Bathroom Window Effect

The Bathroom Window effect divides your images into bars, transforming them so they resemble the view through privacy glass often found in bathrooms. You can select or change the Bathroom Window options to apply this effect to your image.

You can save your settings as a [preset](#) for future use.

To Apply a Bathroom Window Effect:

- Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
- Click **Bathroom Window**.
- Drag the **Bar width** slider to set the thickness of the bars. Thinner bars result in a more distorted image.
- In the Bar direction area, select one of the following to specify the orientation of the bars in your image:
 - Vertical**
 - Horizontal**
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.



You can right-click a slider to reset to the default value.



You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Blinds Effect

Use the Blinds effect to divide your image into bars that look like venetian or vertical window blinds. You can customize the characteristics of the blinds you would like added to your image.

You can save your settings as a [preset](#) for future use.

To Apply a Blinds Effect:

- Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
- Click **Blinds**.
- On the Blinds panel, set the options as described below.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Blinds Options

Width	Specifies the width of the blinds. Type a number from 1 to 1000 or drag the slider to adjust the width of each blind. As the value increases, the width of the blind also increases.
Opacity	Specifies the opacity of the blinds. Type a number from 1 to 99 or drag the slider to adjust the opacity of the blinds. The higher the opacity, the more the image is obscured.
Angle	Specifies the angle of the blinds. Type a number from 1 to 360 or drag the arrow to adjust the angle.
Blind color	Specifies the color of the blinds.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Blue Steel Effect

You can use the Blue Steel effect to give your images a stylish blue tint.

To Apply the Blue Steel Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Blue Steel**.
3. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Bob Ross Effect

You can use the Bob Ross effect to give your images a painted look.

You can save your settings as a [preset](#) for future use.

To Give Your Photos a Bob Ross Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Bob Ross**.
3. On the Bob Ross panel, set the options as described in the table below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Bob Ross Options

Brush size	Drag the Brush size slider to specify the width of the brush strokes in the effect. The higher value, the wider the brush stroke.
Coverage	Drag the Coverage slider to specify the amount or density of paint on the "canvas" of your photo.
Paint thickness	Drag the Paint thickness slider to specify how three dimensional the paint appears.
Colorfulness	Drag the Colorfulness slider to specify the amount of color in your image.

Background color	Image	Enable the Image checkbox to use the color in the image as the background color behind the brush strokes added to the photo. To use a different color for the background, disable the Image checkbox and select a new color from the color drop-down menu.
	Randomize	Indicates the random placement of the paint daubs. When you apply the Bob Ross effect to an image, Photo Editor places the daubs randomly. This makes the paint daubs different every time you apply the filter. To generate a new random placement of the paint daubs, click Randomize.

 You can right-click a slider to reset to the default value.

 You can use the **Edit Brush**  to paint this effect onto specific areas of your image.

 You can use the **Gradient tool**  to transition this effect across specific areas of your image.

 You can use the **Radial Gradient tool**  to apply effects around, or directly to, a center point.

Applying a Bulge Effect

Use the Bulge effect to stretch or shrink areas of your images horizontally and vertically. You can customize the strength, radius and position of the distortion.

You can save your settings as a [preset](#) for future use.

To Apply a Bulge Effect:

- Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
- Click **Bulge**.
- On the Bulge panel, set the options as described below.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Bulge and Shrink Options

Horizontal position	Specifies the center of the distortion along the horizontal axis. A lower value moves the distortion towards the left side of the image, while a higher value moves it towards the right side of the image.
Vertical position	Specifies the center of the distortion along the vertical axis. A lower value moves the distortion towards the bottom of the image, while a higher value moves it towards the top of the image.
Radius	Specifies the radius of the distorted area. A lower value decreases the radius of the distortion, while a higher value increases the radius of the distortion.

Strength	Specifies the strength of the distortion. A negative value shrinks the center of the distortion, while a higher value bulges the distortion.
Background color	Specifies the background color for the filtered image. Select the Image checkbox to use the original image color, or click the color picker to select a different color.
Bulge direction	Specifies the direction of the distortion. Select one or both of the following options: <ul style="list-style-type: none"> • Horizontal: Moves the distortion horizontally. • Vertical: Moves the distortion vertically.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Cartoon Effect

You can use the Cartoon Effect to give your images a sketched appearance.

You can save your settings as a [preset](#) for future use.

To Apply a Cartoon Effect:

- Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
- Click **Cartoon**.
- On the Cartoon panel, set the options as described below.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Cartoon Options

Shading strength	Specifies the strength of the shading in the image. The higher the setting, the more intense the shading that is applied to the image.
Shading radius	Specifies how spread out the shading is.
Shading threshold	Specifies how sharp an edge must be in the image before shading is applied. If you specify a higher value, more edges in the photo will be shaded.
Smoothness	Controls how smooth the transitions between similar colors are.
Outline detail	Specifies how much the details are outlined in black.

Outline strength	Specifies how strong the black outlines are applied.	
Artifact Suppression	Remove small details	Prevents small details from being outlined in black, allowing the image to appear more cartoon-like.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Childhood Effect

You can use the Childhood effect to give your images a dreamy, nostalgic look.

To Apply the Childhood Effect:

- Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
- Click **Childhood**.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Clouds Effect

You can use the Clouds effect to make graphical content out of your images, such as backgrounds and more.

You can save your settings as a [preset](#) for future use.

To Apply Clouds to a Photo:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Clouds**.
3. On the Clouds panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Clouds Options

Size	Specifies the size of the clouds. Drag the slider to the right to increase the size.
Detail	Specifies how fine the detail is. Type a number from 0 to 10 or drag the slider to adjust the details of the clouds.
Randomize	Indicates the random placement of the clouds. When you apply the Clouds effect to an image, Photo Editor places the fragments randomly. This makes the effect different every time you apply the filter. You can define a specific random seed to generate identical fragment patterns. To generate a new random seed, click Randomize .

 You can right-click a slider to reset to the default value.

 You can use the **Edit Brush**  to paint this effect onto specific areas of your image.

 You can use the **Gradient tool**  to transition this effect across specific areas of your image.

 You can use the **Radial Gradient tool**  to apply effects around, or directly to, a center point.

Applying a Collage Effect

You can use the Collage effect to creatively break up a photo into a number of photos.

You can save your settings as a [preset](#) for future use.

To Use the Collage Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Collage**.
3. Drag the sliders to set the Number and Size of the photos.

4. Select a background color by clicking the drop-down arrow to display gradients of colors, or click the color box to display a dialog of swatches to choose from.
5. If you would like to reshuffle the photos, click **Randomize**.
6. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.
7. Click **Exit** to leave Special Effects.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Colored Edges Effect

You can use the Colored Edges effect to trace the lines and details of people or objects in your images.

You can save your settings as a [preset](#) for future use.

To Apply a Colored Edges Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Colored Edges**.
3. On the Colored Edges panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Colored Edges Options

Intensity	Specifies the amount of color added to the edges within the image. The higher the setting, the thicker the color that is applied to the image.
Edge color	Specifies the color of the edges.
Edge detection	Specifies the edge detection algorithm. The algorithm controls the formula used to detect the edges and the direction of the edge indicators.
Blurring	Blurs the edges in the image. Select the Use blurring checkbox, and then select a blur setting to determine how much blur is applied.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Contours Effect

You can use the Contours effect to draw contour lines on your image to create a cartoon effect. Select or change the rounding, line frequency, color and strength setting to apply to your image.

You can save your settings as a [preset](#) for future use.

To Apply a Contours Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Contours**.
3. On the Contours panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Contours Options

Rounding	Specifies the amount of curve in the contour lines. The higher the value, the rounder the lines.
Line frequency	Specifies the amount of space between the contour lines. The higher the value, the closer the lines move together.
Strength	Specifies the strength of the line. The higher the value, the darker the line.
Line color	Specifies the color of the contour lines.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Crayon Drawing Effect

You can use the Crayon Drawing effect to give your photos the appearance of a crayon drawing.

To Use the Crayon Drawing Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Crayon Drawing**.
3. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.



You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Crosshatch Effect

You can use the Crosshatch effect to add crosshatching to an image.

To Use the Crosshatch Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Crosshatch**.
3. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.



You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Dauber Effect

You can use the Dauber effect to make your images look like they were painted with a paint dauber. Select or change the settings of the effect you want applied to your image, such as intensity, frequency and more.

You can save your settings as a [preset](#) for future use.

To Use the Dauber Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Dauber**.
3. On the Dauber panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Dauber Options

Intensity	Specifies the amount of color applied with each daub.
Frequency	Specifies the number of daubs added to the image.
Background color	Specifies the background color of the filtered image. Select the Image checkbox to use the original image colors or click the color picker to select a different color.
Randomize	Indicates the random placement of the paint daubs. When you apply the Dauber effect to an image, Photo Editor places the daubs randomly. This makes the paint daubs different every time you apply the filter. You can define a specific random seed to generate identical daubs. To generate a new random seed, click Randomize .



You can right-click a slider to reset to the default value.



You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Dramatic Effect

You can use the Dramatic effect to make your images look dramatic and moody by drastically changing the contrast in specific areas.

You can save your settings as a [preset](#) for future use.

To Apply a Dramatic Effect:

- Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
- Click **Dramatic**.
- On the Dramatic panel, set the options as described below.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Dramatic Options

Strength	Specifies the strength of the contrast being applied.
Spread	Specifies how far the effect spreads over the details in the photo.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying an Edge Detect Effect

You can use the Edge Detect effect to create a highlighted outline of your image. After creating a black image, the effect uses colored lines to outline the detail of an image where significant color differences exist. Greater differences between colors in the original image produce brighter outline colors. (The Sobel effect is similar to the Edge Detect effect, but produces sharper and brighter outlines.)

To Use the Edge Detect Effect:

- Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
- Click **Edge Detect**.

3. Do one of the following:

- Click **Done** to accept your changes and close the panel.
- Click **Cancel** to discard your changes and close the panel.



You can use the [Edit Brush](#)



to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)



to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)



to apply effects around, or directly to, a center point.

Applying an Emboss Effect

You can use the Emboss effect to add a grayscale relief to an image.

You can save your settings as a [preset](#) for future use.

To Emboss an Image:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Emboss**.
3. On the Emboss panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Emboss Options

Elevation	Specifies the light source's elevation on the image. Lower values produce more shadows and a darker image. Higher values produce fewer shadows and a lighter image.
Weight	Specifies the amount of relief added to the image. Higher values increase the relief depth.
Azimuth	Specifies the angle of shadows that extend from the edges of image details. A value of 0 adds shadows to the left side, while a value of 180 adds shadows to the right side.



You can right-click a slider to reset to the default value.



You can use the [Edit Brush](#)



to paint this effect onto specific areas of your image.



You can use the **Gradient tool**  to transition this effect across specific areas of your image.



You can use the **Radial Gradient tool**  to apply effects around, or directly to, a center point.

Applying a Furry Edges Effect

You can use the Furry Edges effect to add fur and bristles to the lines and details of people or objects in your image.

You can save your settings as a [preset](#) for future use.

To Use the Furry Edges Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Furry Edges**.
3. On the Furry Edges panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Furry Edges Options

Frequency	Specifies how much fur is added to the image. The higher the setting, the more dense the fur that is applied to the image.
Threshold	Specifies how sharp an edge must be before fur is applied to it. As the value decreases, the area of the image that fur is added to increases.
Fur length	Specifies the length of each strand of fur. As the value increases, the length of each fur strand also increases.
Variance	Specifies how much of the fur grows in the direction indicated by the Hair direction setting. The higher the value, the more random the fur direction will be.
Hair direction	Specifies the general direction in which fur appears to grow.
Edge detection	Specifies the edge detection algorithm. The algorithm controls the formula used to detect the edges and the direction of the edge indicators.
Background color	Specifies the background color of the filtered image. Select the Image checkbox to use the original image colors, or click the color picker to select a different color.
Fur color	Specifies the color of the fur. Select the Image checkbox to use the original image colors, or click the color picker to select a different color.
Randomize	Indicates the random placement of the fur strands. When you apply the Furry Edges effect to an image, Photo Editor places the fur randomly. This makes the fur strands different every time you apply the filter. You can define a specific random seed to generate identical fur patterns. To generate a new random seed, click Randomize .



You can right-click a slider to reset to the default value.



You can use the [Edit Brush](#)



to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)



to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)



to apply effects around, or directly to, a center point.

Applying a Gloom Effect

You can use the Gloom effect to give your images a dark, gloomy appearance.

You can save your settings as a [preset](#) for future use.

To Apply a Gloom Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Gloom**.
3. On the Gloom panel, drag the **Color** slider to add a color tint to the image.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.



You can right-click a slider to reset to the default value.



You can use the [Edit Brush](#)



to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)



to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)



to apply effects around, or directly to, a center point.

Applying a Glowing Edges Effect

You can use the Glowing Edges effect to add color to the lines and details of people or objects in your images. The colored lines and details appear to glow.

You can save your settings as a [preset](#) for future use.

To Apply a Glowing Edges Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Glowing Edges**.
3. On the Glowing Edges panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Glowing Edges Options

Intensity	Specifies the amount of color added to the edges within the image. The higher the setting, the more intense the color that is applied to the image.
Color	Specifies the color of the edges.

 You can right-click a slider to reset to the default value.

 You can use the **Edit Brush**  to paint this effect onto specific areas of your image.

 You can use the **Gradient tool**  to transition this effect across specific areas of your image.

 You can use the **Radial Gradient tool**  to apply effects around, or directly to, a center point.

Applying the Gradient Map Effect

You can use the Gradient Map effect to add colors to the dark and light parts of your images. The Gradient Map effect maps shadows to one color, and highlights to another based on the lightness value of each pixel. You can give the darker parts of your image a completely different color from the lighter parts.

You can save your settings as a [preset](#) for future use.

To Apply a Gradient Map Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Gradient Map**.
3. On the Gradient Map panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Gradient Map Options

Dark	Specify the color to be added to the dark parts of your image.
Light	Specifies the color to be added to the light parts of your image.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Granite Effect

You can use the Granite effect to give your images the appearance of being painted on a rock wall. You can save your settings as a [preset](#) for future use.

To Use the Granite Effect:

- Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
- Click **Granite**.
- On the Granite panel, set the options as described below.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Granite Options

Light Angle	Specifies the direction from which an imaginary light source is shining on the image. Drag the arrow to adjust the angle. Different light angles will change the highlights and shadows in the peaks and valleys on the rock.
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 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Grunge Effect

You can use the Grunge effect to give your images a moody, dark look. You can use the Color slider to tint the image a variety of colors.

You can save your settings as a [preset](#) for future use.

To Apply a Grunge Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Grunge**.
3. On the Grunge panel, drag the **Color** slider to specify a color tint. When the Color slider is set to 0, no tint has been added.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Jiggle Effect

Use the Jiggle effect to add jiggly distortions to your image. You can customize the characteristics of the distortions you would like added to your image. Some distortions will change the shape of the outside edges of the image, revealing a transparent background.

You can save your settings as a [preset](#) for future use.

To Apply a Jiggle Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Jiggle**.
3. On the Jiggle panel, set the options as described below.

4. Do one of the following:

- Click **Done** to accept your changes and close the panel.
- Click **Cancel** to discard your changes and close the panel.

Jiggle Options

Size	Specifies the size of the jiggle distortion. Type a number from 1 to 100 or drag the slider to adjust the width of the distortions. As the value increases, the width of the wave also increases.
Detail	Specifies how jagged the distortion becomes. Type a number from 1 to 10 or drag the slider to adjust the detail.
Strength	Specifies the intensity of the distortion. Type a number from 1 to 100 or drag the slider to adjust the strength.
Randomize	Indicates the random placement of the distortions. When you apply the Jiggle effect to an image, Photo Editor places the fragments randomly. This makes the effect different every time you apply the filter. You can define a specific random seed to generate identical fragment patterns. To generate a new random seed, click Randomize .

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Lomo Effect

Simulate the retro-effects of a lomo camera. Photos taken with a lomo camera are high contrast, with a golden hue and a noticeable vignette.

You can save your settings as a [preset](#) for future use.

To Use the Lomo Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Lomo**.
3. Drag the Color Distortion slider to the right to increase the color distortion.
4. Drag the Vignette Strength slider to the right to increase the vignette strength.

5. Do one of the following:

- Click **Done** to accept your changes and close the panel.
- Click **Cancel** to discard your changes and close the panel.

6. Click **Exit** to leave Special Effects.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Mirror Effect

You can use the Mirror effect to reflect an image along the horizontal or vertical axis. Select or change the Mirror options to apply mirroring to your image, including mirror axis and direction.

You can save your settings as a [preset](#) for future use.

To Apply a Mirror Effect:

1. Do one of the following:

- Click **Filter | Add | Special Effect**.
- On the Toolbar, click the Add icon and choose **Special Effect** from the menu.

2. Click **Mirror**.

3. On the Mirror panel, in the Mirror direction area, select one of the following options to indicate which direction you want to mirror the image:

- **Horizontal**
- **Vertical**

4. Drag the **Mirror axis** slider to adjust the position of the mirror. A value of 500 places the mirror in the center of the image.

5. Do one of the following:

- Click **Done** to accept your changes and close the panel.
- Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.



You can use the **Gradient tool**  to transition this effect across specific areas of your image.



You can use the **Radial Gradient tool**  to apply effects around, or directly to, a center point.

Applying a Negative Effect

You can use the Negative effect to create a negative of your image. You can also apply the Negative filter to a negative scanned from a roll of film to produce a positive image.

To Create an Image Negative:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Negative**.
3. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.



You can use the **Edit Brush**  to paint this effect onto specific areas of your image.



You can use the **Gradient tool**  to transition this effect across specific areas of your image.



You can use the **Radial Gradient tool**  to apply effects around, or directly to, a center point.

Applying an Oil Paint Effect

You can use the Oil Paint effect to give your images a painted appearance.

You can save your settings as a [preset](#) for future use.

To Create an Oil Painting from a Photo:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Oil Paint**.
3. On the Oil Paint panel, drag the **Brush width** slider to specify the width of the brush strokes in the effect. The higher the value, the wider the brush stroke.
4. Drag the **Variance** slider to specify the color variance in each brush stroke. Higher values increase the number of colors used in each stroke.

5. Drag the **Vibrance** slider to adjust the intensity of the colors in the image.
6. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

 You can use the **Edit Brush**  to paint this effect onto specific areas of your image.

 You can use the **Gradient tool**  to transition this effect across specific areas of your image.

 You can use the **Radial Gradient tool**  to apply effects around, or directly to, a center point.

Applying the Old Effect

You can use the Old effect to give your images an antique look. (The Old effect is similar to the Sepia effect, but produces a more realistic appearance of age.)

You can save your settings as a [preset](#) for future use.

To Apply the Old Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Old**.
3. On the Old panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Old Options

Age	Specifies the intensity or degree of the effect. (The numbers do not correspond to how old the photo should appear.)
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 You can right-click a slider to reset to the default value.

 You can use the **Edit Brush**  to paint this effect onto specific areas of your image.

 You can use the **Gradient tool**  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying the Orton Effect

Create beautiful impressionistic images with the Orton effect. The Orton effect mimics a darkroom technique created by sandwiching two images together, one of which is slightly out of focus, and both of which are slightly overexposed.

You can save your settings as a [preset](#) for future use.

To Use the Orton Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Orton**.
3. Drag the Blur, Contrast, and Brightness sliders to adjust each effect.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.
5. Click **Exit** to leave Special Effects.



You can right-click a slider to reset to the default value.



You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying an Outline Effect

The Outline effect is similar to the Edge Detect effect. You can use the Outline effect to create a highlighted outline of your image. However, with the Outline effect you can control the thickness of the outline, whether an edge is outlined or not, and the color that displays behind the outlined image.

You can save your settings as a [preset](#) for future use.

To Use the Outline Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.

2. Click **Outline**.
3. On the Outline panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Outline Options

Line width	Specifies the width of the outline in the effect. The higher the value, the wider the outline.
Threshold	Specifies how sharp an edge must be in order to be outlined. If you specify a higher value, more edges in the photo will be outlined.
Background color	Specifies the background color of the filtered image. Click the color picker to select a different color.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Pencil Drawing Effect

You can use the Pencil Drawing effect to create a pencil drawing from your images.

To Create a Pencil Drawing from an Image:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Pencil Drawing**.
3. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Photo Effect

You can use the Photo Effect to apply a variety of filters to your images.

You can save your settings as a [preset](#) for future use.

To Apply a Photo Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Photo Effect**.
3. On the Photo Effect panel, select an option from the Filter Type drop-down menu.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.



You can right-click a slider to reset to the default value.



You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Pixel Explosion Effect

You can use the Pixel Explosion effect to explode pixels from a center point in your images. Select or change the Pixel Explosion settings, such as intensity and direction, to apply this effect to your image.

You can save your settings as a [preset](#) for future use.

To Use the Pixel Explosion Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Pixel Explosion**.

3. On the Pixel Explosion panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Pixel Explosion Options

Horizontal center	Specifies the center point of the explosion on the horizontal axis. A value of 500 places the explosion at the middle of the image.
Vertical center	Specifies the center point of the explosion on the vertical axis. A value of 500 places the explosion at the middle of the image.
Intensity	Specifies the intensity of the explosion. A higher value creates a larger, more brilliant spread of the pixels in the image.
Explosion direction	Specifies the direction of the explosion. Select one or both of the following: <ul style="list-style-type: none"> • Explode horizontally: Explodes the pixels towards the right and left sides of the image. • Explode vertically: Explodes the pixels towards the top and bottom of the image.
Randomize	Indicates the random placement of the pixels. When you apply the Pixel Explosion effect to an image, Photo Editor places the pixels randomly. This makes the pixels different every time you apply the filter. You can define a specific random seed to generate identical pixel patterns. To generate a new random seed, click Randomize .

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Pixelate Effect

A pixel is the smallest piece of a digital image, arranged in rows and columns. When you reduce the resolution of your image, the size of the pixel increases and produces blurring. You can use the Pixelate effect to increase the size of the pixels in your image.

You can save your settings as a [preset](#) for future use.

To Apply a Pixelate Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.

2. Click **Pixelate**.
3. On the Pixelate panel, drag the **Width** and **Height** sliders to set the size of the pixels in your image. Select the **Square** checkbox to make the width and height equal.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Posterize Effect

You can use the Posterize effect to reduce the number of brightness levels in your image. Select or change the Posterize options to apply this effect to your image.

You can save your settings as a [preset](#) for future use.

To Apply a Posterize Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Posterize**.
3. On the Posterize panel, drag the **Brightness levels** slider to adjust the variance of colors in the image. The lower the value, the fewer colors used in the image.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Purple Haze Effect

You can use the Purple Haze effect to give your image a hyper-retro, purple tint.

To Apply the Purple Haze Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Purple Haze**.
3. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.



You can right-click a slider to reset to the default value.



You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Radial Waves Effect

You can use the Radial Waves effect to display waves radiating from a center point in the photo. You can change the center point in the photo and you can also control the appearance of the waves.

You can save your settings as a [preset](#) for future use.

To Apply a Radial Waves Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Radial Waves**.
3. On the Radial waves panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Radial Waves Options

Horizontal position	Specifies the center of the waves on the horizontal axis. A value of 500 places the waves in the middle of the image.
Vertical position	Specifies the center of the waves on the vertical axis. A value of 500 places the waves in the middle of the image.
Amplitude	Specifies the depth and height of each wave.
Wavelength	Specifies the amount of space between waves.
Light strength	Specifies the amount of light contrast between the top and bottom of each wave.
Background color	Specifies the background color of the filtered image. Select the Image checkbox to use the original image colors, or click the color picker to select a different color.
Wave direction	Specifies the direction of the waves. Select one, or both, of the following: <ul style="list-style-type: none"> • Wave horizontally: Makes the waves move towards the right and left sides of the image. • Wave vertically: Makes the waves move towards the top and bottom of the image.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Rain Effect

You can use the Rain effect to make it look like it was raining when you took a photo. Control the amount, the angle, strength and other characteristics of the rain.

You can save your settings as a [preset](#) for future use.

To Apply Rain to a Photo:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Rain**.
3. On the Rain panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Rain Options

Strength	Specifies the length of the rain drops. Drag the slider to the right to increase the length.
Opacity	Specifies the opacity of the rain drops. Type a number from 0 to 100 or drag the slider to adjust the opacity of the rain drops. The higher the opacity, the more the image is obscured.
Amount	Specifies the number of rain drops.
Angle variance	Specifies the angle of the rain drops. Type a number from 0 to 50 or drag the arrow to adjust the angle.
Strength variance	Specifies how much variety there should be in the length of the rain drops. Drag the slider to the left if you want rain drops to have a similar length. Drag the slider to the right if you want to vary the length of rain drops. If you vary the length of rain drops they look natural.
Background blur	Specifies the amount of blur in the photo. Heavy rain will block your vision. Use this option to blur the photo so the rain effect looks natural.
Angle	Specifies the angle at which the rain drops are falling.
Color	Specifies the color of the rain drops.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Ripple Effect

You can use the Ripple effect to divide your images into concentric circles that resembles what you see when you drop a pebble into water. Select or change the Ripple settings to apply to your image, such as position, strength and more.

You can save your settings as a [preset](#) for future use.

To Apply a Ripple Effect:

- Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
- Click **Ripple**.
- On the Ripple panel, set the options as described below.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Ripple Options

Horizontal position	Specifies the center of the ripples on the horizontal axis. A value of 500 places the ripples in the middle of the image.
Vertical position	Specifies the center of the ripples on the vertical axis. A value of 500 places the ripples in the middle of the image.
Amplitude	Specifies the depth and height of each ripple.
Wavelength	Specifies the amount of space between ripples.
Light strength	Specifies the amount of light contrast between the top and bottom of each ripple.
Background color	Specifies the background color of the filtered image. Select the Image checkbox to use the original image colors, or click the color picker to select a different color.
Ripple direction	Specifies the direction of the ripples. Select one or both of the following: <ul style="list-style-type: none"> • Ripple vertically: Makes the ripples move towards the top and bottom of the image. • Ripple horizontally: Makes the ripples move towards the right and left sides of the image.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Scattered Tiles Effect

You can use the Scattered Tiles effect to divide your images into rectangular tiles, and scatter and stack the tiles. Select or change the Scattered Tiles options to apply this effect to your image.

You can save your settings as a [preset](#) for future use.

To Apply a Scattered Tiles Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Scattered Tiles**.
3. On the Scattered Tiles panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Scattered Tiles Options

Tile size	Specifies the size of the tiles.
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Scatter amount	Specifies how much the tiles will move from their original positions.
Background color	Specifies the color of the background. Click the color picker to select a different color.
Randomize	Indicates the random placement of the tiles. When you apply the Scattered Tiles effect to an image, Photo Editor places the tiles randomly. This makes the effect different every time you apply the filter. You can define a specific random seed to generate identical tile patterns. To generate a new random seed, click Randomize .

 You can right-click a slider to reset to the default value.

 You can use the **Edit Brush**  to paint this effect onto specific areas of your image.

 You can use the **Gradient tool**  to transition this effect across specific areas of your image.

 You can use the **Radial Gradient tool**  to apply effects around, or directly to, a center point.

Applying a Sepia Effect

You can use the Sepia effect to give your images an antique look. (The Old effect is similar to the Sepia effect, but produces a more realistic appearance of age.)

You can save your settings as a [preset](#) for future use.

To Add a Sepia Tone to an Image:

- Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
- Click **Sepia**.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

 You can use the **Edit Brush**  to paint this effect onto specific areas of your image.

 You can use the **Gradient tool**  to transition this effect across specific areas of your image.

 You can use the **Radial Gradient tool**  to apply effects around, or directly to, a center point.

Applying a Seventies Effect

You can use the Seventies effect to give your images a retro look.

To Apply the Seventies Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Seventies**.
3. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Sheet Metal Effect

You can use the Sheet Metal effect to turn your images into sheet metal impressions.

You can save your settings as a [preset](#) for future use.

To Apply a Sheet Metal Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Sheet Metal**.
3. On the Sheet Metal panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Sheet Metal Options

Rounding	Specifies the amount of curve in the edges of the impressions.
Detail	Specifies the amount of detail in the impression.

Angle	Specifies the angle of the grain in the sheet metal.
Metal color	Specifies the color of the sheet metal.
Direction	Specifies the direction in which the sheet metal was manipulated. Select one of the following: <ul style="list-style-type: none"> • Indented: Stamps the metal from the top side of the image. • Pushed out: Stamps the metal from underneath the image.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Shift Effect

You can use the Shift effect to divide your images into bars and shift them in random directions.

You can save your settings as a [preset](#) for future use.

To Apply a Shift Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Shift**.
3. On the Shift panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Shift Options

Strength	Specifies the amount of shift between the bars.
Width	Specifies the width of each bar.
Angle	Specifies the angle of the bars.
Background color	Specifies the background color of the filtered image. Select the Image checkbox to use the original image colors, or click the color picker to select a different color.

 You can right-click a slider to reset to the default value.



You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Slant Effect

You can use the Slant effect to make a photo appear slanted. For example, you could use the Slant effect to distort a photo by pushing the top of the photo to the left and the bottom of the photo to the right. Similarly, you could use the slant effect to push the left side of the photo upwards and the right side of the photo downwards.

You can save your settings as a [preset](#) for future use.

To Apply a Slant Effect:

- Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
- Click **Slant**.
- On the Slant panel, set the options as described below.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Slant Options

Amount	Specifies the degree of the slant.
Fulcrum	Specifies the center of the slant. Drag the slider to the left to place the center of the slant near the bottom of the photo. Drag the slider to the right to place the center of the slant near the top of the photo.
Background color	Specifies the background color of the filtered image. Click the color picker to select a different color.
Slant Direction	Specifies the angle of the slant: <ul style="list-style-type: none"> Horizontal: Select Horizontal to push the top or bottom of the photo to the left or right. Vertical: Select Vertical to push the left or right side of the photo up or down.



You can right-click a slider to reset to the default value.



You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Sobel Effect

You can use the Sobel effect to create a highlighted outline of your image. After creating a black image, the effect uses colored lines to outline the detail of an image where significant color differences exist. Greater differences between colors in the original image produce brighter outline colors. (The Sobel effect is similar to the Edge Detect effect, but produces sharper and brighter outlines.)

To Use the Sobel Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Sobel**.
3. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.



You can use the [Edit Brush](#)



to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)



to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)



to apply effects around, or directly to, a center point.

Applying a Solarize Effect

You can use the Solarize effect to simulate the effect of overexposing an image, as though the film was exposed to light before developing. Select or change the Solarize options to apply this effect to your image.

You can save your settings as a [preset](#) for future use.

To Apply a Solarize Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Solarize**.
3. On the Solarize panel, drag the **Threshold** slider to specify the brightness threshold of the image.
4. In the Effect area, specify which pixels you want to adjust by selecting one of the following options:
 - **Solarize:** adjusts pixels located above the specified threshold option. The effect takes any pixels above the threshold and replaces them with their negative value. When you solarize an image, a higher threshold value sets a brighter threshold, and colors need to be brighter to be overexposed.
 - **Lunarize:** adjusts pixels located below the specified threshold option. The effect takes any pixels below the threshold and replaces them with their negative value. When you lunarize an image, a

higher threshold value sets a darker threshold, and colors do not have to be as bright to be overexposed.

5. Do one of the following:

- Click **Done** to accept your changes and close the panel.
- Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Somber Effect

You can use the Somber effect to give your images an austere or sleek look.

To Apply the Somber Effect:

1. Do one of the following:

- Click **Filter | Add | Special Effect**.
- On the Toolbar, click the Add icon and choose **Special Effect** from the menu.

2. Click **Somber**.

3. Do one of the following:

- Click **Done** to accept your changes and close the panel.
- Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Stained Glass Effect

You can use the Stained Glass effect to divide your image into fragments of a random size and shape, to give the photo the appearance of a stained glass window. Control the size and position of the fragments using the effect settings.

You can save your settings as a [preset](#) for future use.

To Apply a Stained Glass Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Stained Glass**.
3. On the Stained Glass panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Stained Glass Options

Fragment size	Specifies the size of the fragments.
Randomize	Indicates the random placement of the fragments. When you apply the Stained Glass effect to an image, Photo Editor places the fragments randomly. This makes the effect different every time you apply the filter. You can define a specific random seed to generate identical fragment patterns. To generate a new random seed, click Randomize .

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Sunspot Effect

You can use the Sunspot effect to add a bright spot in your images.

You can save your settings as a [preset](#) for future use.

To Apply a Sunspot Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Sunspot**.
3. On the Sunspot panel, drag the **Horizontal Position** and **Vertical Position** sliders or click the image to set the location of the sunspot.
4. Drag the **Brightness** slider to set the intensity of the sunspot.
5. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

Applying a Swirl Effect

You can use the Swirl effect to rotate and stretch people and objects in your image.

You can save your settings as a [preset](#) for future use.

To Apply a Swirl Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Swirl**.
3. On the Swirl panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Swirl Options

Horizontal position	Specifies the center of the swirl on the horizontal axis. A value of 500 places the swirl in the middle of the image.
Vertical position	Specifies the center of the swirl on the vertical axis. A value of 500 places the swirl in the middle of the image.
Radius	Specifies the size of the swirl effect.
Strength	Specifies the strength and direction of the swirl. Higher values create a clockwise swirl, while negative values create a counter-clockwise swirl.
Focus	Specifies the concentration of the swirl. Higher values concentrate the effect on the center of the swirl, while lower values spread the swirl across the image.
Background color	Specifies the background color of the filtered image. Select the Image checkbox to use the original image colors, or click the color picker to select a different color.
Swirl direction	Specifies the direction of the swirl. Select one or both of the following: <ul style="list-style-type: none"> • Swirl horizontally: Moves the swirl towards the top and bottom of the image. • Swirl vertically: Moves the swirl towards the right and left sides of the image.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying the Threshold Effect

You can use the Threshold effect to create a black and white image.

You can save your settings as a [preset](#) for future use.

To Apply the Threshold Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Threshold**.
3. On the Threshold panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Threshold Options

Threshold	This slider determines which pixels become black and which ones become white in the black and white image. Any pixels that are brighter than the selected threshold will become white and any pixels that are darker than the threshold will become black.
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 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Topography Effect

You can use the Topography effect to change the details of your images into contour lines.

You can save your settings as a [preset](#) for future use.

To Apply a Topography Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Topography**.
3. On the Topographic Map panel, drag the **Rounding** slider to adjust the amount of curve in the contour lines.
4. Drag the **Number of lines** slider to specify how many contour lines you want to add.
5. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Water Effect

You can use the Water effect to insert an expanse of water below the subject of a photo and to display a reflection of the subject in the water. You can control the position of the water below the subject. For example, you can position the water below a person's chin, or below their waist. You can also control the appearance of ripples in the water and how dark or light the water appears.

You can save your settings as a [preset](#) for future use.

To Apply a Water Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Water**.
3. On the Water panel, set the options as described below.

4. Do one of the following:

- Click **Done** to accept your changes and close the panel.
- Click **Cancel** to discard your changes and close the panel.

Water Options

Position	Specifies the position of the water below the subject of the photo.
Amplitude	Specifies the height of the ripples in the water. Drag the slider to the left to reduce the height of the ripples and the distortion caused by the ripples. Drag the slider to the right to increase the height of the ripples and the distortion caused by the ripples.
Wavelength	Specifies the distance between ripples. Drag the slider to the left to reduce the distance between ripples and increase the distortion caused by the ripples. Drag the slider to the right to increase the distance between ripples and reduce the distortion caused by the ripples.
Perspective	Changes the size of the waves as they get farther from the subject. Drag the slider to the left to increase the size of the waves farthest from the subject and to increase the illusion of distance.
Lighting	Specifies the amount of light in the water.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Water Drops Effect

You can use the Water Drops effect to display water drops on the surface of the photo. You can control the number and size of water drops, and their position on the photo.

You can save your settings as a [preset](#) for future use.

To Apply Water Drops to a Photo:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Water Drops**.
3. On the Water Drops panel, set the options as described below.

4. Do one of the following:

- Click **Done** to accept your changes and close the panel.
- Click **Cancel** to discard your changes and close the panel.

Water Drops Options

Density	Specifies the number of water drops on the photo. Drag the slider to the left to remove water drops. Drag the slider to the right to add water drops.
Radius	Specifies the size of the water drops. Drag the slider to the left to make the water drops smaller. Drag the slider to the right to make the water drops larger.
Height	Specifies the height of the water drops above the photo surface. Drag the slider to the left to reduce the height of the water drops and the distortion caused by the water drops. Drag the slider to the right to increase the height of the water drops and the distortion caused by the water drops.
Randomize	Indicates the random placement of the water drops. When you apply the Water Drops effect to an image, Photo Editor places the water drops randomly. This makes the effect different every time you apply the filter. You can define a specific random seed to generate identical water drop patterns. To generate a new random seed, click Randomize .

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Waves Effect

You can use the Waves effect to display waves across the photo. You can change the distance between waves. This distance is called wavelength. You can also change the height of the waves, and the angle at which the waves cross the photo.

You can save your settings as a [preset](#) for future use.

To Apply a Waves Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Waves**.
3. On the Waves panel, select or change the options as described below.

4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Waves Options

Wavelength	Specifies the distance between waves. Drag the slider to the left to reduce the distance between waves and increase the distortion caused by the waves. Drag the slider to the right to increase the distance between waves and reduce the distortion caused by the waves.
Amplitude	Specifies the height of the waves. Drag the slider to the left to reduce the height of the waves and the distortion caused by the waves. Drag the slider to the right to increase the height of the waves and the distortion caused by the waves.
Angle	Specifies the angle of the waves. Type a number from 1 to 360 or drag the arrow to adjust the angle.
Background color	Specifies the background color. Select the Image checkbox to use the original image colors, or click the color picker to select a different color.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Weave Effect

You can use the Weave effect to give a photo the appearance of being woven into a tapestry or basket. You can control the width of the vertical and horizontal strips, the width of the gap between the strips, and the background color that displays through the gap.

You can save your settings as a [preset](#) for future use.

To Apply a Weave Effect:

1. Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
2. Click **Weave**.
3. On the Weave panel, set the options as described below.
4. Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Weave Options

Strip width	Specifies the width of the vertical and horizontal strips.
Gap width	Specifies the width of the gap between the strips.
Background color	Specifies the color of the background. Click the color picker to select a different color.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Applying a Wind Effect

You can use the Wind effect to add wind lines that make stationary objects in your image look like they are moving. Select or change the settings to control the effect of the wind added to your image.

You can save your settings as a [preset](#) for future use.

To Apply a Wind Effect:

- Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
- Click **Wind**.
- On the Wind panel, select or change the options as described below.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

Wind Options

Strength	Determines how strong the wind lines are in the image. The higher the value, the stronger the wind lines.
Threshold	Determines how sharp an edge must be before the filter will apply wind. The higher the value, the sharper the edge needs to be.
Chance of wind	Determines the amount of wind lines to place in the image.
Edge detection	Specifies the edge detection algorithm. The algorithm controls the formula used to detect the edges and the direction of the edge indicators.
Background color	Specifies the background color. Select the Image checkbox to use the original image colors, or click the color picker to select a different color.
Wind color	Specifies the color of the wind lines. Select the Image checkbox to use the original image colors, or click the color picker to select a different color.

Wind angle	Specifies the angle of the wind lines.
Randomize	Indicates the random placement of the wind lines. When you apply the Wind effect to an image, Photo Editor places the wind lines randomly. This makes the wind lines different every time you apply the filter. You can define a specific random seed to generate identical wind lines. To generate a new random seed, click Randomize .

 You can right-click a slider to reset to the default value.

 You can use the **Edit Brush**  to paint this effect onto specific areas of your image.

 You can use the **Gradient tool**  to transition this effect across specific areas of your image.

 You can use the **Radial Gradient tool**  to apply effects around, or directly to, a center point.

Creating a Custom Special Effect Filter (Convolution Effect)

You can use the Convolution filter to create your own special effects and apply them to your image.

You can save your settings as a [preset](#) for future use.

To Create a Custom Effect Filter:

- Do one of the following:
 - Click **Filter | Add | Special Effect**.
 - On the Toolbar, click the Add icon and choose **Special Effect** from the menu.
- Click **User Defined Convolution**.
- On the User Defined Convolution panel, set the options as described below.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

User Defined Convolution Options

Convolution Matrix	Specifies the formula to use when altering the image. Type numbers in the matrix fields to change the pixels in the image. Using a mathematical formula, the color value of each pixel in an image is multiplied by the numbers in the matrix to produce an effect.
Division	Specifies the fractional coefficient of the matrix. Type a number into the Division field to use fractional coefficients in the matrix. The product of the convolution matrix is divided by the division factor before being applied to a pixel.
Bias	Specifies the brightness of the image. Type a number into the Bias field to change the brightness of the image. The bias

	number is added to the RGB values of each pixel. A positive number brightens the image, while a negative number darkens the image.
Clear Matrix	Resets the matrix.
Sample Filters Drop-Down Menu	Loads a sample effect to use as a starting point for creating your own effect.



You can use the [Edit Brush](#)



to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)



to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)



to apply effects around, or directly to, a center point.

About Blend Modes

Blend modes are filters that change the appearance of the text added to your images. The following table lists the blend modes available at the top of the Layers pane, and gives a brief explanation of their effects.

Blend Modes

Normal	Applies the text to the underlying image with the specified color. Only opacity affects this blend.
Screen	Combines the text color with the inverse of the underlying photo color, resulting in a color that is the same or lighter.
Multiply	Combines the text color with the underlying photo to produce a darker color. Multiplying any color with black produces black; multiplying any color with white leaves the color unchanged.
Dodge	Combines the text color with the underlying pixels in the photo to produce a lighter color.
Burn	Combines the text color with the underlying pixels in the photo to produce a darker color.
Overlay	Preserves the shadows and highlights of the lower layers while applying either Multiply or Screen blend mode based on the underlying image area's color values.
Difference	Subtracts the text color from the color of the underlying photo. Any white in the text produces a true negative of the color in the image, while black produces no effect.
Darken	Applies pixels in the text that are darker than the underlying image. Pixels in the text that are lighter than the underlying image disappear (based on RGB values).
Lighten	Applies pixels in the text that are lighter than the underlying image. Pixels in the text that are darker than the underlying image disappear (based on RGB values).
Hard Light	Adds strong highlights or shadows by applying Multiply or Screen based on the underlying image area's color values.
Soft Light	Adds soft highlights or shadows by darkening or lightening based on the underlying image area's color values.
Hue	Applies the hue value of colors in the text to the color of the underlying image areas.
Saturation	Applies the saturation value of colors in the text to the color of the underlying image areas.
Color	Applies the hue and saturation of the text to the image. This blend does not affect the

	luminance of the underlying image.
Luminosity	Applies the lightness value of colors in the text to the color of the underlying image areas.
Dissolve	Randomly replaces the pixels with the image (base) or text (blend) color, depending on the opacity at any pixel location.
Exclusion	Like Difference, but with less contrast, Exclusion subtracts the text (blend) color from the color of the underlying photo. Any white in the text produces a true negative of the color in the image, while black produces no effect.
Vivid Light	Combines the text (blend) color with the underlying pixels in the photo by increasing or decreasing contrast to produce a lighter or darker color, as determined by the blend color.
Pin Light	When the light source is lighter than 50% gray, the pixels darker than the light source are replaced. Pixels lighter than the light source remain the same. When the light source is darker than 50% gray, the pixels lighter than the light source are replaced. Pixels darker than the light source remain the same.
Linear Light	Dodges or burns by lightening or darkening the brightness value, depending on the text (blend) color.
Hard Mix	Applies red, green, and blue channel values of the text (blend) color to the RGB values of the image.
Subtract	Subtracts the text color from the image (base) color in each channel.
Divide	Divides the text color from the image (base) color.
Darker Color	From the text color and the image (base) color, the lower channel values are chosen.
Lighter Color	From the text color and the image (base) color, the higher channel values are chosen.



You can use the **Edit Brush**



to paint an effect onto specific areas of your image, and then set the blend mode and opacity slider to change the way the effect is applied.

Chapter 8: Editing - Geometry Tools

Rotating an Image

You can rotate an image at preset or custom angles.

You can save your settings as a [preset](#) for future use.

To Rotate an Image at a Custom Angle:

1. Do one of the following:
 - Click **Filter | Geometry | Rotate**.
 - On the Toolbar, click the Geometry icon and choose **Rotate** from the menu.
2. Select one or more of the following:
 - Select one of the default orientation options.
 - Drag the **Straightening** slider to the left or right until the image appears straightened.
 - Click the **Horizontal** or **Vertical** button, and use the tools as described below.
 - Select **Crop straightened image** if you want to crop the image after it is straightened.
 - Select **Preserve straightened image** if you do not want to crop the straightened image. Select the color that you would like to display behind the straightened image from the **Fill color** drop-down.
 - Select **Show grid overlay** to display a grid over the image. You may find that the grid helps you straighten the image and understand how the image will be cropped.
3. Do one of the following:
 - Click **Done** to apply your changes and close the tool.
 - Click **Cancel** to discard all changes and close the tool.

Rotate Icons

Horizontal



Click on the horizontal icon, and then use the cursor to draw a line on the image that you want to set as the horizontal line.

Vertical



Click on the vertical icon, and then use the cursor to draw a line on the image that you want to set as the vertical line.



You can right-click a slider to reset to the default value.

Flipping an Image

You can flip an image both vertically and horizontally.

You can save your settings as a [preset](#) for future use.

To Flip an Image:

1. Do one of the following:
 - Click **Filter | Geometry | Flip**.
 - On the Toolbar, click the Geometry icon and choose **Flip** from the menu.
2. Do one or both of the following:
 - Select the **Horizontal Flip** checkbox.
 - Select the **Vertical Flip** checkbox.
3. Do one of the following:
 - Click **Done** to apply your changes and close the tool.
 - Click **Cancel** to discard all changes and close the tool.



You can use the [Edit Brush](#)



to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)



to transition this effect across specific areas of your image.

Cropping an Image

You can use the Crop tool to remove unwanted parts of your images, or to reduce the image canvas to a particular size.

You can also save your settings as a [preset](#) for future use.



When zooming in, hold down the **Spacebar** to pan the image.

To Crop an Image:

1. Do one of the following:
 - Click **Filter | Geometry | Crop**.
 - On the Toolbar, click the Geometry icon and choose **Crop** from the menu.
2. [Resize](#) the crop window, and position it over the area of the image you want to keep.
3. To darken the parts of the image outside the crop window, drag the **Darken outside crop area** slider to the left. Drag the slider to the right to lighten the area outside the crop window.
4. Click **Estimate new file size** to view how big your image file is after cropping.
5. Do one of the following:
 - Click **Done** to crop the image and close the tool.
 - Click **Cancel** to exit the tool without cropping the image.



You can right-click a slider to reset to the default value.

Resizing the Crop Window

You can resize the crop window in three ways:

- Drag the edges of the crop window to the desired size.
- Specify an exact size for the crop window in pixels, inches, centimeters, or millimeters.
- Apply a ratio to constrain the crop window proportions.

To Resize the Crop Window by Dragging:

1. Position your cursor over the edge or corner of the crop window until it changes into a double-pointed arrow.
2. Drag the crop window's border to the desired size.

To Specify an Exact Size for the Crop Window:

1. Type the desired crop window proportions into the **Width** and **Height** spin boxes.
2. In the **Units** drop-down list, select a unit of measurement.
3. Use the **Dots per inch** spin box to specify a resolution.

To Constrain the Crop Window to a Ratio:

1. Select the **Constrain cropping proportion** checkbox.
2. Select a ratio from the drop-down list and select or clear the **Landscape** checkbox to toggle the crop window between landscape and portrait orientation.
3. Do one of the following:
 - Position your cursor over the edge of the crop window until it changes into a double-pointed arrow, and then drag the edge of the crop window to the desired size.
 - Use the **Width** or **Height** spin box to specify a dimension for one side of the crop window. Photo Editor automatically resizes the other dimension based on the ratio you selected.

Correcting Perspective Distortion

You can use the Perspective Correction tool to correct perspective distortion in digital photographs. Perspective distortion is caused by wide-angle and telephoto lenses, which distort the perspective of large or far-away objects. For example, if you take a photo of a tall building, the building may appear to be narrower at the top even though the building is the same width from top to bottom.

To Correct Perspective Distortion:

1. Do one of the following:
 - Click **Filter | Geometry | Perspective Correction**.
 - On the Toolbar, click the Geometry icon and choose **Perspective Correction** from the menu.
2. An outline displays around the image. The outline has handles at all four corners, and in the middle of all the sides. Drag the handles to change the perspective.
3. Set the options as described below.
4. Do one of the following:
 - Click **Done** to apply your changes and close the tool.
 - Click **Cancel** to discard all changes and close the tool.

Perspective Correction Options

Background color	When you correct distortion in a photo, the edges of the photo may bulge outwards or shrink inwards. Use the Background color options to fill gaps in the corners or
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	sides of a corrected photo: <ul style="list-style-type: none"> • Transparent: Select this option if you want to fill gaps in the corners or sides of a corrected photo with transparency.
Show Grid	Select this option if you want to display a grid over the photo while you correct distortion. This is useful if you want to assess whether objects in the photo are straight.

Correcting Lens Distortion

You can use the Lens Distortion Correction tool to correct barrel, pincushion, and fisheye distortion in digital photographs. In barrel distortion the photo appears to bulge outwards from the center. In pincushion distortion the photo appears to shrink inwards toward the center. In fisheye distortion, the photo appears to bulge outwards from the center, as if the photo were wrapped around a sphere.

Barrel, pincushion, and fisheye distortion are common in photos that were taken with wide angle or zoom lenses.

You can save your settings as a [preset](#) for future use.

To Correct Lens Distortion:

1. Do one of the following:
 - Click **Filter | Geometry | Lens Distortion Correction**.
 - On the Toolbar, click the Geometry icon and choose **Lens Distortion Correction** from the menu.
2. In the **Type of Distortion** section, select **Barrel**, **Pincushion**, or **Fisheye**.
3. Set the options as described below.
4. Do one of the following:
 - Click **Done** to apply your changes and close the tool.
 - Click **Cancel** to discard all changes and close the tool.

Lens Distortion Correction Options

Horizontal center	Drag the slider to the left or right to identify the center of the image on the horizontal axis.
Vertical center	Drag the slider to the left or right to identify the center of the image on the vertical axis.
Correction strength	Drag the slider to the right until the objects in the photo appear to be straight.
Scale	Drag the slider to the left or right to change the scale of the photo.
Background color	When you correct distortion in a photo, the edges of the photo may bulge outwards or shrink inwards. Use the Background color options to fill gaps in the corners or sides of a corrected photo: <ul style="list-style-type: none"> • Image: Select this option if you want to fill gaps in the corners or sides of a corrected photo by placing the uncorrected photo in the background. This is useful if the gaps are small.
Show Grid	Select this option if you want to display a grid over the photo while you correct distortion. This is useful if you want to assess whether objects in the photo are straight.



You can right-click a slider to reset to the default value.

Automatically Correcting Lens Distortion

You can correct barrel and pincushion distortion in digital photographs. In barrel distortion the photo appears to bulge outwards from the center. In pincushion distortion the photo appears to shrink inwards toward the center. Barrel and pincushion distortion are common in photos that were taken with wide angle or zoom lenses.

In Photo Editor, you have the option of using manual correction via the Manual Correction slider, or you can enable lens correction via your lens profile. This can be done by selecting the make, model, and lens of the camera used to take your image. The Lens Correction tool can apply automatic adjustments based on the distortion inherent to the lens used, or you can enable lens correction for each image manually. The Lens Correction tool contains a database of camera makes, models, and their possible lenses. The possible lenses for the selected camera will be available for you to choose from the Lens drop-down menu, unless there is only one possible lens, in which case, that lens will be pre-selected.

You can find the name of the lens used in the Current Lens Information section. However, the lens value displayed in the EXIF may not be reliable in the case of third party lenses as the camera itself may only recognize the third party lens as an ID number. If possible, recover the correct lens value from the Info palette, (but outside of the Lens Correction tool), and select it from the Lens drop-down menu (inside the Lens Correction tool).

You can use the Manual Correction slider for further adjustments after using automatic correction, or on its own.

You can also use your lens profile to correct chromatic aberration, if it is available.

 For quick viewing of the available lens profiles, go [here](#).

To Fix Lens Distortion Using Your Lens Profile:

1. Do one of the following:
 - Click **Filter | Geometry | Lens Correction**.
 - On the Toolbar, click the Geometry icon and choose **Lens Distortion** from the menu.
2. Select the **Enable Lens Profile** checkbox.
3. If the displayed camera make and model are not correct, select the correct options from the Make and Model drop-down menus.
4. From the Lens drop-down menu, select the lens used to take the image. You can find this information displayed in the Current Lens Information section. The correction will occur automatically.
5. If you desire further adjustments, move the **Strength** slider in the Manual Correction section to the left for a bulge effect, or to the right to stretch the edges of the image.

 You can right-click a slider to reset to the default value.

 Enable the **Show Grid** checkbox to display a grid over your image. This tool is useful when fixing alignment in your images.

To Fix Chromatic Aberration Using Your Lens Profile:

Chromatic aberration occurs due to the properties of a given lens. Therefore, you can use the lens profile to automatically correct it. The Chromatic Aberration checkbox will be enabled if your selected lens has a corresponding chromatic aberration correction available.

1. Do one of the following:
 - Click **Filter | Geometry | Lens Correction**.
 - On the Toolbar, click the Geometry icon and choose **Lens Distortion** from the menu.
2. Select the **Enable Lens Profile** checkbox.
3. Select the **Chromatic Aberration** checkbox.

To Fill in the Edges of a Manually Corrected Image:

Some manual adjustments may affect the edges of the image. You can choose what color will fill the discrepancies created by the lens correction. Alternatively, you can opt for transparency in this area.

Disable the **Transparency** checkbox, then select a color from the Background Color drop-down menu.

Resizing an Image

You can resize an image by adjusting its dimensions in pixels, percentage, or actual/print size. While resizing, you can also choose an aspect ratio and a resampling filter to adjust the resized image's appearance.

You can save your settings as a [preset](#) for future use.

To Resize an Image:

1. Do one of the following:
 - Click **Filter | Geometry | Resize**.
 - On the Toolbar, click the Geometry icon and choose **Resize** from the menu.
2. Select one of the following resize options:
 - **Pixels**: resizes the image to specific dimensions in pixels.
 - **Percent**: Resizes the image to a percentage of the original.
 - **Actual/Print size in**: Resizes the image to match a specific output size. Click the drop-down list to specify a unit of measurement.
3. If you want to maintain a specific width to height ratio, select the **Preserve aspect ratio** checkbox, and then select one of the following options from the drop-down list:
 - **Original**: Maintains the original image's width to height ratio.
 - **1 x 1**: Forces the width and height to be equal.
 - **2 x 3**: Forces a width to height ratio of 2:3.
 - **3 x 2**: Forces a width to height ratio of 3:2.
 - **3 x 5**: Forces a width to height ratio of 3:5.
 - **5 x 3**: Forces a width to height ratio of 5:3.
 - **Custom**: Applies a custom ratio. Enter a width to height ratio in the **Custom Aspect Ratio** dialog box.
4. Select a resizing filter from the **Resizing Filter** drop-down list.
5. Under the resize option you selected in step #3, type the image's new dimensions into the **Width** and **Height** spin boxes. If you selected Actual/Print size in, click the **Resolution** drop-down list, and then select a resolution (in dots per inch) for your output image.
6. To estimate the size of the output image, click **Estimate new file size**.
7. Do one of the following:
 - Click **Done** to apply your changes and close the Resize tool.
 - Click **Cancel** to discard all changes and close the tool.



Resizing Tips:

- Maintain image quality by reducing images only by 33%, 50%, or 66%. Other percentages can distort the aspect ratio.
- Avoid resizing an image repeatedly. Each resizing places image pixels using a slightly different orientation. As a result, multiple resizes can change the overall color and appearance of the image. If your first resize attempt does not produce the desired result, click the Undo button.
- Avoid increasing the size of an image. Increasing image size makes the image's pixels more apparent, causing a grainy effect.

Distorting and Retouching with the Liquify Tool

You can use the Liquify tool to move pixels without changing them.

You can save your settings as a [preset](#) for future use.

To Distort an Image:

1. Do one of the following:
 - Click **Filter | Geometry | Liquify**.
 - On the Toolbar, click the Geometry icon and choose **Liquify** from the menu.
2. In the Distortion Tools section, select the type of distortion to apply.
3. Set the options as described below.
4. Do one of the following:
 - Click **Done** to apply your changes and close the Liquify tool.
 - Click **Cancel** to discard all changes and close the tool.

Liquify Options

Distortion Tools	You can distort your images by moving your cursor, essentially brushing on the effect by pushing and pulling pixels around the image.	
Shift		You can use the Shift tool to push pixels in images.
Pinch		You can use the Pinch tool to condense pixels towards a center point.
Bulge		You can use the Bulge tool to expand pixels outward.
Restore		You can use the Restore tool to brush the pixels back to their original position.
		You can hold down the right mouse button to activate the Restore tool while using any of the other Distortion tools.
Nib Width	Adjusts the size of the brush. You can use the mouse wheel to adjust nib width or adjust the Nib Width slider.	
Density	Adjusts the size of the area affected. Within the inner circle of the nib, the effect is being applied at 90% or more. The area between the inner and outer circle, the effect is transitioning between 90%-0% at the outer edge.	



Use **Shift + mouse wheel** to adjust Density.

Strength	Adjusts the intensity of the overall effect. Move the slider to the right to intensify the effect.
Fill color	In some cases, you may distort the image to the point where its edges are pulled in. You can select the color that you would like to display behind the image.
Transparent	In some cases, you may distort the image to the point where its edges are pulled in. You can select the Transparent checkbox for the discrepancies created behind the image.

Chapter 9: Editing - Exposure and Lighting Tools

Adjusting Image Exposure

You can use the Exposure tool to adjust an image's exposure, contrast, and fill light.

You can save your settings as a [preset](#) for future use.

To Adjust the Image Exposure:

1. Do one of the following:
 - Click **Filter** | **Exposure/Lighting** | **Exposure**.
 - On the Toolbar, click the Exposure/Lighting icon and choose **Exposure** from the menu.
2. Set the options as described below.
3. Do one of the following:
 - Click **Apply** to apply your changes and set options on another tab.
 - Click **Done** to apply your changes and close the tool.
 - Click **Cancel** to discard all changes and close the tool.

Image Exposure Options

Exposure	Drag the slider to the right to increase the exposure, or drag to the left to decrease exposure.
Auto	Click the Auto button to automatically adjust the exposure level.
Contrast	Drag the slider to the right to increase contrast, or drag to the left to decrease contrast.
Fill Light	Drag slider to the right to increase the amount of light in the darkest areas of the image, or drag to the left to decrease fill light. Fill light brightens dark areas of the image.
Exposure warning 	Highlights overexposed and underexposed areas of the image. Overexposed pixels turn red, underexposed pixels turn green. The icon is gray when disabled, and turns yellow if enabled.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Adjusting Image Levels

You can use the Levels tool to precisely adjust the contrast and light levels in your images.

You can save your settings as a [preset](#) for future use.

To Adjust Image levels:

1. Do one of the following:
 - Click **Filter | Exposure/Lighting | Levels**.
 - On the Toolbar, click the Exposure/Lighting icon and choose **Levels** from the menu.
2. Do one of the following:
 - Set the options as described below to adjust the contrast and light levels manually.
 - Click **Auto** and select a menu option to automatically adjust image properties.
3. Do one of the following:
 - Click **Apply** to apply your changes.
 - Click **Done** to apply your changes and close the Levels tool.
 - Click **Cancel** to discard all changes and close the tool.

Levels Options

Channel	Specifies the brightness or color channel you want to adjust.
Shadows	Specifies the black point of an image. Move the slider or type a number from 0 to 255 into the spin box to define the blackest area of an image. As the value increases, the dark colored areas of the image become darker. You can also click on the arrow to automatically set it to where the black point start in the image.
Midtones	Specifies the midtones in an image. Move the slider or type a number into the spin box to set the midtone. Higher values make the image appear brighter, while lower values make the image appear darker. You can also click on the arrow to automatically set it to the midtone of the image.
Highlights	Specifies the white point of an image. Move the slider or type a number from 0 to 255 into the spin box to define the whitest area of an image. As the value increases, the light colored areas of the image become lighter. You can also click on the arrow to automatically set it to where the highlights start in the image.
Auto	Select one of the following options: <ul style="list-style-type: none"> • Adjust Contrast: Automatically analyzes and adjusts image contrast. • Adjust Color and Contrast: Automatically analyzes and adjusts each color channel independently, and then adjusts the contrast. • Adjust Color and Brightness: Automatically analyzes and adjusts image color and brightness. • Tolerance: Opens the Tolerance settings dialog box. Specify the maximum clipping percentage for black and white levels, and click OK. Photo Editor adjusts the image levels automatically.
Black Point picker 	Click the Black Point picker, and then click the image area you want to set as the black point.

Mid Point picker

Click the **Mid Point** picker, and then click the image area you want to set as the mid point.

White Point picker

Click the **White Point** picker, and then click the image area you want to set as the white point.



When you click around the image with a selected eye dropper you will see the RGB numbers changing to reflect the RGB values of the pixel under the eye dropper. The RGB values represent the source pixel (unprocessed) and the current pixel as it appears on the screen.



You can use the **Edit Brush**



to paint this effect onto specific areas of your image.



You can use the **Gradient tool**



to transition this effect across specific areas of your image.



You can use the **Radial Gradient tool**



to apply effects around, or directly to, a center point.

Adjusting Levels Automatically

You can use the Auto Levels tool to automatically correct the exposure levels of your images. Auto Levels makes the darkest image pixels darker, and the brightest pixels brighter.

You can save your settings as a [preset](#) for future use.

To Automatically Correct an Image's Levels:

- Do one of the following:
 - Click **Filter | Exposure/Lighting | Auto Levels**.
 - On the Toolbar, click the Exposure/Lighting icon and choose **Auto Levels** from the menu.
- Select one of the following options:
 - Auto Contrast and Color:** Adjusts color differences, brightness, and balances RGB channels.
 - Auto Contrast:** Adjusts the color differences and brightness only.
 - Auto Color:** Balances the RGB channels in the image, without changing the brightness or contrast.
- Use the **Strength** slider to fine tune the amount of exposure you want to apply.
- Click **Exposure Warning** to make overexposed and underexposed pixels visible. Overexposed pixels turn red, underexposed pixels turn green.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.



You can right-click a slider to reset to the default value.



You can use the [Edit Brush](#)



to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)



to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)



to apply effects around, or directly to, a center point.

Adjusting Tone Curves

You can use the Curves tool to change the tonal range of an image. Select the RGB color channel to adjust the entire range of the image, or select a specific color.

You can save your settings as a [preset](#) for future use.

To Adjust the Brightness Curves in an Image:

1. Do one of the following:
 - Click **Filter | Exposure/Lighting | Tone Curves**.
 - On the Toolbar, click the Exposure/Lighting icon and choose **Tone Curves** from the menu.
2. Set the options as described below.
3. Do one of the following:
 - Click **Apply** to apply your changes.
 - Click **Done** to apply your changes and close the Curves tool.
 - Click **Cancel** to discard all changes and close the tool.

Curves Options

Channel	Specifies the color channels to adjust.
Show Histogram	Toggles the histogram display on and off.
Histogram	Displays a graphic of the color information levels in the image, based on the selected channel. Click and drag the line to manipulate the curve. Each time you click the curve, a new node is added. You can drag the nodes up and down the curve. To remove a node, drag the node up and out of the graph, or down and out of the graph.
Exposure warning	Highlights overexposed and underexposed areas of the image. Overexposed pixels turn red, underexposed pixels turn green.



You can use the [Edit Brush](#)



to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)



to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)



to apply effects around, or directly to, a center point.

Adjusting Lighting

You can use the Light EQ™ tool to adjust areas in an image that are too dark or too light, without affecting other areas of the photo. You can also simultaneously lighten dark areas that are too dark, and darken areas that are too bright. Examples would be a photo of a person silhouetted against a bright background like the sea, or a window. In fact, most photos taken on a dull day, or with a flash, can be improved in various ways with fine adjustments.

You can save your settings as a [preset](#) for future use.

The Light EQ™ tool is very versatile. There are 4 tabs — each allows you to achieve results in different ways. In addition, there are several keyboard and mouse shortcuts that allow you to make adjustments on specific areas of the photo itself.

- **1-Step** tab: For an instant, effortless exposure adjustment.
- **Basic** tab: Is for very quick and easy adjustments using three sliders. Photo Editor analyzes the photo and varies the adjustment throughout the image automatically. For example, darker images are brightened more. By clicking the **Auto** button, you can have Photo Editor fully analyze the photo and set the slider positions automatically. You can also click directly on an area of the image to generate automatic settings optimal for that area, (usually the subject of the photo).
- **Standard** tab: Works like a sound equalizer but with light. You can adjust the brightness and contrast of different tone bands (areas of relative brightness or darkness) of the image independently using a slider for each tone band. A graph shows the amount of brightening or darkening applied throughout the tonal range. The gray areas in the graph are suggested boundaries for adjustment to avoid clipping and loss of detail, and turn red to indicate where you have adjusted the sliders far enough to cause clipping.
- **Advanced** tab: Gives you ultimate control of the brightness and contrast in an image. Basic adjustment curves can be constructed using four sliders, and you can manually adjust the curves by clicking and dragging within the graph area or on the image itself.

To Open the Light EQ™ Tool:

Do one of the following:

- Click **Filter | Exposure/Lighting | Light EQ™**.
- On the Toolbar, click the Exposure/Lighting icon and choose **Light EQ™** from the menu.

Using the 1-Step Tab

When you open an image in the Light EQ™ tool, 1-Step automatically adjusts your image's exposure. You can further adjust it using the Amount slider. To return to the 1-Step automatic adjustment, press the **Reset** button.

Using the Basic Tab

To Add Light to Dark Areas:

1. Drag the **Highlights** slider to the right to add light to the dark parts of the photo.
2. Adjust the settings using any of the controls in the table below.

To Darken Areas That Are Too Bright:

1. Drag the **Shadows** slider to the right to lighten and return detail to areas that are too dark.
2. Adjust the settings using any of the controls in the table below.

To Adjust Midtones That Are Too Light or Dark:

1. Drag the **Midtones** slider to the right to lighten and return detail to areas that are too dark.
2. Adjust the settings using any of the controls in the table below.

Light EQ™ Controls

Right-click on a slider	Right-click on a slider to reset it.
Exposure Warning 	Click the Exposure Warning to make any overexposed or underexposed areas visible. Overexposed pixels turn red, underexposed pixels turn green. You can also toggle Exposure Warning on and off momentarily by holding down the E key.
Auto	Click to allow the software to analyze the photo and apply optimal settings based on the amount of light and dark pixels in the photo. Darker photos are brightened more than photos that are already bright.
Done	Click to apply your changes and close the tool.
Cancel	Click to discard all changes and close the tool.

Using the Standard Tab



The Standard tab has two sets of sliders. The top set is for brightening. The lower set is for darkening. The dark-to-light gradient on each slider indicates that you brighten that tone band when you move the slider up (top row of sliders) or darken that tone band when you move the slider down (bottom row).

Between the two sets of sliders are two horizontal bars graded from black to white. These bars indicate that sliders on the far left affect the dark tonal bands. The sliders on the right affect light tonal bands. Moving a slider changes the light in that particular tonal band.

In the middle of the bands are two graphs that change as you adjust the sliders to represent the amount of darkening and lightening throughout the tonal range of the image. The two gray graphs show the maximum amount of brightening or darkening that you can apply before clipping begins. If you push a slider too far, the clipping is shown in bright pink.

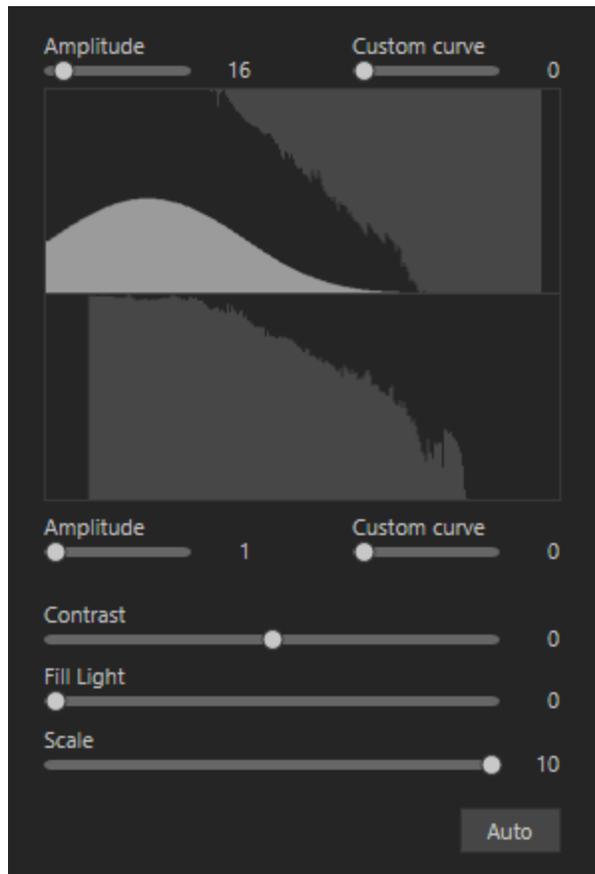
To increase contrast within a tonal band, apply brightening and darkening simultaneously in equal amounts by dragging the upper and lower sliders up and down, respectively. The area between the top of the upper graph and the bottom of the lower graph indicates the amount by which contrast is increased.

To Use the Standard Tab:

- Do one of the following:
 - Drag the tone band sliders up or down depending on which light bands you want to adjust.
 - Type the exact number into the number boxes or increment the numbers to make precise adjustments.
 - Click the **# Tone** drop-down list to increase or decrease the number of tone band sliders.
 - Click  (or press **E**) to see any overexposed or underexposed pixels.
 - Click the **Auto** button to apply settings automatically.
 - Drag the **Darkening** slider to darken the light areas of the image.
 - Drag the **Contrast** slider to increase the contrast in the image.
 - Drag the **Fill Light** slider to lighten dark areas of the image.

- Left-click and drag upwards to brighten the dark areas of the photo. Try to prevent clipping (shown in pink on the graph).
 - Right-click and drag downwards to darken the bright areas of the photo. Try to prevent clipping (shown in pink on the graph).
2. Click **Done** to apply your settings and close the tool. Or click **Cancel** to discard your changes and close the tool.

Using the Advanced Tab



Sliders

The Advanced tab has two sliders for brightening and two for darkening. The **Brightening** and **Darkening** sliders control the shape of the adjustment curves, while the **Amplitude** sliders control the height of the curves.

The more you brighten or darken, the more you increase the balance of the dark against the light areas in the image. The **Amplitude** sliders increase the intensity of the effects of brightening or darkening.

The **Scale** slider at the bottom of the tool adjusts the overall adjustment sensitivity to local variation in brightness. Moving this slider to the left makes the adjustment more sensitive to smaller areas of brightness variation, which may be beneficial in some images. For most images, however, leaving the slider in the default position gives the best result. You can also adjust the **Contrast** slider to decrease or increase contrast, or use the **Fill Light** slider to lighten dark areas of the image.

Graphs

Between the Brightening and Darkening controls are two gray graphs that indicate the maximum amount of lightening or darkening that you can apply before clipping (shown as bright pink) begins.

Two colored curves appear and change as you drag the Brightening, Darkening and Amplitude sliders — these curves indicate the amount of brightening and darkening applied throughout the tonal range of the image. Darker tonal areas are on the left, and brighter tonal areas are on the right. As you move your cursor over the image, a vertical line in the graph indicates the tone level of the area under the cursor within the tonal range. At times there are two lines because the tone levels for brightening and darkening are not necessarily the same. This is because brightening is sensitive to maximum color values while darkening is sensitive to minimum color values.

The Advanced tab is unique in that you can adjust the curves manually, either on the graph itself, or on the actual photo. Adjustments made on the photo are reflected in the curve on the graph. Adjustments made on the graph are reflected on the photo.

To increase contrast within a tonal range without changing the brightness, apply brightening and darkening simultaneously in equal amounts by dragging the upper and lower curves up and down, respectively. The area

between the top of the upper graph and the bottom of the lower graph indicates the amount by which contrast is increased.

To Use the Advanced Tab:

- Do one of the following:
 - Drag the **Brightening** or **Darkening** sliders to adjust the bright or dark pixels. As you drag, a gray curve appears to indicate your adjustments.
 - Left-click and drag upwards to brighten the dark areas of the photo. Try to prevent clipping (shown in pink on the graph).
 - Right-click and drag downwards to darken the bright areas of the photo. Try to prevent clipping (shown in pink on the graph).
 - Drag the **Scale** slider to the right to make your adjustments more sensitive to smaller areas of brightness variation.
 - Drag the **Contrast** slider to increase or decrease contrast in your image.
 - Drag the **Fill Light** slider to add light to the dark areas in your image.
 - Make adjustments using any of the options in the table below, including on the image itself.
- Click **Done** to apply your settings and close the tool. Or click **Cancel** to discard your changes and close the tool.

Adjustment Options - Advanced Tab

Area	Action	Result
Sliders	Drag Brightening	To the right: Increases the lightening applied to the darker areas. To the left: Applies brightening more uniformly to all areas of the image. (The name of the slider changes to Custom curve when you change the curve manually or make adjustments on the image.)
	Drag Darkening	To the right: Increases the darkening applied to the brighter areas of the image. To the left: Applies the darkening more uniformly to all areas of the image.
	Drag Amplitude (Brightening)	To the right: Increases the intensity of the brightening across all areas of the image. The height of the curve increases. To the left: Reduces the intensity of the brightening and the height of the curve. If the Amplitude slider is 0 - no brightening is applied. If the Amplitude is 100 - 200, the proportional amount of clipping increases. In most cases it is not necessary to adjust amplitude.
	Drag Amplitude (Darkening)	To the right: Increases the intensity of the darkening across all areas of the image. The height of the bottom curve increases. To the left: Reduces the intensity of the darkening and the height of the curve.
	Drag Scale	To the left: Makes the tool more sensitive to smaller areas of brightness variation.

Area	Action	Result
		This means that smaller areas can be adjusted independently. Generally the default scale of 10 gives the best result, but if an image contains small details that need brightening, a lower scale might give better results.
On Graph	Drag the graph (top)	<p>The graph changes as you left-click and drag up on the graph itself. The graph represents the brighten adjustments you are making. The dark gray graph represents the maximum amount you can drag the graph before clipping (pink) begins.</p> <p>The height of the graph represents the level of brightening applied at each tone level. (Tone moves from black on the left to white on the right.)</p> <p>When you make direct brightening or darkening adjustments on the graph or image, the corresponding Brightening or Darkening slider changes to Custom curve. If you adjust the position of the slider after this it discards all direct curve adjustments.</p> <p>When you make direct brightening or darkening adjustments on the graph or image, the corresponding Brightening or Darkening Amplitude slider changes to indicate the current curve amplitude.</p>
	Drag the graph (bottom)	The graph changes as you right-click and drag down on the graph itself. The graph represents the darken adjustments you are making. The dark gray graph represents the maximum amount you can drag the graph before clipping (pink) begins.
	You can use all the shortcuts below that apply to the image, directly to the Graph itself.	Changes the tonal band on the graph itself with a corresponding change in the image. This is useful for making fine adjustments to a specific tonal band.
On Image	Double-click with left mouse button	Automatically sets Brightening to optimum for that area of the image. A brighter area (e.g. a face) works best.
	Double-click with right mouse button (or Shift + double-click with left mouse button)	Automatically sets the Darkening to optimum for that area of the image.
	Ctrl + double-click with left mouse button	<p>Increases the amount of brightening around that tone level while decreasing the brightening in the rest of the image.</p> <p>Use this method to quickly brighten a specific subject or area to bring it out of the image.</p>
	Ctrl + double-click with right mouse button	Increases the amount of darkening around that tone level while decreasing the amount of darkening in the rest of the image.
	Scroll up or down with the mouse wheel above the image	Increases or decreases the amount of brightening applied at that tone level in the image. Both the image and the graph show the changes.
	Shift+ scroll with the mouse wheel above the image	Decreases or increases the amount of darkening applied at that tone level in the image.
	Hold down "A" + scrolling or + dragging with the left mouse button	Sets the brightening Amplitude slider directly.
	Hold down "A" + Shift	Sets the darkening Amplitude slider directly.

Area	Action	Result
	+ scrolling or + dragging with the right mouse button	
	Click and drag up and down on the image (left mouse button)	Increases or decreases the amount of brightening applied at that tone level in the image. Both the image and the graph show the changes. (Only works if the image is actual size - no zooming.)
	Shift + click and drag up and down on the image (left mouse button)	Decreases or increases the amount of darkening applied at that tone level in the image. (Only works if the image is actual size - no zooming.)

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Reducing Haze

You can use the Dehaze tool to restore contrast, detail, and lost color to images. This tool is especially useful for images that have been captured through a haze. A haze can occur when dust, smoke, or other particles obscure the clarity of the image, particularly the sky.

To Dehaze an Image:

- Do one of the following:
 - Click **Filter | Exposure/Lighting | Dehaze**.
 - On the Toolbar, click the Exposure/Lighting icon and choose **Dehaze** from the menu.
- Drag the **Amount** slider to adjust the strength of the correction.
- Do one of the following:
 - Click **Done** to accept your changes and close the panel.
 - Click **Cancel** to discard your changes and close the panel.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.



You can use the **Gradient tool**  to transition this effect across specific areas of your image.



You can use the **Radial Gradient tool**  to apply effects around, or directly to, a center point.

Dodge and Burn

Enhance your photos and improve contrast by controlling the light and intensity of color in select areas. Dodge, burn, saturate and desaturate your photos to accentuate and define shapes, magnify and fade color, and add shadows and highlights.

You can use the Dodge and Burn tool to lighten or darken areas in a photo without affecting other areas. The tool is often used to lighten underexposed areas or darken overexposed areas.

You can save your settings as a [preset](#) for future use.

Dodging and Burning Parts of an Image

To Open the Dodge and Burn Tool:

Do one of the following:

- Click **Filter | Exposure/Lighting | Dodge and Burn**.
- On the Toolbar, click the Exposure/Lighting icon and choose **Dodge and Burn** from the menu.

To Lighten or Darken Areas of a Photo:

1. Select the **Dodge** tool to lighten areas, or the **Burn** tool to darken areas.
2. Under Tool Settings, select the area to adjust: **Shadows**, **Midtones**, or **Highlights**.
3. Drag the range slider to fine-tune targeted areas within the shadows or highlights. Increasing the range broadens the affected range of tones, while decreasing the range narrows the affected range of tones.
4. Under Brush settings select from the following preference settings:
 - Drag the **Nib Width** slider to select a brush size.
 - Drag the **Feathering** slider to soften the edges of your strokes.
 - Drag the **Strength** slider to adjust the intensity of your strokes.
5. Draw over the areas of the image you want to lighten or darken.
6. Click **Done**.



When you adjust the range slider, a preview of the areas of the image that will be affected by brushing will be shown as a grayscale image. The brighter the pixels are in the preview image, the more they will be affected by brush strokes. Areas that are pure white will be affected with full strength, and areas that are black will be completely unaffected. For best results, move the range slider until the pixels you want to dodge or burn are white, and areas that you want to leave unaffected are black.



Scroll with your mouse to adjust the brush size on the fly, or use Shift + mouse scroll to adjust feathering.

To Saturate or Desaturate Areas of a Photo:

1. Select the **Saturate** tool to intensify colors, or the **Desaturate** tool to fade colors.
2. Under Tool Settings, select one of the following:
 - Standard to target all areas of the photo.
 - Vibrance to target the less saturated colors and to prevent skin tones from becoming over-saturated.
3. Under Brush settings select from the following preference settings:
 - Drag the **Nib Width** slider to select a brush size.
 - Drag the **Feathering** slider to soften the edges of your strokes
 - Drag the **Strength** slider to adjust the intensity of your strokes
4. Draw over the areas of the image you want to lighten or darken.
5. Click **Done**.



You can right-click a slider to reset to the default value.

Chapter 10: Editing - Color Tools

Adjusting White Balance

You can use the White Balance tool to remove unwanted hue from an image. For example, if you take a photo at sunset and the resulting image has a reddish hue, you can use the White Balance tool to remove it.

You can save your settings as a [preset](#) for future use.

To Remove a Color Cast from an Image:

1. Do one of the following:
 - Click **Filter | Color | White Balance**.
 - On the Toolbar, click the Color icon and choose **White Balance** from the menu.
2. Click an image area that should be white or gray. The color square shows the color of the original pixel on the left, and the modified pixel on the right.
3. Drag the Temperature slider to the left (more blue) or right (more yellow) to select a specific color temperature.
4. Drag the Tint slider to the left (more magenta) or right (more green) to match the white balance settings that you selected when you took the photo.
5. To specify the strength of the white balance adjustment, move the Strength slider. Higher settings remove more of the unwanted color.
6. Click **Done** to save your changes, or click **Cancel** to discard your changes and leave the tool.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 If you are having difficulties achieving the desired effect, try clicking an image area that is a different shade of white or gray.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Adjusting Color

You can use the Color EQ (hue, saturation, contrast, and brightness) tool to adjust overall colors in an image or each color individually. The advanced tools can subtly fine-tune and enhance colors, or completely change individual colors in an image.

Color EQ is useful for changing a single color in an image. If you have an image with a yellow car, you can use the Saturation tab to saturate the yellow, or use the Brightness tab to brighten the yellow. In the Hue tab, you can change the color of the car from yellow to pink. In the Contrast tab, you can adjust the contrast of the yellow and use the Balance slider to target the brightness range for that contrast adjustment.

You can save your settings as a [preset](#) for future use.



If you have an image of a yellow car with a yellow building in the background, you can change just the car by using the Selections tool. Select the car using the Selections tool and then apply your color adjustments.

To Adjust Color:

1. Do one of the following:
 - Click **Filter | Color | Color EQ**.
 - On the Toolbar, click the Color icon and choose **Color EQ** from the menu.
2. Select the Saturation, Brightness, Hue, or Contrast tab, and adjust them according to the options described in the table below.
3. Do one of the following:
 - Click **Apply** to apply your changes.
 - Click **Done** to apply your changes and close the tool.
 - Click **Cancel** to discard all changes and close the tool.



You can use the [Edit Brush](#)



to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)



to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)



to apply effects around, or directly to, a center point.

Color EQ Options

Select **High Quality** mode or **Standard** mode from the top of the Color EQ pane. To adjust colors individually, left-click a color on the image and drag up or down to alter. Your changes are reflected in the color sliders in High Quality mode, and the graph in Standard mode respectively. This works in the Saturation, Brightness, Hue, and Contrast tabs.

High Quality	Adjust image colors individually. High Quality uses the newer, more modern color models, allowing for a visually perceptible and higher quality adjustment.
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Adjust each color individually by dragging sliders right for more intensity, or left for less intensity. You can also enter a number into the fields for precise adjustments. Or select a precise color to adjust by placing your cursor on the image for the double arrow icon to appear. Then click and drag up or down to adjust the colors beneath the double arrow icon. The affected color sliders automatically adjust as you move your cursor.

Vibrance

Drag the slider to adjust the vibrance of the image without affecting skin tones.

Saturation

Drag the slider to adjust the saturation of the image.

Standard Adjust colors individually or make global adjustments.

Vertical slider

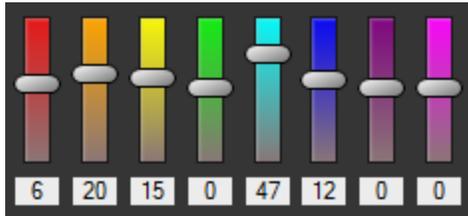


Apply adjustments to the entire image. A slider on the left has the following effects on the tabs:

- **Saturation:** Adjusts from saturation to grayscale.
- **Brightness:** Adjusts the light or dark tones in the image.
- **Hue:** Changes to a different color.

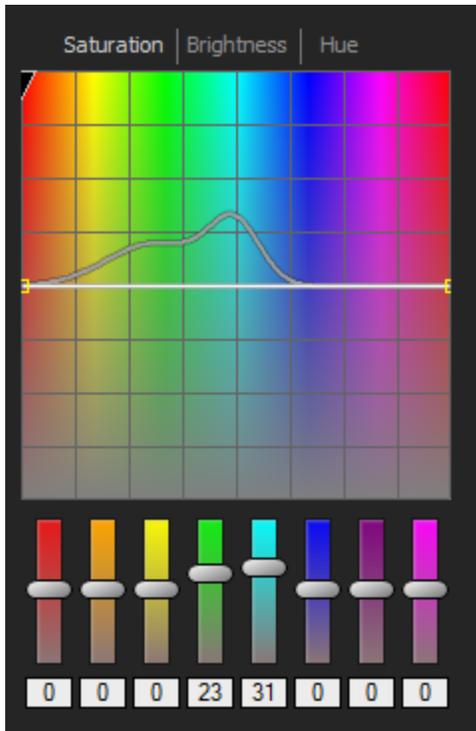
You can also enter a number into the field for precise adjustments.

Individual color sliders



Adjust each color with individual sliders. Select the color you want to adjust and click and drag the sliders. You can also enter a number into the fields for precise adjustments.

Direct image adjustments



Place your cursor on the image for the double arrow icon to appear. Then click and drag up or down to adjust the colors beneath the double arrow icon. The curve control and the affected color sliders automatically adjust as you move your cursor. The black down arrow on the graph indicates the color you are adjusting in the image.

The curve appears black in the graph, and you cannot directly adjust it. To apply further adjustments, you can alter the white curve. When you adjust the white curve, the black curve automatically changes with it. You can also enter a number into the fields for precise adjustments.

Vibrance

Drag the slider to adjust the vibrance of the image without affecting skin tones.

 You can right-click a slider to reset to the default value.

Adjusting Split Tone

Split toning is a powerful technique originating in film photography to tint the highlights and shadows.

The Split Tone tool gives you creative control over the Hue and Saturation of your highlights and shadows. Use the sliders to adjust the balance of tones in the highlights and shadows of your photos. Split toning allows you to add a creative element to RAW conversion and non-destructive editing in Photo Editor.

You can save your settings as a [preset](#) for future use.

To Adjust Highlights and Shadows:

- Do one of the following:
 - Click **Filter | Color | Split Tone**.
 - On the Toolbar, click the Color icon and choose **Split Tone** from the menu.
- Drag the sliders to apply colored highlights and shadows as described in the table below.

 You can right-click a slider to reset to the default value.

Adjustment Options

Highlights	
Hue	Drag the slider to the right to select a highlight color.
Saturation	Drag the slider to the right to increase saturation of the specified color in the highlights of the image.
Shadows	
Hue	Drag the slider to the right to select a shadow color.
Saturation	Drag the slider to the right to increase saturation of the specified color in the shadows of the image.
Balance	Drag the slider to the right to emphasize the highlight color; drag the slider to the left to emphasize the shadow color. For example if the slider is set to the maximum at 50, then full emphasis is applied to the highlight color; if the slider is set to the minimum -50, then full emphasis is applied to the shadow color.

 Create a sepia tone effect by first reducing the saturation of your photo with the Advanced Color tool and then applying a reddish brown hue with the Split Tone tool. Or create a monochromatic black and white photo with a slight tint of hue.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Adjusting Color Balance

You can adjust an image's color values using the Color Balance tool.

You can save your settings as a [preset](#) for future use.

To Adjust an Image's Color:

1. Do one of the following:
 - Click **Filter | Color | Color Balance**.
 - On the Toolbar, click the Color icon and choose **Color Balance** from the menu.
2. Adjust the sliders as described in the table below.
3. Do one of the following:
 - Click **Apply** to apply your changes.
 - Click **Done** to apply your changes and close the tool.
 - Click **Cancel** to discard all changes and close the tool.

Color Balance Options

Vibrance	Boosts color in the image, and avoids affecting skin tones.
Saturation	Adjusts the saturation of the image. Drag the slider to the right to increase or drag to the left to decrease saturation.
Hue	Adjusts the hue of the image. Drag the slider to the right to increase or drag to the left to decrease hue.
Lightness	Adjusts the image brightness. Drag the slider to the right to increase or drag to the left to decrease the image's brightness.
Red	Adjusts the red channel in the image. Drag the slider to the right to increase or drag to the left to decrease the red tone in your image.
Green	Adjusts the green channel in the image. Drag the slider to the right to increase or drag to the left to decrease the green tone in your image.
Blue	Adjusts the blue channel in the image. Drag the slider to the right to increase or drag to the left to decrease the blue tone in your image.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Creating a Grayscale Image

You can create rich grayscale images when you can control the brightness of the red, green, and blue channels, as well as the overall brightness. Use the Convert to Black and White tool to emphasize different areas or aspects

of a photo, as well as alter its mood and tone.

If you hover your mouse over each slider and watch the effect on the small preview, it shows you which parts of the image will be affected by each channel. This helps to gauge the effect of each slider on the image.

You can save your settings as a [preset](#) for future use.

To Create a Grayscale Image:

1. Do one of the following:
 - Click **Filter | Color | Convert to Black & White**.
 - On the Toolbar, click the Color icon and choose **Convert to Black & White** from the menu.
2. Adjust the settings as described in the table below.
3. Click **Done** to save your changes, or click **Cancel** to discard your changes.

Grayscale Options

Brightness Tab

On the Brightness tab, do any of the following:

- Drag individual color sliders, or left-click on the image (where a color previously occurred) and drag up or down to alter the brightness of specific tones. For instance, drag your cursor on sky areas to alter the brightness of the blue.
- Drag the **Percent Red** slider to the left or right.

The more red there is in a pixel, the more effect the red slider has on that pixel. The area of red in the picture is brightened or darkened more than other areas.
- Drag the **Percent Green** slider the left or right.

The more green there is in a pixel, the more effect the green slider has on that pixel. The area of green in the picture is brightened or darkened more than other areas.
- Drag the **Percent Blue** slider to the left or right.

The more blue there is in a pixel, the more effect the blue slider has on that pixel. The area of blue in the picture is brightened or darkened more than other areas.
- Drag the **Percent Brightness** slider to the right or left to brighten or darken the whole image.



You can right-click the slider to reset the value to zero.

Contrast Tab

You can increase or decrease the contrast of each individual color. In addition, you can specify the brightness range that the contrast adjustment will target for each color.

On the Contrast tab, do the following:

Strength: To adjust the contrast in specific color tones, drag individual color sliders, or left-click on the image (where a color previously occurred) and drag up or down.

Balance: To set the targeted brightness range for the contrast adjustment, adjust the slider to bring details out of highlights or shadows. To bring details out of the midtones, leave the Balance sliders set to 0.



Hold down **Shift** while clicking and dragging on the image to target the color's corresponding Balance slider.



You can right-click the slider to reset the value to zero.

At the bottom of the Convert to Black & White panel, you can use the Amount and Hue sliders to add color back into the image. Choose the color using the Hue slider. The saturation of the color added back to any given pixel is

scaled based on both the amount of color/saturation that existed in the original image and the Amount slider.



You can use the **Edit Brush**



to paint this effect onto specific areas of your image.



You can use the **Gradient tool**



to transition this effect across specific areas of your image.



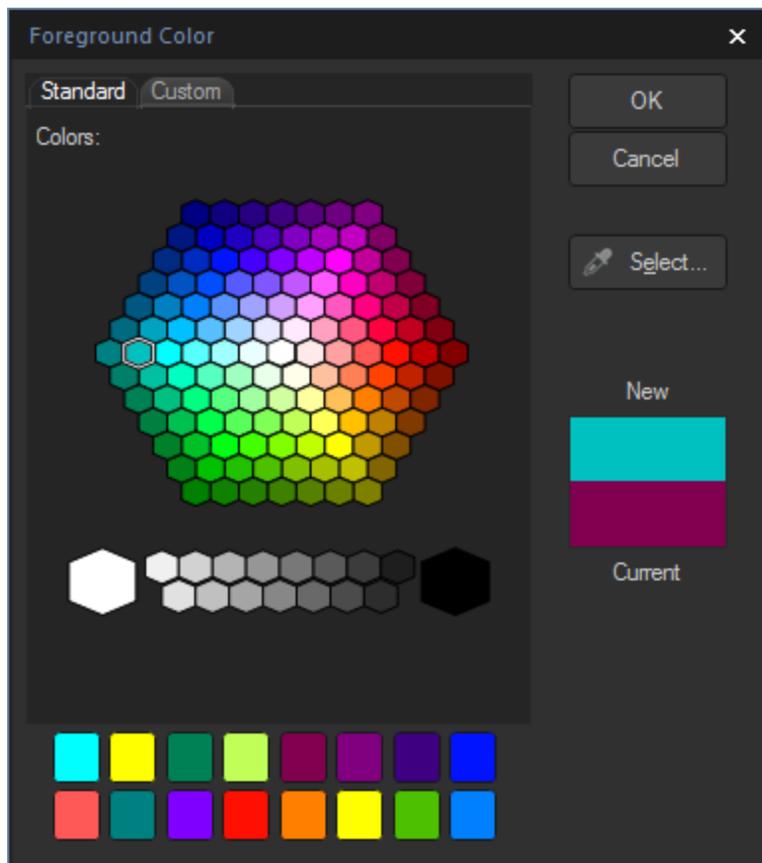
You can use the **Radial Gradient tool**



to apply effects around, or directly to, a center point.

Using the Color Dialog Box

The Colors dialog box appears in several places in Photo Editor when you select or apply a color. You can use the Color dialog box to select a color in multiple ways and to adjust a color using several different tools.



The Standard Tab

On the first tab, there is a fixed honeycomb of Basic colors to choose from, including gray, black, and white at the bottom. Below it is a grid of Custom or Favorite colors that you can fill in by selecting a color and then right-clicking a box in the grid. To create a custom color, click the Custom tab.

The Custom Tab

On the second tab, there is a color palette. On the far right is a color slider, which you can use to navigate to a color group and gain access to any or all colors of the spectrum. Add colors to your Custom colors by selecting the color in the palette and then right-clicking a box in the grid.

Selecting and Adjusting Colors

To select a color, click on a square in the grid of custom colors, or on the color palette. You can also drag over the color palette. When you click a color, that color appears in the New box and all of its numerical values, (Hue, Saturation, Luminosity, as well as Red, Green, and Blue), appear in the fields on the Custom tab.

You can also adjust a color by changing the Hue, Saturation, and Luminosity values. To select a precise color, type in the values for that color. You can do the same using the Red, Green, and Blue values.

Using the Histogram

The Histogram displays a graphical representation of the distribution of intensity levels of pixels for each color channel in an image.

To Display and Use the Histogram:

1. Click **Panes | Histogram**.
2. On the Histogram, select or clear the following checkboxes:
 - **R**: Shows or hides the red color channel.
 - **G**: Shows or hides the green color channel.
 - **B**: Shows or hides the blue color channel.
 - **L**: Shows or hides the lightness of the image.

Chapter 11: Editing - Detail Tools

Sharpening an Image

You can use the Sharpen tool to sharpen an image by enhancing medium and high contrast edges.

You can save your settings as a [preset](#) for future use.

To Sharpen an Image Using Sharpen Tool:

1. Do one of the following:
 - Click **Filter | Detail | Sharpen**.
 - On the Toolbar, click the Detail icon and choose **Sharpen** from the menu.
2. Drag the sliders to enhance or fix your image as described below.
3. Do one of the following:
 - Click **Done** to apply your changes and close the tool.
 - Click **Cancel** to discard all changes and close the tool.

Sharpen Options

Amount	Specifies the amount of sharpening applied by increasing contrast around the edges.
Radius	Controls the number of pixels to adjust around each edge. Higher values increase the number of sharpened pixels and tend to bring out coarser detail, while lower values reduce the number of sharpened pixels and tend to bring out finer detail.
Mask	Allows the targeting of edges, while suppressing the sharpening of noise and texture. To view the areas the mask affects, press the Alt key when moving the mask slider. Areas affected by sharpening appear white.
Detail	Suppresses the halo, (the light border that forms around edges with extreme sharpening), by reducing its intensity. The higher the value, the stronger the reduction.
Threshold	Specifies how different the pixel lightness values within an edge must be before the pixels within the edge are sharpened. Higher values sharpen only stronger edges but minimize the appearance of noise. Lower values sharpen both strong and weaker edges, but can increase the appearance of noise. We recommend you set the threshold to enhance edges while keeping background noise to a minimum.

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

 You can use the [Radial Gradient tool](#)  to apply effects around, or directly to, a center point.

Blurring an Image

You can use the Blur tool to apply different kinds of blur to an image.

You can save your settings as a [preset](#) for future use.

To Blur an Image:

1. Do one of the following:
 - Click **Filter | Detail | Blur**.
 - On the Toolbar, click the Detail icon and choose **Blur** from the menu.
2. In the **Blur type** section, select the type of blur to apply.
3. Set the options as described below.
4. Do one of the following:
 - Click **Done** to apply your changes and close the Blur tool.
 - Click **Cancel** to discard all changes and close the tool.

Blur Types

Gaussian 	Produces an even, smooth blur.	
	Amount	Specifies the amount of blur. Move the slider to the right to intensify the effect.
Linear 	Produces a blurring effect that gives the illusion of movement.	
	Amount	Specifies the amount of blur. Move the slider to the right to intensify the effect.
	Angle	Specifies the direction of the blur effect.
Radial 	Produces blur around a center point. Click the image to set the center point.	
	Amount	Specifies the amount of blur. Move the slider to the right to intensify the effect.
	Clockwise	Specifies clockwise blur.
	Counter-clockwise	Specifies counter-clockwise blur.
	Horizontal position	Specifies the blur's center point on the horizontal axis.
	Vertical position	Specifies the blur's center point on the vertical axis.
Spread 	Produces a smeared or frosted blur.	
	Amount	Specifies the amount of blur. Move the slider to the right to intensify the effect.
Zoom 	Produces inward or outward blur to or from a center point.	
	Amount	Specifies the amount of blur. Move the slider to the right to intensify the effect.
	Zoom in	Creates a blur that zooms in to the image's center.
	Zoom out	Creates a blur that zooms out from the image's center.
	Horizontal position	Specifies the blur's center point on the horizontal axis.
	Vertical position	Specifies the blur's center point on the vertical axis.

 Smart Blur	<p>Produces blur by detecting and avoiding edges, and preserves detail based on the threshold setting. This effect is usually used to smooth out skin.</p> <p>Amount Specifies the amount of blur. Move the slider to the right to intensify the effect.</p> <p>Threshold Specifies how little detail an area must have before the blur will apply to it.</p>
 Lens	<p>Produces a blur that mimics the blurring effect of a camera aperture.</p> <p>Select a bokeh shape from the options on the Blur panel. These shapes concentrate in highlights.</p> <p>Amount Specifies the strength of the blur. Move the slider to the right to intensify the effect.</p> <p>Bokeh Frequency Specifies how often the bokeh shapes show up.</p> <p>Bokeh Brightness Specifies how much the bokeh shapes stand out.</p>

 You can right-click a slider to reset to the default value.

 You can use the **Edit Brush**  to paint this effect onto specific areas of your image.

 You can use the **Gradient tool**  to transition this effect across specific areas of your image.

 You can use the **Radial Gradient tool**  to apply effects around, or directly to, a center point.

About Noise and Noise Reduction

Image noise looks like random black, white, or colored pixels in an area of a photo where there should be solid color, such as a dark night sky. In digital photography, noise is typically more visible in the dark areas of a photo.

There are many causes of image noise. You will increase image noise if you use a high ISO setting (such as ISO 800) to capture a photo, or if you extend the exposure time. (You would typically use a high ISO setting and extend exposure time to take a photo in low light.) However, image noise can be caused by dead or stuck pixels in a digital camera's image sensor. Similarly, dust on a camera lens or scanner bed can cause noise by blocking or reflecting light.

Images generally have two types of noise: luminance and color. Luminance noise is random variations of brightness, and particularly in gray areas, may appear spotted when there should be a solid color in the area of the image.



Color noise is random variations of color in the image.



Noise is visually distracting, so in most cases you will want to reduce noise in your photos. However, if you reduce noise too much you may unintentionally reduce image sharpness. You can use the Noise Removal tool to remove both luminance and color noise in your images.

Removing Noise

You can use the Remove Noise tool to remove noise from your images while preserving details that you want to retain.



You can use the Remove Noise tool to remove hot image pixels caused by digital cameras with malfunctioning CCD array sensors, or the extra pixels caused by a dusty scanner or camera lens.

You can save your settings as a [preset](#) for future use.

To Remove Noise from an Image:

1. Do one of the following:
 - Click **Filter | Detail | Noise**.
 - On the Toolbar, click the Detail icon and choose **Noise** from the menu.
2. Select the **Remove Noise** tab.
3. Select an option from the Noise Type section.
4. Set the options as described below.



Hold down the **Alt** key while adjusting a slider to view a preview of its effect on the image.

5. Do one of the following:
 - Click **Done** to apply your changes and close the Remove Noise tool.
 - Click **Cancel** to discard all changes and close the tool.

Noise Removal Options

Noise Type	Camera Noise Removal	
		Removes digital camera noise. Adjust the following sliders to further remove noise:
		Luminance Reduces the random variations of brightness in the noise.
		Strength Controls the strength of the Luminance slider.
		Color Reduces the random variations of color in the noise.
		Preserve Detail Restores details lost due to strong noise removal. Set the slider to adjust how much detail is

		restored.
	Preserve Detail Threshold	Determines the level of detail necessary to be included in the Preserve Detail slider's adjustments.
Median Noise Removal 	Square	Removes noise using a 3 x 3 pixel square.
	X	Removes noise using a 3 x 3 pixel X shape. Use this option when you want to preserve an image's thin and diagonal lines.
	Plus	Removes noise using a 3 x 3 pixel plus (+) shape. Use this option when you want to preserve an image's thin, vertical, and horizontal lines.
Despeckle 		Removes noise.

 You can right-click a slider to reset to the default value.

 You can use the **Edit Brush**  to paint this effect onto specific areas of your image.

 You can use the **Gradient tool**  to transition this effect across specific areas of your image.

 You can use the **Radial Gradient tool**  to apply effects around, or directly to, a center point.

Adding Noise

You can use the Add Noise tool to add a grainy texture to an image. Adding small amounts of noise can reduce the appearance of minor imperfections in the original image.

You can save your settings as a [preset](#) for future use.

To Add Noise to an Image:

- Do one of the following:
 - Click **Filter | Detail | Noise**.
 - On the Toolbar, click the Detail icon and choose **Noise** from the menu.
- Select the **Add Noise** tab.
- Set the options as described below.

4. Do one of the following:

- Click **Done** to apply your changes and close the Add Noise tool.
- Click **Cancel** to discard all changes and close the tool.

Add Noise Options

Intensity	Specifies the amount of noise to add to the image. A higher intensity increases the chance that a noise pixel will replace a pixel in the original image.
Color proximity	Specifies the color of noise pixels to add to the image. A lower value gives each noise pixel a color similar to the pixel it replaces. Higher values result in a random selection of the noise pixel color.
Noise color	Select one of the following options to specify noise pixel color: <ul style="list-style-type: none"> • Random: Randomly selects the color. • Monochrome: Produces black and white noise pixels. • Adjustable: Randomly selects the color of each noise pixel, but more pixels match a defined color. To define a color, click the color picker and select a color.
Noise placement	Adds noise to image areas that closely match a defined color. Select the Set color checkbox to enable noise placement, and click the color picker to specify a color.
Randomize	Indicates the random placement of noise in an image. When you use Add Noise tool, Photo Editor places the noise pixels based on a random seed. This makes the image noise different each time you use the Add Noise tool. You can define a specific random seed to generate identical image noise. To generate a new random seed, click Randomize .

 You can right-click a slider to reset to the default value.

 You can use the [Edit Brush](#)  to paint this effect onto specific areas of your image.

 You can use the [Gradient tool](#)  to transition this effect across specific areas of your image.

Adjusting Details

To highlight important details in your photo, and remove the emphasis off others, you can use the Detail Brush. The impact of the Detail Brush is cumulative. This means that the more you brush in a particular area using the blur option, for example, the more blurry the area will become.

To Adjust Details:

1. Do one of the following:
 - Click **Filter | Detail | Detail Brush**.
 - On the Toolbar, click the Detail icon and choose **Detail Brush** from the menu.
2. Adjust the settings as described below.
3. Do one of the following:
 - Click **Done** to apply your changes and close the tool.
 - Click **Cancel** to discard all changes and close the tool.

Detail Brush Options

Operation	Select the operation would you like to perform:	
	<ul style="list-style-type: none"> • Blur • Sharpen 	
Tool settings	If you selected Sharpen , set the following:	
	Radius	Controls the number of pixels to adjust around each edge. Higher values increase the number of sharpened pixels and tend to bring out coarser detail, while lower values reduce the number of sharpened pixels and tend to bring out finer detail.
	Threshold	Specifies how different the pixel lightness values within an edge must be before the pixels within the edge are sharpened. Higher values sharpen only stronger edges but minimize the appearance of noise. Lower values sharpen both strong and weaker edges, but can increase the appearance of noise . We recommend you set the threshold to enhance edges while keeping background noise to a minimum.
Brush settings	Nib Width	Drag the slider to select a brush size.
	Feathering	Drag the slider to soften the edges of your strokes.
	Strength	Drag the slider to determine the strength of the sharpening or blurring.

 You can also type a number into the number box and incrementally make precise adjustments.

 You can right-click a slider to reset to the default value.

Adjusting Clarity

The Clarity tool adds subtle definition to the details in your image. Use the Clarity tool to enhance the contrast of midtones in your images, without overpowering the shadows and highlights.

You can save your settings as a [preset](#) for future use.

To Adjust the Clarity of Your Image:

1. Do one of the following:
 - Click **Filter | Detail | Clarity**.
 - On the Toolbar, click the Detail icon and choose **Clarity** from the menu.
2. Drag the **Strength** slider to the right for greater clarity, or to the left for reverse clarity.
3. Do one of the following:
 - Click **Done** to apply your changes and close the tool.
 - Click **Cancel** to discard all changes and close the tool.

 You can also type a number into the number box and incrementally make precise adjustments.

 You can right-click a slider to reset to the default value.



You can use the [Edit Brush](#)



to paint this effect onto specific areas of your image.



You can use the [Gradient tool](#)



to transition this effect across specific areas of your image.



You can use the [Radial Gradient tool](#)



to apply effects around, or directly to, a center point.

Chapter 12: Options and Configuration

Setting the Color Management Options

The Photo Editor color management options help reduce color matching problems between devices, such as your computer, your monitor, and printers. Photo Editor automatically detects the color profile assigned to your monitor, (if setup correctly within your operating system). It is recommended that you regularly profile your monitor with color management hardware and software.

Before changing the color management settings, make sure you have accurate color profiles for each of the devices that you plan to use. You can obtain color profiles from device manufacturers if the profiles were not included in the device's software, or from the professional printers.

 Color management can be a complex process. If you are not familiar with color management systems, it is recommended that you accept the default color management settings in Photo Editor.

To Set the Color Management Options:

1. Click **Tools | Options**.
2. In the Options dialog box, click **Color Management**.
3. On the Color Management page, set or change any of the options as described below.
4. Click **OK** to accept your changes.

Color Management Options

Enable	Enable Color Management	Activates the color management system in Photo Editor and the fields in this dialog box.
	Color Management Engine	Select from the drop-down list of color management engines.
Input	Default Input Profile	Specifies the default color profile to use when the image is not tagged with an ICC profile.
Soft Proofing	Enable soft proofing	Allows you to choose from a selection of device profiles you want your monitor to simulate for proofing. You can choose your printer profile to be the emulated device and then preview what the output from your printer would look like on your monitor (soft proofing).
	Emulated Device Profile	Choose the device to be emulated.
	Rendering Intent	A strategy for handling situations where not all colors will fit in the output device's color space. Strategy options consist of: <ul style="list-style-type: none"> • Perceptual: Remaps colors outside of the target color space by compressing all colors for the entire image. Colors may become less saturated as everything condenses towards neutral and away from the saturated colors at the edges of the target color space. • Relative Colorimetric: Maps all out-of-gamut colors to the closest in-gamut color. Colors that fall outside the range of what the output device can render are adjusted to the closest color the device is capable of displaying.

- **Saturation:** Preserves the saturation of colors, potentially at the cost of hue and lightness. This intent is most valuable for business applications, such as graphics, where images need to be vibrant and contrast distinctly from one another.
- **Absolute Colorimetric:** Colors that fall outside the range of what the output device can render are adjusted to the closest color that can be rendered. However, the white point does not move, which may result in the distance of the colors to the white point changing.



Some Soft Proofing menu items are also available under **View | Soft Proofing**. Select your Rendering Intent or whether to enable Soft Proofing.

Setting the Display Options

You can use the Options dialog box to change the window background and specify how images are zoomed.

To Set the Display Options:

1. Click **Tools | Options**.
2. In the Options dialog box, click **Display**.
3. On the Display options page, set or change the options described below.
4. Click **OK** to accept your changes and return to Photo Editor.

Display Options

Background	Default color	Uses the default Photo Editor color for the background.
	Custom color	Specifies a color to use as the background.

Setting the ACDSee Photo Editor Options

You can use the Options dialog box to configure settings for Photo Editor.

To Set the Editor Options:

1. Click **Tools | Options**.
2. In the Options dialog box, click **Settings**.
3. On the Settings page, configure the options as described below.
4. Click **OK** to apply your changes and return to Photo Editor.

Settings	Show icons on Filter Menu pane	Displays icons next to the tools on the Filter Menu pane. To display the Filter Menu pane, go to View Filter Menu .
	Show Focus Stack warning	Toggles the warning about arranging images by focal distance prior to focus stacking.
	AutoSave all changes	Toggles AutoSave on and off. AutoSave saves your changes automatically, without prompting the Save Changes dialog.

 AutoSave is not available for RAW images.

GPU selection	<p>In order to ensure optimum performance, parts of Photo Editor run off of your GPU. Photo Editor automatically chooses the best GPU in your system. This option — Let ACDSee Photo Editor decide — is enabled by default. When Let ACDSee Photo Editor decide is enabled, GPU model text displays next to the option, specifying whether Photo Editor is running off of your primary GPU or another, more superior GPU that Photo Editor has detected. In most cases, the GPU detected and identified as the best by Photo Editor will be one and the same: your primary GPU.</p> <ul style="list-style-type: none"> • Use primary: You can enable this option if you prefer to use your primary GPU over the GPU Photo Editor has chosen. • Let ACDSee Photo Editor decide: Select this option to enable using the superior GPU found by Photo Editor.
Recorded Actions Folder	<p>Displays the path of the location where your action scripts (your recordings) are stored on your hard drive. Click the Browse button to specify a new location on your hard drive.</p>
Adobe® Photoshop® Plug-in Paths	<p>Displays the paths of the hard drive locations of your Photoshop® plug-ins. This will tell Photo Editor where to find your plug-in. Ideally, you will direct the path to the location where your Photoshop® plug-ins are already stored.</p> <p>To change or add a location, press Add, then browse to the location, select it and press Select Folder.</p> <p>To remove a location, select it and press Remove.</p> <p>To move your plug-ins to a listed location, select the location and press Open Folder. You can then drag your plug-ins into the folder.</p>

Setting the Rulers and Guidelines Options

You can use the Options dialog box to configure settings for rulers and guidelines.

To Set the Rulers and Guidelines Options:

1. Choose **Tools | Options...**
2. In the Options dialog box, click **Settings | Rulers and Guidelines**.
3. Set the options as described below.
4. Click **OK** to apply your changes and return to ACDSee.

Rulers and Guidelines Options

Guidelines	Color	Select a color for your guidelines.
Rulers	DPI	Determines the ruler scale by dividing the layer's pixel value by dots per inch.
	Load resolution from EXIF	Uses the value in the Pixels Per Inch field of the Image Attributes section located on the File tab of the Properties pane.

metadata

DPI field does not dynamically update according to the DPI in your layer's EXIF metadata. However, when this checkbox is enabled, the EXIF metadata value will override the value in the DPI field.

Units

Select a unit of measure for your rulers:

- **Inches**
- **Centimeters**
- **Pixels**
- **Percent**

Auto-hiding Panes and Panels

You can use the **Auto Hide** button to automatically hide some panes and panels in Photo Editor. When a pane is set to auto-hide, it rolls away when you click outside of it, leaving a tab displayed. You can access the pane by moving the cursor over the tab. When a pane or panel is floating, the auto-hide feature is not available. You cannot move the pane to a new location if it is set to auto-hide.

The Auto Hide button's appearance on the pane's title bar reflects its current setting:



A horizontal pushpin indicates that the pane is set to automatically hide when you click outside of it.



A vertical pushpin indicates that the pane is fixed and will remain visible even if you click outside of it.

To Set or Remove Auto-Hide:

Click the **Auto Hide** button on the title bar so that it displays a slanted or horizontal pushpin.

Customizing Toolbars

You can customize the appearance and organization of toolbars by selecting which toolbars to display, and specifying each toolbar's buttons or commands. You can also discard your changes and reset the toolbars to their default layout at any time.

Displaying and Hiding Toolbars

You can choose to display or hide the specific toolbars.

To Display or Hide a Toolbar:

Do one of the following:

- Click **View | Toolbars**, and then select the toolbar you want to display or hide.

Customizing Toolbar Contents

You can customize the following toolbars:

- ACDSee Actions
- Tools
- Filter

You can add, remove, and rearrange buttons on these toolbars. You can also display or hide text labels and tool tips for the buttons on these toolbars, and change button size. All toolbar customization options are on the Customize dialog box.

To Display the Customize Dialog Box:

Click **View | Toolbars** and then select **Customize**.

To Display or Hide Text Labels Below Toolbar Buttons:

1. Display the Customize dialog box.
2. Click the **Toolbars** tab.
3. Select **ACDSee Actions, Filter, or Tools**.
4. Select the **Show text labels** checkbox to display text labels, or clear the **Show text labels** checkbox to hide text labels.
5. Click **Close**.

To Display or Hide Tool Tips for Toolbar Buttons:

1. Display the Customize dialog box.
2. Click the **Options** tab.
3. Select **Show ScreenTips on toolbars** to display tool-tips, or clear **Show ScreenTips on toolbars** to hide tool-tips. If you select this option, you can also select **Show shortcut keys in ScreenTips** to show keyboard shortcuts in the tool-tips.
4. Click **Close**.

Resetting Toolbars

You can discard all of your changes, and return the toolbars and buttons to their default states.

To Reset the Toolbars:

1. Display the Customize dialog box.
2. Click the **Toolbars** tab, and then click **Reset All**.
3. Click **Yes** to reset the toolbars.
4. Click **Close**.

Customizing Toolbar and Pane Locations

You can hide, resize, float, move, and dock most toolbars and panes to suit your preferences.

Hiding Panes

At the top right corner, you can use the Hide/Unhide buttons to hide and reveal panes on the left, right, or bottom of the screen.

Hide/Unhide Left Panels



Hide/Unhide Bottom Panels



Hide/Unhide Right Panels



Moving Panes and Toolbars

You can move a pane or toolbar from a docked or floating position to a new location.

 Some toolbars do not activate the Docking Compass.

To Move a Pane or Toolbar:

1. Drag the pane or toolbar's title bar and hold your cursor over any of the arrows of the Docking Compass.
2. When the shaded marquee displays the position of the pane or toolbar you want, release the mouse button.
3. To return a pane to its previous location, double-click its title bar.

To Move a Docked or Floating Pane or Toolbar:

Do one of the following:

- Drag the pane or toolbar's tab to a new location.
- Drag the pane or toolbar's title bar to a new location.
- If you use dual monitors, you can move the panes and toolbars to your second monitor to free up space on your main monitor.

Docking Panes and Toolbars

When you select a pane or toolbar, the Docking Compass activates to help you place the pane precisely. The Docking Compass consists of an outer and inner ring of arrows. When you hold your cursor over any of the arrows, a shaded marquee displays the potential position of the pane.

 Some toolbars do not activate the Docking Compass.

To Dock a Pane or Toolbar:

Drag the pane or toolbar's title bar or tab to activate the Docking Compass. To dock a pane around the outer edge of the window, hold your cursor over any of the outer arrows of the Docking Compass, and then release the mouse button.

Resizing Panes

You can resize all the panes and toolbars, whether they are docked or floating.

To Resize a Docked Pane:

1. Hold your cursor over the edge of the pane or toolbar until the cursor changes to arrows and lines.
2. Drag the edge of the pane or toolbar to the size you want.

To Resize a Floating Pane:

Hold your cursor over the edge or corner of the pane or toolbar and then drag the pane to the size you want.

 To resize the Filmstrip, drag one of its edges.

 You can tear off and move the Toolbar, as well as the ACDSee Actions bar and the Color pane.

Customizing Keyboard Shortcuts

There are pre-defined keyboard shortcuts for commands that you use frequently. You can change pre-defined shortcuts, or create keyboard shortcuts for commands that do not currently have shortcuts.

 If a shortcut is already assigned to a command, then assigning it to another command will unassign it from the original command.

To Customize Keyboard Shortcuts:

1. Click **Tools | Customize Shortcuts...** or press **Ctrl + Shift + Alt + S**.
2. From the Category drop-down menu, select a category, such as File, Edit, or View. The commands available from that menu display in the Commands list box.
3. Select a command in the **Commands** list box.
 - If a keyboard shortcut has been defined for that command, it displays in the **Current Keys** box.
 - If a keyboard shortcut has not been defined for that command, the Current Keys box will be empty.

To remove an existing keyboard shortcut, select the keyboard shortcut in the Current Keys box, and then click **Remove**.

To Define a New Keyboard Shortcut:

1. Click in the **Enter a new shortcut key** text box.
2. Press the keys on your keyboard that you want to use for the keyboard shortcut.
The keys display in the Enter a new shortcut key text box. The Currently assigned to field will display the function your entered shortcut is assigned to, if applicable.
3. Click **Assign**.
The new keyboard shortcut displays in the Current keys box.
4. Click **Close**.

To remove all custom keyboard shortcuts and restore the default keyboard shortcuts, click **Reset All**.

Chapter 13: Printing

Printing Images

With the Photo Editor print utility, you can print your images on any size of paper, in any orientation, and at any resolution your printer can support. You can also use the print utility to create and print contact sheets, complete with headers, footers, and captions specific to each image.

As you change the options in the Print dialog box, you can view a dynamically updated preview of the image and its position on the page. You can adjust the output size, print multiple copies of each image, and change the orientation of the images on each page.

To Print a Single Image:

1. Select the image you want to print.
2. Click **File | Print Image**.
3. Under **Format**, choose a print size.
4. On the **Printer Options** tab, [specify the printer](#) you want to use, the paper size, the number of copies you want, the range of pages that you want to print, and image resolution.
5. On the **Page Settings** tab, [specify the image position](#) on the paper and the margin widths, and specify the number of prints of each photo.
6. Add [captions, headers, or footers](#).
7. Click **Print**.

Setting Printer Options

When printing your images with ACDSee, you can specify which printer you want to use, and set the printer options on the **Printer Options** tab in the Print dialog box.

Printer Options

Printer	Specifies the printer you want to use. Select a printer from the drop-down list and click the Properties button to set its options. Refer to the printer manufacturer's Help file or manual for more information.
Paper size	Specifies the size of the paper, e.g. Letter, Legal, A4.
Orientation	Specifies Portrait or Landscape page orientation.
Copies	Specifies the number of copies you want to print.
Print range	Select one of the following options: <ul style="list-style-type: none"> • All: Prints all of the pages in the document. • Pages from: Prints a range of pages. Specify the first and last pages of the range in the fields.
Resolution	Specifies a resolution in pixels-per-inch (PPI) for the image. The higher the value, the more dots per inch, and the higher the resolution of the printed image. For example, 600 PPI is 360,000 (600 x 600) pixels per square inch.
Filter	Specifies the resampling filter to use when printing images. Click the drop-down list and select one of the following: <ul style="list-style-type: none"> • Box: Displays considerable tiling or jaggies when you resize an image. • Triangle: Produces good results for image reduction and enlargement, but

	<p>displays sharp transition lines.</p> <ul style="list-style-type: none"> • Bicubic: Produces good results with photo-realistic images and with images that are irregular or complex. Uses interpolation to minimize the raggedness normally associated with image expansion. • Bell: Smooths the image. • B-Spline: Produces smooth transitions, but may cause excessive blurring. • Lanczos: Produces the sharpest images, but may also introduce some ringing artifacts. • Mitchell: Produces smooth transitions when enlarging photo-realistic images. This filter is good compromise between the ringing effect of Lanczos and the blurring effect of other filters.
Gamma	Applies gamma correction to the printed images. Type a number from 0.10 to 3.00 in the Gamma value field to adjust the gamma of the image. Higher values make the image appear brighter, while lower values make the image appear darker.
Color Management	<p>From the drop-down menu, you may choose between allowing your printer to manage colors, or managing colors with ACDSee.</p> <p>Manage colors using ACDSee:</p> <ul style="list-style-type: none"> • Printer Profile: Allows you to select from all printer profiles currently stored on your computer. Scroll down to find the profile corresponding to the currently selected printer. • Rendering Intent: A strategy for handling situations where not all colors will fit in the output device's color space. • Soft Proof: Allows you to preview what the printed output would look like with the currently selected printer profile. • Gamut Warning: Displays colors that cannot be reproduced by the printer in the preview. In such cases, the closest available color is selected. The rendering intent describes the method used to select another color. <p>For more information, see Color Management.</p>
Use EXIF 2.2 printing when available	Your camera may capture EXIF information that, when shared with your printer, will optimize printing results. Select this option if your camera and printer support EXIF 2.2 printing.

Setting Image Size and Positioning

You can use the Page Settings tab in the Print dialog box to adjust and control the size of the images you are printing, and the positioning of images on each page.

Page Settings Options

Page position	Specifies where to place the image on each page.
Margins	Specifies the size of the margins. Type a value or click the arrows in the Top , Bottom , Left , and Right spin boxes.
Number of prints	Specifies how many copies of each image to print. The print utility adds pages as required.
Automatically rotate picture based on print format	Specifies whether you want the print utility to determine automatically which orientation to use for each image. If you select the checkbox, the print utility changes each page's orientation to best suit the image you are printing.
Maintain aspect ratio	Specifies whether you want the print utility to maintain the original image's aspect ratio. Select one of the following options to indicate how the print utility should handle

the aspect ratio for oversized images:

- **Crop image to fit print format:** Prints only the part of the image that fits within the print format.
 - **Shrink image to fit print format:** Prints the entire image, reduced to fit inside the print format.
-

Setting Print Adjustments

You can use the settings on the Adjustments tab of the Print dialog to compensate for quirks specific to your printer, such as the way your printer handles exposure.

- ! It is recommended that you adjust these settings only after printing initially, when you know what corrections your printer may require.
- ! Please note that any adjustments made on the Adjustments tab will not be reflected in the Preview window.

To Apply Adjustments to Images Prior to Printing:

1. Click **File | Print**.
2. In the Print dialog, on the Adjustments tab, adjust the Exposure, Contrast, or Sharpness sliders as desired.
3. Click **Print**.

Adding Text to Pages

You can add headers and footers to pages, and captions beneath your images.

To Add Captions to Your Printed Images:

1. In the Print dialog box, click the **Caption** tab.
2. Select **Use caption text**.
3. Click **Font** to open the Font dialog box and set the font options.
4. In the text box, type the text you want the caption to display.
5. Click **Insert Metadata** to insert file-specific information into the caption for each image.
6. In the **Text alignment** drop-down list, select the caption positioning.
7. To set the maximum number of text lines for each caption to display, select the **Number of lines** checkbox, and then specify a number in the field.

To Add Headers and Footers to Your Printed Pages:

1. Do one of the following:
 - Click the **Header** tab and select **Use header text**.
 - Click the **Footer** tab and select **Use footer text**.
2. Click **Font** to open the Font dialog box and set the font options.
3. In the text box, type the text you want the header or footer to display.

4. To insert the current page number or the total number of pages into the text, click **Insert Page Number**, and then select an option from the menu.
5. In the **Text alignment** drop-down list, select the header or footer positioning.
6. To set a maximum number of text lines, select the **Number of lines** checkbox, and then specify a number in the field.

Creating Custom Print Layouts

You can create your own custom print layouts and store them as print options.

To Create a Custom Print Format:

1. In the Print dialog box, select **Full page**.
2. In the Print format area, click **Add**.
3. In the Add Custom Format dialog box, select a measurement unit from the **Measurement units** drop-down list.
4. Enter the dimensions for the new format in the **Format width** and **Format height** fields.
5. Click **Add**.

Chapter 14: Shortcuts

Keyboard Shortcuts

Use the following keyboard shortcuts.



If you would like to define your own keyboard shortcuts, see [Customizing Keyboard Shortcuts](#).

Shortcut	Resulting Action
Alt + F4	Closes Photo Editor.
Shift + Esc	Minimizes Photo Editor.
Ctrl + Shift + Alt + S	Opens the Customize Shortcuts dialog box, in which you can customize keyboard shortcuts.
Alt + O	Opens the Options dialog box.
F1	Opens the Help file.
` (grave accent)	Toggles the display of the full file path in the Status bar.
File Menu	
Page Arrow Right	Opens the next image.
Page Down	
3 (numeric keypad)	
Page Arrow Left	Opens the previous image.
Page Up	
9 (numeric keypad)	
Ctrl + S	Saves the image.
Ctrl + Alt + S	Saves a copy.
Ctrl + O	Opens the Open Files dialog.
Ctrl + Q	Closes the image.
Ctrl + Shift + Q	Closes all images.
Ctrl + P	Opens the current image in the ACDSee Print utility.
End	Switches to the last image in the Filmstrip.
Home	Switches to the first image in the Filmstrip.
Edit Menu	
Ctrl + Y	Redo.
Ctrl + Z	Undo.
Ctrl + Shift + Z	Undo all.
Ctrl + C	Copy.
Ctrl + V	Paste.
Delete	Delete.
Viewing	
Ctrl + Page Arrow Right	Toggles the right pane open and closed.
Ctrl + Page Arrow Left	Toggles the left pane open and closed.

Ctrl + Page Arrow Down	Toggles the bottom pane open and closed.
/ (forward slash)	Zooms the image to its actual size.
Shift + 8	Fits the image to the viewing area.
* (numeric keypad asterisk)	
+ (plus)	Zooms in.
- (minus)	Zoomed out.
F	Displays the image full screen.
'	Toggles Navigator open and closed when zoomed into the image.
[Enables soft proofing.
Z	Displays saved version of the image.
Page Arrow Right	Pans right when zoomed into the image.
Page Arrow Left	Pans left when zoomed into the image.
Page Down	Pans down when zoomed into the image.
Page Up	Pans up when zoomed into the image.

Customizing the Interface

Ctrl + Shift + H	Toggles the Histogram open and closed.
Ctrl + Shift + U	Toggles the Undo History pane open and closed.
Ctrl + T	Toggles rulers on and off.
Ctrl + Shift + G	Enables/disables snapping to guidelines.
Ctrl + Shift + ;	Clears all guidelines.
Ctrl + Alt + ;	Locks guidelines in place.
Ctrl + ;	Toggles guidelines on and off.

Selecting

Alt + A	Selects all.
Alt + D	Deselects.
Alt + I	Inverts selection.
Alt + Del	Deletes selected pixels.
Alt + Shift + F	Applies Smart Erase to a selection.
Alt + Shift + P	Opens the Pixel Targeting panel for targeting the selection to specific colors and/or tones.
Alt + Shift + S	Saves the selection.
Ctrl + Alt + L	Creates a selection based on brightness in the image.
Alt + Shift + L	Opens the Load Selection dialog box.
Alt + Shift + M	Opens the Manage Selections dialog box
Alt + Shift + O	Opens the Overlay Options dialog box.

Filters

F2	Opens the Red Eye Reduction tool.
F3	Opens the Repair tool.
F4	Opens the Skin Tune tool.
F5	Opens the Chromatic Aberration tool.
F6	Opens the Watermark tool.
F7	Opens the Border tool.
F8	Opens the Vignette tool.
F9	Opens the Special Effects panel.
F10	Opens the Tilt-Shift tool.
F11	Opens the Grain tool.
F12	Opens the Rotate tool.
Alt + F1	Opens the Flip tool.
Alt + F2	Opens the Crop tool.
Alt + F3	Opens the Perspective Correction tool.
Alt + F5	Opens the Distortion Correction tool.
Alt + F6	Opens the Lens Correction tool.
Alt + F7	Opens the Resize tool.
Alt + F8	Opens the Liquify tool.
Alt + F9	Opens the Exposure tool.
Alt + F10	Opens the Levels tool.
Alt + F11	Opens the Auto Levels tool.
Alt + F12	Opens the Tones Curves tool.
Ctrl + F1	Opens the Light EQ™ tool.
Ctrl + F2	Opens the Dehaze tool.
Ctrl + F3	Opens the Dodge and Burn tool.
Ctrl + F4	Opens the White Balance tool.
Ctrl + F5	Opens the Color EQ tool.
Ctrl + F6	Opens the Color Balance tool.
Ctrl + F7	Opens the Convert to Black & White tool.
Ctrl + F8	Opens the Split Tone tool.
Ctrl + F9	Opens the Color LUTs tool.
Ctrl + F10	Opens the Sharpen tool.
Ctrl + F11	Opens the Blur tool.
Ctrl + F12	Opens the Noise Reduction tool.
Shift + F1	Opens the Clarity tool.
Shift + F2	Opens the Detail Brush tool.

Working Inside Filters

B	Toggles Brush controls open and closed.
S	Toggles the brush stroke display when working inside a filter.
G	Toggles Gradient controls open and closed.
R	Toggles Radial Gradient controls open and closed.
Spacebar	Switches to the Hand tool when working with the Brush or Gradients inside a filter.
E	Toggles the exposure warning on and off in the Exposure tool.

Layered Editor

Ctrl + Alt + I	Opens the Import image as layer dialog box.
Ctrl + Alt + N	Adds a new blank layer.
Ctrl + Alt + D	Duplicates the selected layer.
Ctrl + Delete	Deletes the selected layer.
Ctrl + Alt + R	Opens the Rename Layer dialog box.
Ctrl + Alt + V	Toggles the Show/Hide Layer button on and off.
Ctrl + Alt + C	Toggles the Clipping button on and off.
Ctrl + Shift + Down	Merges the selected layer with the layer below it.
Ctrl + Alt + F	Merges all layers into a single image.
Shift + J	Shows all layers.
Shift + Y	Hides all layers.
Ctrl + Shift + F	Applies Frequency Separation.
Ctrl + Shift + T	Rasterizes the selected text layer.
Ctrl + Shift + D	Opens the HDR dialog.
Ctrl + Shift + O	Opens the Focus Stack dialog.
Shift + Alt + A	Auto-aligns the selected images.
Shift + Alt + B	Opens the Auto-Blend dialog.

Layer Masks

Ctrl + Alt + W	Adds a white layer mask.
Ctrl + Alt + B	Adds a black layer mask.
Ctrl + Alt + ,	Adds the mask to a selection.
Ctrl + Alt + -	Subtracts the mask from a selection.
Ctrl + Alt + =	Selects the area common to the mask and the selection.
Ctrl + Alt + .	Creates a mask from the selection.
Ctrl + Alt + J	Inverts the mask.
Ctrl + Shift + Delete	Deletes the mask.
Ctrl + Alt + P	Opens the Pixel Targeting panel, allowing you to mask specific colors and/or tones.
Ctrl + Shift + V	Pastes the image layer as a luminance mask.
Ctrl + Shift + M	Disables/enables the selected mask.

Adjustment Layers

Shift + E	Adds an Exposure Adjustment Layer.
Shift + B	Adds a Blur Adjustment Layer.
Shift + Z	Adds a Posterize Adjustment Layer.
Shift + U	Adds a Curves Adjustment Layer.
Shift + I	Adds a Negative Adjustment Layer.
Shift + F	Adds a Color Adjustment Layer.
Shift + W	Adds a Black and White Adjustment Layer.
Shift + T	Adds a Threshold Adjustment Layer.
Shift + G	Adds a RGB Adjustment Layer.
Shift + R	Adds a Clarity Adjustment Layer.
Shift + L	Adds a Levels Adjustment Layer.
Shift + X	Adds a Vibrance Adjustment Layer.
Shift + V	Adds a Vignette Adjustment Layer.
Shift + S	Adds a Sharpen Adjustment Layer.
Shift + O	Adds a Color EQ Adjustment Layer.
Shift + Q	Adds a Light EQ Adjustment Layer.
Shift + M	Adds a Gradient Map Adjustment Layer.
Shift + K	Adds a Skin Tune Adjustment Layer.
Shift + P	Adds a Photo Effect Adjustment Layer.
Shift + A	Adds a White Balance Adjustment Layer.
Shift + H	Adds a Dehaze Adjustment Layer.
Shift + C	Adds a Split Tone Adjustment Layer.
Shift + N	Adds a Noise Reduction Adjustment Layer.
Shift + D	Adds a Color LUT Adjustment Layer.

Tools

M	Activates the Move tool.
Ctrl + Shift + C	Activates the Resize Canvas tool.
T	Activates the Text tool.
Ctrl + Shift + R	Activates the Rectangle tool.
Ctrl + Shift + E	Activates the Elliptical tool.
Ctrl + Shift + L	Activates the Line tool.
Ctrl + A	Activates the Arrow tool.
Ctrl + Shift + P	Activates the Polygon tool.
Ctrl + Shift + B	Activates the Curve tool.
B	Activates the Brush tool.
Ctrl + F	Activates the Fill tool.
Ctrl + G	Activates the Gradient tool.
Alt + E	Activates the Eraser tool.
Ctrl + E	Activates the Smart Erase tool.
Ctrl + Shift + I	Activates the Eyedropper tool.

Color Tools

Ctrl + [Opens the Foreground Color dialog box.
Ctrl +]	Opens the Background Color dialog box.
Ctrl + X	Switches the foreground and background color.
Selection Tools	
Ctrl + R	Activates the Rectangle Selection tool.
Ctrl + I	Activates the Ellipse Selection tool.
Ctrl + L	Activates the Lasso Selection tool.
Ctrl + W	Activates the Magic Wand Selection tool.
Ctrl + B	Activates the Brush Selection tool.
Actions	
Ctrl + Shift + S	Stops recording.
Alt + Shift + R	Starts recording.

Mouse Shortcuts

Use the following mouse shortcuts to make quick image adjustments.



To print this page for easy reference, right-click and select **Print...**

Shortcut	Resulting Action
Shift + click	Turns off the auto-collapse feature in the pane as you open groups.
Shift + mouse wheel	Makes large adjustments to the sliders.
Spacebar + click + drag	Scrolls the image by dragging the mouse. Use when you have the image zoomed in.
Right-click	Resets any slider to its default value.
Mouse wheel over slider	Makes fine adjustments to a slider. Place your cursor over the slider and scroll up or down.
Mouse wheel over image	Adjusts brush size. Place your cursor over the image and scroll up or down to adjust nib width.
Shift + mouse wheel	Adjusts feathering. Place your cursor over the image and scroll up or down to adjust feathering.

Chapter 15: Plug-ins

Working with Plug-ins

A plug-in is a software module that adds functionality to a larger program. Photo Editor comes standard with many different plug-ins.

Types of Plug-ins

- **Image Decode:** Converts a file from a binary format to the image displayed in Photo Editor. Decode plug-ins allow Photo Editor to display images of many different file formats. The files that you can view with Photo Editor depend on which decoding plug-ins are installed on your computer.
- **Image Encode:** Converts the image displayed in Photo Editor to a binary file format. Encode plug-ins allow Photo Editor to save (or convert) images to many different file formats. The files that you can edit and save with Photo Editor depend on which encoding plug-ins are installed on your computer.
- **Archive:** Allows Photo Editor to display and save archives of many different file formats. The archives that you can view and create with Photo Editor depend on which archive plug-ins are installed on your computer.
- **Camera:** Allows Photo Editor to browse images on your digital camera and transfer them to a folder on your hard drive.
- **Command Extension:** Adds functionality to Photo Editor. For example, there is a plug-in that you can use to share your images over the Internet.
- **Pane Extension:** Adds a pane to Photo Editor where you can perform tasks like order prints of your digital images.



We cannot ensure the quality of plug-ins that are not certified by ACD Systems. As with any other piece of software, you are trusting that the plug-in is free of viruses and that the company that produced the plug-in is trustworthy.

Managing Plug-ins

The Plug-in Settings dialog box displays a list of all the ACDSee plug-ins installed on your computer. You can also use the Plug-in Settings dialog box to control which plug-ins Photo Editor uses.

To Access the Plug-in Settings Dialog Box:

Click **Tools | Plug-in Settings...**

Disabling a Plug-in

You can disable a plug-in in the Plug-in Settings dialog box so that Photo Editor no longer uses it.

To Disable a plug-in:

1. In the Plug-in Settings dialog box, select one of the Plug-in tabs.
2. Clear the checkbox beside the name of the plug-in that you do not want Photo Editor to use.
3. Click **OK**.

Changing the Plug-in Order

Some file formats can be supported by more than one plug-in. However, when this happens, you can control which plug-in is used to read or write a file format. The order that plug-ins appear in the Plug-in Settings dialog box is the order that Photo Editor uses the plug-ins to read or write a file.

To Change the Plug-in Order:

1. In the Plug-in Settings dialog box, select one of the Plug-in tabs.
2. Select a plug-in in the **Plug-ins** list.
3. Do one of the following:
 - Click the **Move up** button to move the plug-in higher in the list.
 - Click the **Move down** button to move the plug-in lower in the list.
4. Click **OK**.

Viewing Plug-in Properties and Getting Help

You can view and set properties for certain plug-ins.

To View Plug-in Properties:

1. In the [Plug-in Settings dialog box](#), select one of the Plug-in tabs.
2. Select a plug-in in the Plug-ins list.
3. Click the **Properties** button.

To View a Plug-in's Help File:

1. In the [Plug-in Settings dialog box](#), select one of the Plug-in tabs.
2. Select a plug-in in the **Plug-ins** list.
3. Click the **Plug-in Help** button.

Chapter 16: File Information

About RAW Files

A RAW file is like a negative. RAW files contain all of the data that was collected by your digital camera's sensor when you took a photo. To save any changes you make to a RAW file permanently, you need to save it as a separate file, in a different file format (JPEG, ACDC, or TIFF, for example).



Photo Editor will automatically apply geometry corrections to DNG files that include geometric distortion correction tags. DNG files created from the Adobe DNG Converter© will often generate geometric distortion tags for micro 4/3rds cameras.

Associating Files

Photo Editor can work with a large number of image formats. Photo Editor can be set as the default application for opening certain file types. This process is called associating files. When you associate file types, you set Photo Editor as the default program to open these kinds of files when you double-click them.

To Set File Association Options in Photo Editor:

1. Click **Tools | File Association Settings**.
2. In the two format sections, select the checkboxes of the file formats you would like to associate with Photo Editor for image and RAW formats.
3. Click **Save**.

To Disassociate a File Type with Photo Editor:

1. Click **Tools | File Association Settings**.
2. In the two format sections, deselect the checkboxes of the file formats you would like to disassociate with Photo Editor for image and RAW formats.
3. Click **Save**.

Glossary

A

Absolute Colorimetric

Rendering intent, generally used for proofing. Based on a device-independent color space, reproducing colors within the available gamut perfectly, and reducing colors outside of the gamut to the nearest reproducible hue (at the expense of saturation).

Actions, ACDSee Actions

ACDSee Actions record adjustments. You can then apply them to other images by "playing" them back. This is an efficient method to batch editing.

Acquire

Often used term to describe the process of locating images on peripheral devices (such as scanners and digital cameras) and adding the images to your hard drive. Can also refer to taking screen captures. See [import](#).

Aliasing

Jagged edges caused by pixels. Occurs most often in low resolution images or images that have been enlarged. See [jaggies](#).

Anchor

Method of fixing an object such as a selection to a screen, page, or image location.

Antialiasing, Anti-Aliasing

Software technique for reducing jagged lines, or 'jaggies'. Uses shades of gray and color to smooth out the contrast between adjacent pixels.

Aspect Ratio

An image's width-to-height ratio. For example, an image with an aspect ratio of 3:1 has a width 3 times larger than its height.

Azimuth

Angle of shadows that extend from the edges of image details. In Photo Editor you can control azimuth when applying the Emboss effect to an image.

B

Background Processing

Tasks or programs that function without user interaction.

Bandwidth

Amount of data that can be sent through a network connection in a fixed amount of time. Bandwidth is measured in kilobits per second (Kbps).

Barrel Distortion

In barrel distortion the photo appears to bulge outwards from the center.

Bit

Bits are small units of computer memory. The color depth of your image is constrained by the number of bits available to store color information. For example, it is possible to store 256 different color values per color channel in 8-bit RGB images. Similarly, it is possible to store 65,536 different color values per color channel in 18-bit images.

Blackpoint

An image's darkest area. You can control the intensity of the black in an image by adjusting its blackpoint.

Blend Modes

Filters that change the effect of a tool or the appearance of a selected object.

Brightness

Light intensity of an image. You can make an image appear brighter or darker by adjusting its brightness.

Brush

A tool that you can use to isolate or indicate pixels you want to apply effects or adjustments to. The Brush in Drawing Tools can be used to draw in color on your image. See [Smart Brushing](#).

C

Chromatic Aberration

A lens artifact that can result in fringes in high contrast areas of some photos.

CMYK

Color model that uses cyan, magenta, yellow, and black (key) as its primary colors.

Color Cast

Changes the hue of an image while keeping the saturation and brightness intact. For example, many digital cameras produce pictures with a slightly blue color cast. Photo Editor includes a tool that removes an unwanted color cast.

Color Channel Value

Contains all pixel information for a single color. A grayscale image has one channel, while an RGB image has three channels. You can adjust RGB values when editing a color.

Color Gamut

Range of colors that a device such as a printer or monitor can produce or display.

Color Management

Process of adjusting your computer settings so that the color output from your printer matches the colors you see on your monitor.

Color Space

There are two types of color spaces: device-independent or device-dependent. A device-independent color space, such as RGB, describes all possible colors. A device-dependent color space describes the subset of colors (from the device-independent color space) that a particular device can reproduce. Device-dependent color spaces are used to map colors between devices (for example, from a monitor to a printer) to ensure that colors are reproduced accurately.

Compression

Process that converts data to a storage format requiring less space than the original data.

Contact Sheet

Physical or digital page that contains a series of small images, usually in a grid format.

Contrast

Measure of an image's color and brightness differences.

Convert

Change a file from one format to another. For example, you might convert a file from a bitmap (.bmp) to a JPEG (.jpg) to reduce the file size.

Cropping

Removing unwanted image areas.

D

Dock

Attaching a toolbar, window, or pane to different screen areas.

DPI (dots per inch)

Measurement of an image's resolution. For example, 92 DPI means 92 dots horizontally and 92 dots vertically, which equals 8,464 dots per square inch. More dots per inch result in higher resolution and image quality.

Dynamic Range

The dynamic range of an image is directly related to the dynamic range of your digital camera's sensor. If your digital camera's sensor has a large dynamic range it can capture the darkest shadows and brightest highlights at the same time, without clipping the shadows or highlights. (RAW images preserve the dynamic range of your digital camera's sensor.) Adjusting the tonal range of the image changes how the dynamic range of the image is represented on a monitor or in a photo.

E

Elevation

Height of an imaginary light source over an image. The elevation of the light source works in conjunction with azimuth to generate a three-dimensional emboss effect.

Encode

Writing (or saving) a file format.

Encryption

Method of converting data into a secure format. You need a digital password or key to read an encrypted file.

EXIF (Exchangeable Image File)

Standard for storing information, primarily with images that use JPEG compression. Most digital cameras create EXIF information and embed it in the image file. For example, EXIF information can include details about shutter speed and whether a flash was used.

Export

Moving data from one application to another. The exporting application places the data in a format that the other application understands.

Exposure

Exposure is the amount of time that your digital camera's sensor is exposed to light.

F

Feather

Softening image edges to blend them into the background.

File Format

Medium for encoding information in a file. Each type of file has a different file format that specifies how it organizes the information it contains.

Filter

Program that can apply an effect to an image, such as an embossed appearance or a sepia tone.

Fisheye Distortion

In fisheye distortion, the photo appears to bulge outwards from the center, as if the photo were wrapped around a sphere.

G

Gamma

Range of color values a monitor, scanner, or printer can display. Adjusting this value increases or decreases the intensity of the light spectrum.

Grayscale Image

Image composed of different shades of gray.

H

Highlights

Highlights are the brightest or whitest parts of an image.

Histogram

A histogram is a graph that displays the dynamic range of shadows and highlights in an image.

HSL

An acronym for hue, saturation, and lightness.

Hue

Predominant color in an image.

I

Image Resolution

Quality of image details and colors. Also used to describe the quality of monitors and printer output.

Interpolation

Process that uses nearby pixels to estimate the color of new pixels added to the larger image. For example, interpolation might be used when enlarging a digital image.

J-K

Jaggies

Individual pixels displayed in an image with low resolution. The appearance of pixels in an image causes lines and curves to appear jagged.

L

Lens Vignetting

Unusual darkness in the corners of images as a result of an inability of the lens to distribute light into the corners of the image.

Lossless Compression

Form of compression that retains all image data and quality.

Lossless Rotation and Flipping

Rotation of a JPEG image without loss of image quality. This works best on images with dimensions that are a multiple of 8 or 16.

Lossy Compression

Form of compression that attempts to remove unnecessary data. This data loss can affect image quality.

M

Marquee

Dashed-line frame that identifies a selected portion of an image. Depending on the tool, you can resize or move a marquee with or without changing the underlying image.

Metadata

Information about an image and how it was taken. For example, the metadata of digital camera images can contain the date and time the picture was taken, the shutter speed, the exposure settings of the camera, and whether a flash was used.

Monochrome Image

Image containing a single color.

N

Noise

Effect produced when a variety of pixel colors are used in the same color region. Noise often occurs in images with high ISO setting or slow shutter speed.

O

Opacity

Determines how visible an effect is when applied to an image or a selection. High opacity produces a more solid effect, while low opacity results in a nearly invisible effect.

Overexposed

Images that are overexposed have too many highlights, and tend to look faded. You typically overexpose images by exposing your digital camera's sensor to light for too long.

P-Q

Panning

Moving zoomed images vertically, horizontally, and diagonally across the display area to view specific areas of the image.

Perceptual

Rendering intent that scales all of the colors within one gamut to fit within another gamut. Best used for photographic images, as it maintains the relationship between the colors more accurately than the colors themselves.

Perspective Distortion

Perspective distortion is caused by wide angle and telephoto lenses, which distort the perspective of large or far-away objects. For example, if you take a photo of a tall building, the building may appear to be narrower at the top even though the building is the same width from top to bottom.

Pincushion Distortion

In pincushion distortion the photo appears to shrink inwards toward the center.

Pixel (PICTure ELe ment)

Smallest visible portion of a digital image, arranged in rows and columns.

Plug-in

Software module that adds functionality to a larger program.

PPI (pixels per inch)

Measurement of how an image is displayed. More pixels per inch result in higher image quality.

Presets

A preset contains image correction settings. You can create and use presets to ensure that settings you apply are the same and consistent across all images.

Primary Colors

Colors that can produce other colors when blended. For example, in the RGB color model, red, green, and blue are primary colors.

R

Raster Image

Image composed of a rectangular grid of pixels. Each pixel contains a defined value about its color, size, and location in the image. As a result, resizing the image can affect its quality.

RAW

An image file format. RAW files contain all of the image data that was captured by your digital camera's sensor. RAW files are not processed by your camera.

Red Eye

Red eye occurs when the light from your digital camera's flash reflects off the retinas in the subject's eyes. The subject's eyes look red instead of their normal color.

Relative Colorimetric

Rendering intent that maps the colors that fall exactly within the color gamuts of both the input and output devices. Best used for single- or limited-color images as colors outside of both gamuts may be mapped to a single color.

Render

Drawing images to your screen.

Rendering Intent

Approach used to map colors from one color gamut to another. There are four rendering intents available: [Perceptual](#), [Relative Colorimetric](#), [Saturation](#), and [Absolute Colorimetric](#).

Resolution

Quality and clarity of an image, measured in pixels, dots per inch, or pixels per inch.

RGB

Color model that uses red, green, and blue as its primary colors.

Ringing Artifacts

Distortion around the edges of image subjects, caused by compressing or resizing an image.

S

Saturation

Purity of a color. Higher color saturation results in more gray.

Saturation (rendering intent)

Rendering intent that maintains color saturation from one gamut to another. Best suited for images in which the actual color represented is less important than the color's vividness.

Selection

Portion of an image that you define with a selection tool. A marquee surrounds a selection. Photo Editor and ACD Photo Editor include selection tools.

Sepia

Sepia-toned images are composed of shades of brown. Many old photographs have a sepia tone.

Sharpen

The sharpen tool is for sharpening images. The original image is blurred slightly. This blurred version of the image is subtracted from the original image, revealing the edges in the original image. These edges can then be sharpened by increasing contrast.

Sharpness

The sharpness in an image is determined, primarily, by your digital camera's lens and sensor. You can also create the illusion of sharpness by increasing the contrast between edges within an image.

Shortcut Menu

Menu that appears when you right-click within a program. Sometimes referred to as a context menu.

Smart Brushing

Brushing targeted to specific colors, brightness values, or combination of color and brightness. The Smart Brush only affects pixels similar in value to the pixel in the center of the brush stroke, and allows you to apply adjustments to those pixels.

Soft Proofing

Using your computer's monitor as a proofing device. The monitor displays a simulation of how colors will appear when rendered by the printer.

T

Thumbnails

Small preview of a full-sized image.

U

Underexposed

Images that are underexposed have too many shadows. Images typically become underexposed if you don't expose your digital camera's sensor to light long enough.

V

Vector Image

Image consisting of individual objects rather than pixels. Mathematical equations define the objects. You can adjust the size of a vector image and the image will retain its clarity and quality.

W

Watermark

Background text or graphics added to an image, usually to provide copyright protection.

White Balance

Removes color cast to create a photo that is correctly lit. You can use your camera settings to apply the correct white balance before taking an image, or correct the white balance in Photo Editor.

Whitepoint

Lightest image area. You can control the intensity of the white in an image by adjusting its whitepoint.

Z

Zoom

In Photo Editor, zoom refers to the process of increasing or decreasing the display scale for an image. Increase the display scale to view a portion of an image or a specific image detail. Decrease the display scale to view more or all of the image.

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