AliveColors
Graphics Editor

CONTENTS

HOW IT WORKS

AliveColors is the all-in-one solution for detailed image editing and retouching, high-quality photo enhancement, creating stylization effects as well as professional painting and drawing.

With a wide range of tools, effects, and parameters, you can edit existing photos or create an image from scratch.

For more details please read the Tutorials.

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INSTALLATION ON WINDOWS

The **AliveColors** image editor runs on Windows, Mac, Linux (64-bit). See the supported operating systems.

Below you will find instructions on how to install AliveColors on **Windows**.

You must have administrator rights to install the software.

Follow the instructions:

1. Run the **alivecolors-setup.exe** file.
2. Select your language and press the **Install** button to launch the installation process.

   All other necessary files will be downloaded and installed automatically.
   If your computer is not connected to the Internet, use the offline method.

3. Click **Next** to continue.
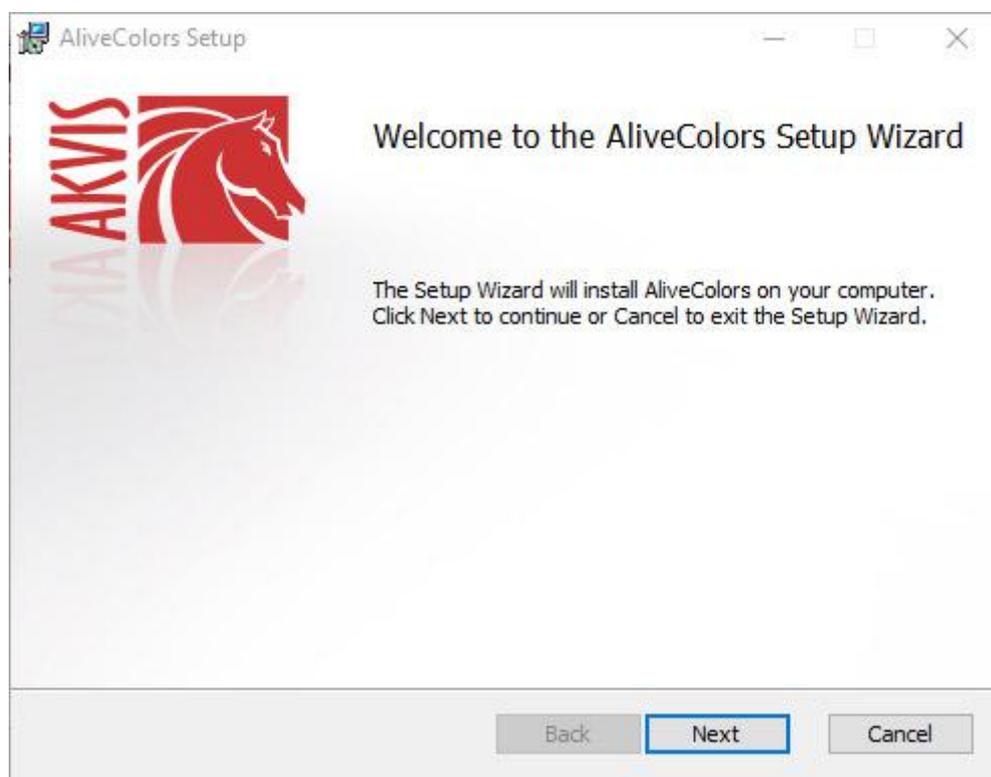
4. To continue the installation process, read and accept the **End-User License Agreement**.

   Select "**I accept the terms in the License Agreement**" and press **Next**.
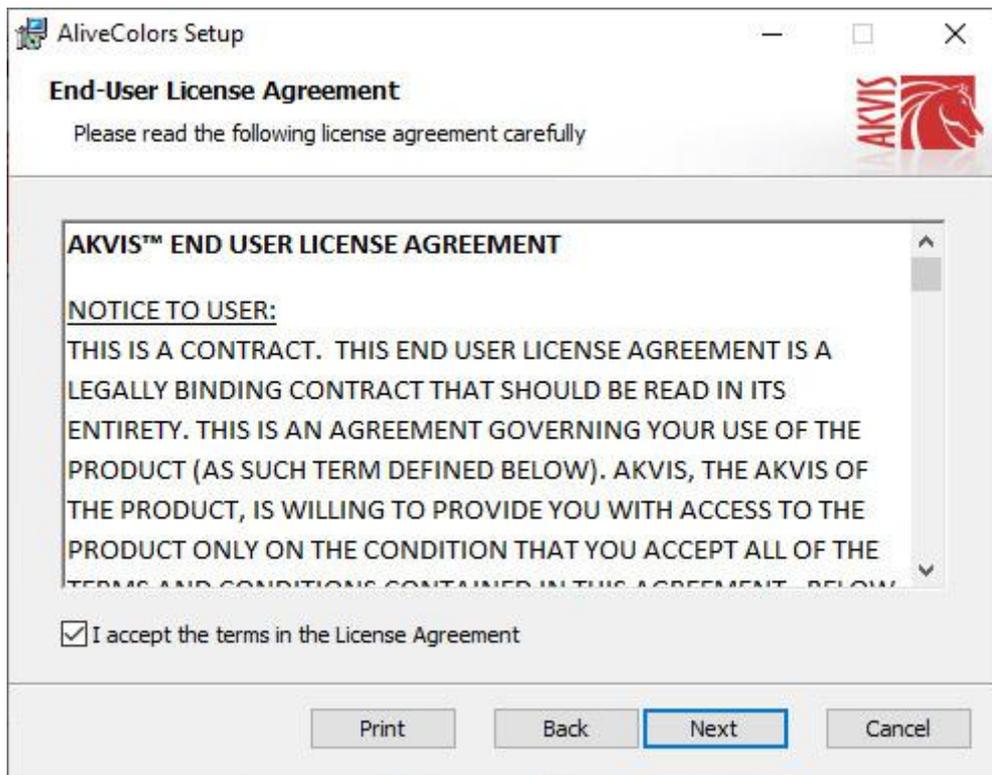
5. You can choose a drive to install the program.
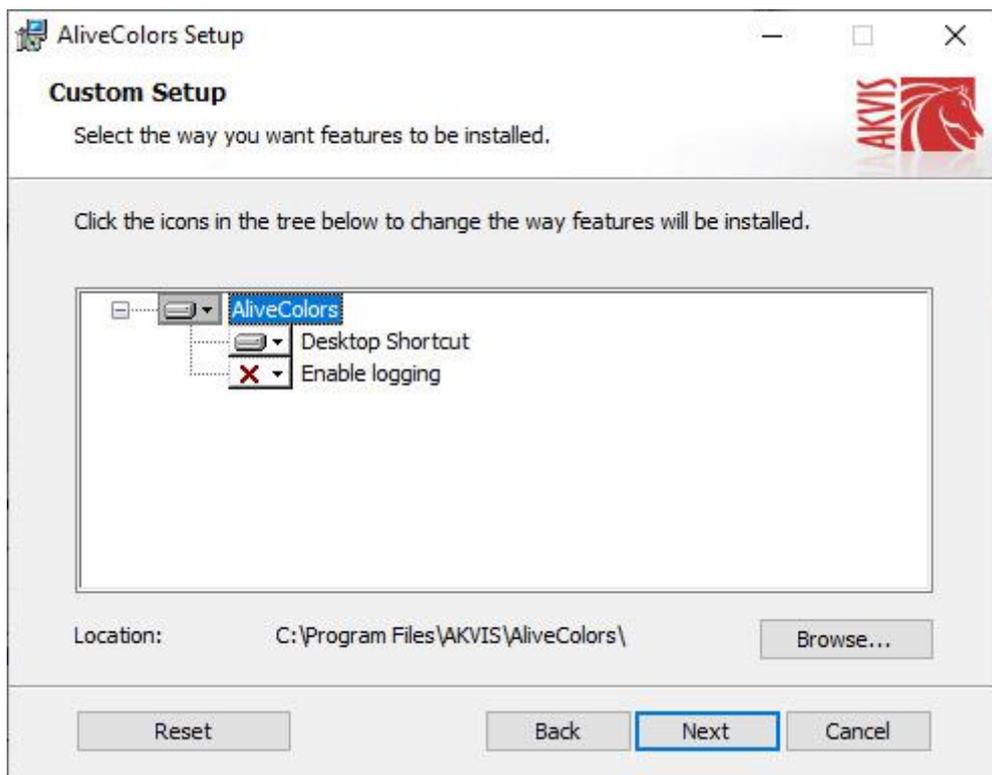
6. Press **Install**.
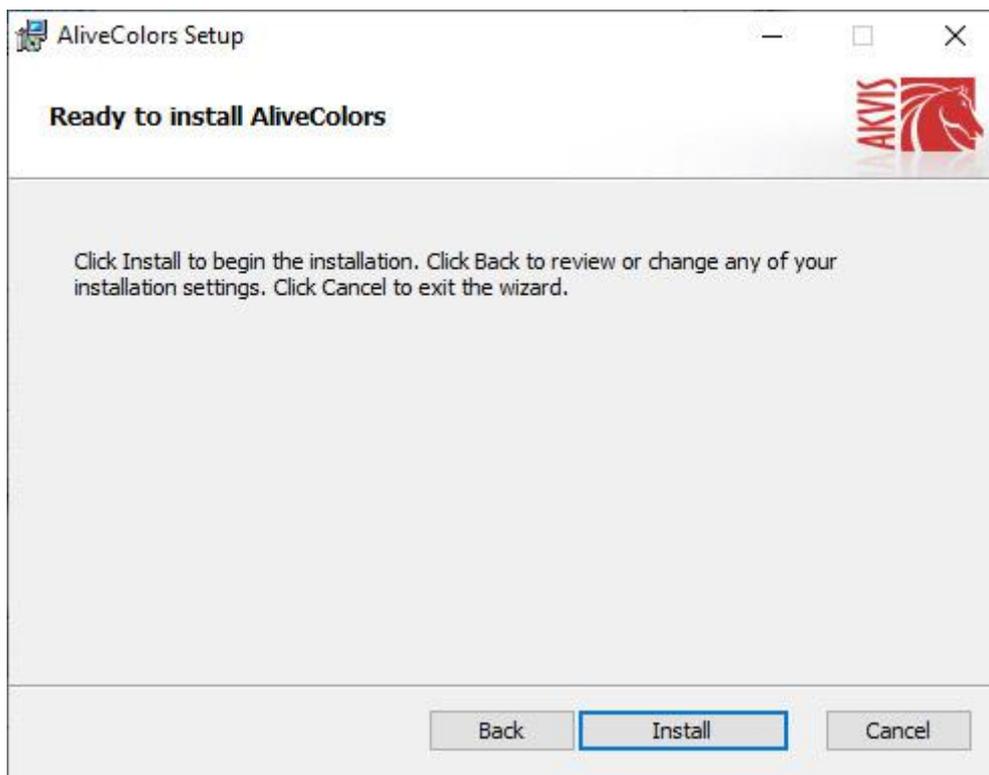
7. The installation is completed.

   You can subscribe to the **AliveColors Newsletter** to be informed about updates, events, and special offers. Enter your e-mail address and confirm that you accept the Privacy Policy.

8. Press **Finish** to exit the AliveColors Setup.
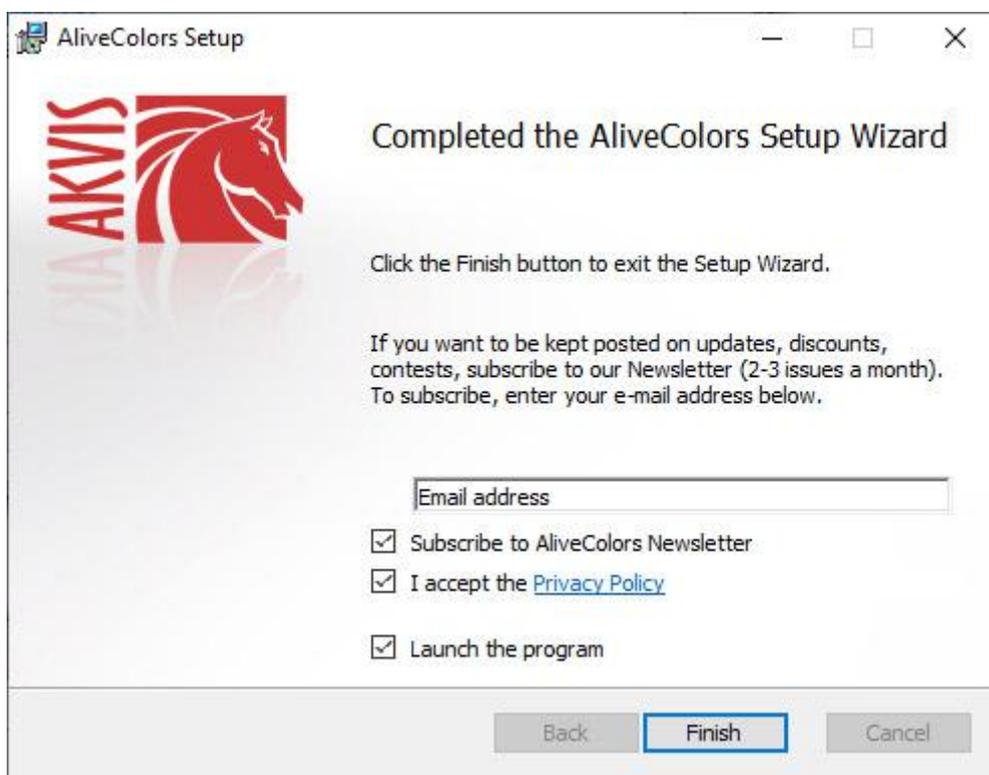
After the installation of AliveColors, you will see a new line in the **Start** menu and a shortcut on the desktop.

Installation on a Computer Not Connected to the Internet

On a computer connected to the Internet, download the file **alivecolors-setup.exe** file to an empty folder and run it with the **/layout** key. As a result of this action, other necessary **.msi** files will be downloaded here.

Then transfer this folder with all the files to a computer not connected to the Internet and run **alivecolors-setup.exe**. The installation of the image editor with all the functions and modules will proceed as usual.

Note: For optimal operation of AI filters, you need a discrete (not integrated) graphics card with at least 3 Gb memory and the latest version of a driver for the graphics card. Otherwise, the processing will be performed by the CPU. The program will still work, but a bit slower.

See the system requirements.

INSTALLATION ON MAC

The **AliveColors** image editor runs on Windows, Mac, Linux (64-bit). See the supported operating systems.

Below you will find instructions on how to install AliveColors on **Mac**.

You must have administrator rights to install the software.

Follow the instructions:

1. Open the virtual disk dmg: **alivecolors.dmg**
2. Read the **License Agreement** and press **Agree**, if you agree with the conditions.
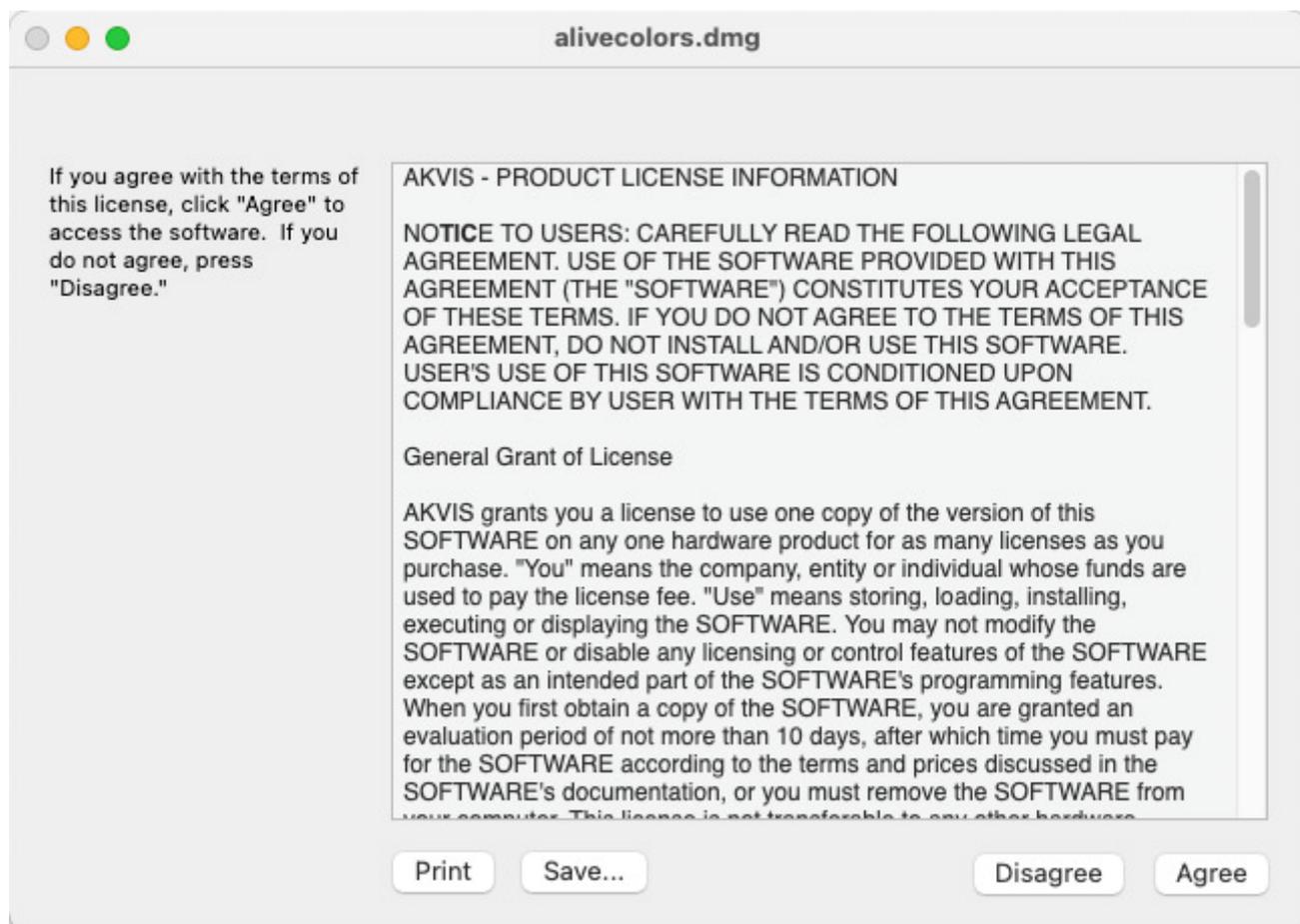
3. **Finder** will open with AliveColors application inside.
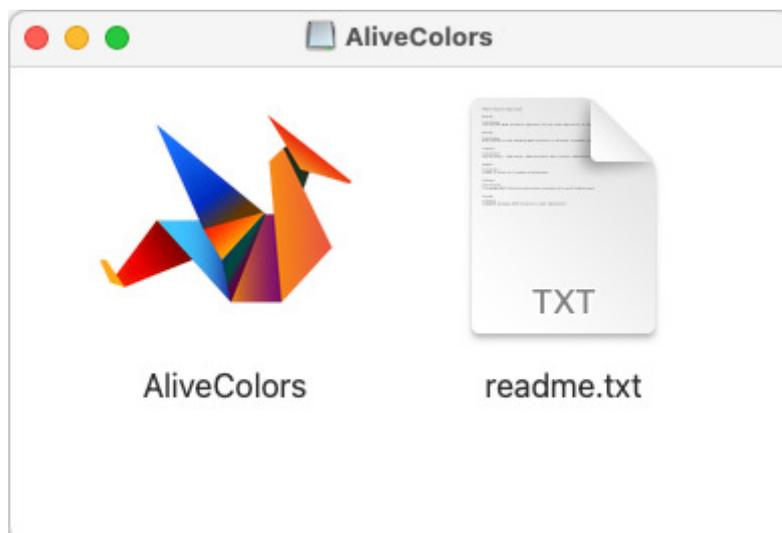
4. To install AliveColors just drag the application into the **Applications** folder (or any other place you like).

Run the program by double-clicking on its icon in Finder.

INSTALLATION ON LINUX

The **AliveColors** image editor runs on Windows, Mac, Linux (64-bit). See the supported operating systems.

Below you will find instructions on how to install AliveColors on **Linux**.

>   **Note:** The AliveColors image editor is compatible with **Linux kernel 5.0+ 64-bit**. You can find out the kernel version using the **uname -srm** command.

AliveColors installers are available for several Linux distributions:

>   ► DEB package: Debian/Ubuntu
>
>   ► RPM package: Red Hat/CentOS/Fedora
>
>   ► openSUSE

Also, you can install **AliveColors** using Flatpak.

Installation on **Debian**-based systems:

>   **Note:** You need apt-install or apt-get permissions required to install software.

1. Run the terminal.
2. Create a directory to store keys:

   sudo mkdir -p /usr/share/keyrings

3. Download the key that signed the repository:

   curl -fsSL https://akvis.com/akvis.gpg | sudo tee /usr/share/keyrings/akvis.gpg >/dev/null

   or

   wget -O - https://akvis.com/akvis.gpg | sudo tee /usr/share/keyrings/akvis.gpg >/dev/null

4. Add the repository to the list where the system looks for packages to install:

   echo 'deb [arch-=i386 signed-by=/usr/share/keyrings/akvis.gpg] https://akvis-deb.sfo2.cdn.digitaloceanspaces.com akvis non-free' | sudo tee /etc/apt/sources.list.d/akvis.list

5. Update the list of known packages:

   sudo apt-get update

6. Install the AliveColors image editor:

   sudo apt-get install alivecolors

   Agree to download and install required packages (qt-akvis, akvis-alivecolors-bin, akvis-alivecolors-presets, akvis-alivecolors-framepack, akvis-hdrfactory-akf, akvis-makeup-akf, akvis-natureart-akf, akvis-smartmask-akf).

7. The installation is completed.

   Launch the image editor via the terminal or using the program shortcut.

8. For automatic updates, use the command:

```
sudo apt-get upgrade
```

To remove the image editor:

```
sudo apt-get remove alivecolors --autoremove
```

Installation on **RPM**-based systems (**CentOS**, **RHEL**, **Fedora**):

1. Run the terminal.
2. Register the key that signed the repository:

   ```
   sudo rpm --import https://akvis.com/akvis.asc
   ```

3. Add the repository to the system:

   ```
   sudo wget -O /etc/yum.repos.d/akvis.repo https://akvis.com/akvis.repo
   ```

4. Update the package list:

   when using the **dnf** package manager:

   ```
   sudo dnf update
   ```

   when using the **yum** package manager:

   ```
   sudo yum update
   ```

5. Install AliveColors:

   when using the **dnf** package manager:

   ```
   sudo dnf install alivecolors
   ```

   when using the **yum** package manager:

   ```
   sudo yum install alivecolors
   ```

6. The installation is completed.

   Launch the image editor via the terminal or using the program shortcut.

7. For automatic updates:

   when using the **dnf** package manager:

   ```
   sudo dnf upgrade
   ```

   when using the **yum** package manager:

   ```
   sudo yum upgrade
   ```

8. To remove the image editor:

   when using the **dnf** package manager:

   ```
   sudo dnf remove alivecolors
   ```

when using the **yum** package manager:

```
sudo yum remove alivecolors
```

Installation on **openSUSE**:

1. Run the terminal.
2. Login as a root user.
3. Add the key that signed the repository:

```
rpm --import http://akvis.com/akvis.asc
```

4. Add the repository to the system:

```
zypper ar -r https://akvis.com/akvis.repo akvis
```

5. Update the package list:

```
zypper ref
```

6. Install AliveColors:

```
zypper install alivecolors
```

7. The installation is completed.

   Launch the image editor via the terminal or using the program shortcut.

8. For automatic updates:

```
zypper update
```

   To remove the image editor:

```
zypper remove alivecolors
```

Installation using **Flatpak**:

1. Run the terminal.
2. Add the Flathub repository

```
sudo flatpak remote-add --if-not-exists flathub https://flathub.org/repo/flathub.flatpakrepo
```

3. Add the AKVIS repository

```
sudo flatpak remote-add --if-not-exists akvis --from https://akvis-
flatpak.sfo3.cdn.digitaloceanspaces.com/com.akvis.flatpakrepo
```

4. Install AliveColors:

```
sudo flatpak install -y akvis com.akvis.alivecolors
```

5. The installation is completed.

   Launch the image editor using the program shortcut or the terminal:

```
flatpak run com.akvis.alivecolors
```

6. To update all installed flatpaks, use the command:

```
sudo flatpak update -y
```

to remove the program:

```
sudo flatpak remove -y com.akvis.alivecolors
```

In order to display the program interface correctly, it is recommended to install the Compton or Picom composite manager.

USING TRIAL VERSION OF ALIVECOLORS

Download and install **AliveColors**.

When you run the unregistered version of the program, the **About AliveColors** window appears.

Click the **TRY IT** button to start a trial period for **AliveColors**.

During the 10-day evaluation period, you can use all the features for free and **without activation**.

The trial period starts from the first launch of the program.

The **About AliveColors** window displays the number of days until the end of the trial period.

After the trial period has expired, the **TRY IT** button will become inactive. To continue using the product, you should activate the program.

To get a licensed version, you do not need to download another copy of the program. Just activate the installed one.

HOW TO ACTIVATE ALIVECOLORS

After you have downloaded **AliveColors**, run the setup file and follow the installation instructions.

During the 10-day trial period, you can try all the features of the program without registration.

To use the product after the trial period has expired, you have to activate the software. There are **Free** and **Business** licenses.

> **Attention:** The process described below requires that your computer must be connected to the internet during the activation process. If it is not possible, we offer you an alternative solution.

► Free Version

Proceed as follows to activate a free version of AliveColors:

1. When starting an unregistered version of the program, the **About AliveColors** window appears. Click the **FREE** button.

2. Enter your valid email address in the **Email Address** input field, activate both options *I accept the Privacy Policy* and *Subscribe to AliveColors Newsletter*, and click **OK**.

Alternatively, you can request a serial number directly from the Customer Room by clicking on the button **Get license key for AliveColors Free**.

3. The license key will be sent to your email address. You will be automatically subscribed to **AliveColors Newsletter**.

> **Attention:** If you unsubscribe, your free license key will be immediately disabled!

4. Open the program again and click **ACTIVATE**.
5. Enter your name and the license key (serial number) provided in the email.
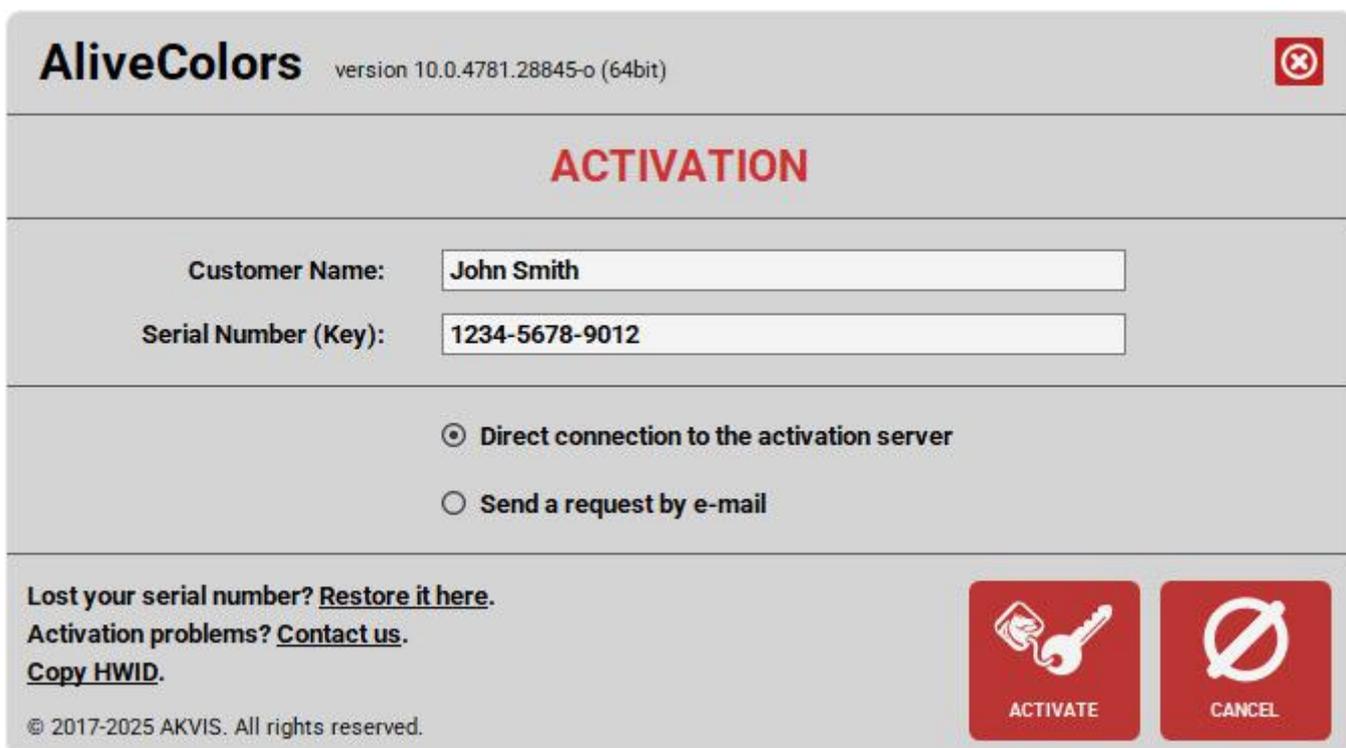
6. Choose the option **Direct connection to the activation server** and click **ACTIVATE**.
   Your registration is completed!

► **Business Lifetime License**

1. When starting an unregistered version of the program, the **About AliveColors** window appears.
2. Click **ACTIVATE**.
3. Enter your name and the license key (serial number) which you received after your purchase.

4. Choose the option **Direct connection to the activation server** and click **ACTIVATE**.
   Your registration is completed!

Activation Without Internet Connection

If you have no Internet connection, please follow these steps to activate the software:

1. Click **ACTIVATE**.
2. Enter your name and the license key (serial number).
3. Choose the option **Send a request by e-mail** and click **ACTIVATE**.
4. A message with all necessary information will be created by the program.
5. Transfer the activation message to a computer connected to Internet, for example, with a USB stick. Send us the activation request without any changes to: activate@akvis.com.
6. Based on this information, we will generate a license file (**AliveColors.lic**) and send it to your e-mail address.
7. Save the **AliveColors.lic** file (do not open it, just copy) to your computer where you want to register the software, in the **AKVIS** folder in Users' Public Documents:

   Windows: C:\Users\Public\Documents\AKVIS;
   Mac: /Users/Shared/AKVIS;
   Linux: /var/lib/AKVIS.

   Your registration is completed!

WORKSPACE

AliveColors is all-in-one graphics software for detailed image editing and retouching, high-quality photo enhancement, creating stylization effects as well as professional painting and drawing.

Watch our video tutorial to learn more about the workspace of AliveColors image editor.

Run **AliveColors**. Right after the launch of the image editor, its workspace looks like this:

Start Screen of AliveColors Image Editor

In the central area of the software window, the **Start Screen** is shown.

At the top of the screen there are the following controls:

- the button opens the dialog box for creating a new image;

- the button creates a new document from the clipboard;

- the button opens the file dialog, where you can select an image from the disk.

The central area of the start screen is the list of recently opened documents. You can view documents as thumbnails ⊞ or a text list ☰.

The size of the thumbnails of the recently opened images can be adjusted using the slider at the top of the start screen.

When you click the ✚ button next to an image, it will turn into ⦿, and the image will be pinned in the list and will not be lost when opening other images. Press the button again to unpin the image.

When you click the ⊠ button next to an image, it will be deleted from the list.

At the bottom of the start screen there is the **Learn Panel** where you can find links to video tutorials for working with the editor.

>   **Hint:** You can enable or disable the Start Screen and the Learn Panel in the editor's Preferences.

After opening an image, the editor's workspace will look as follows:
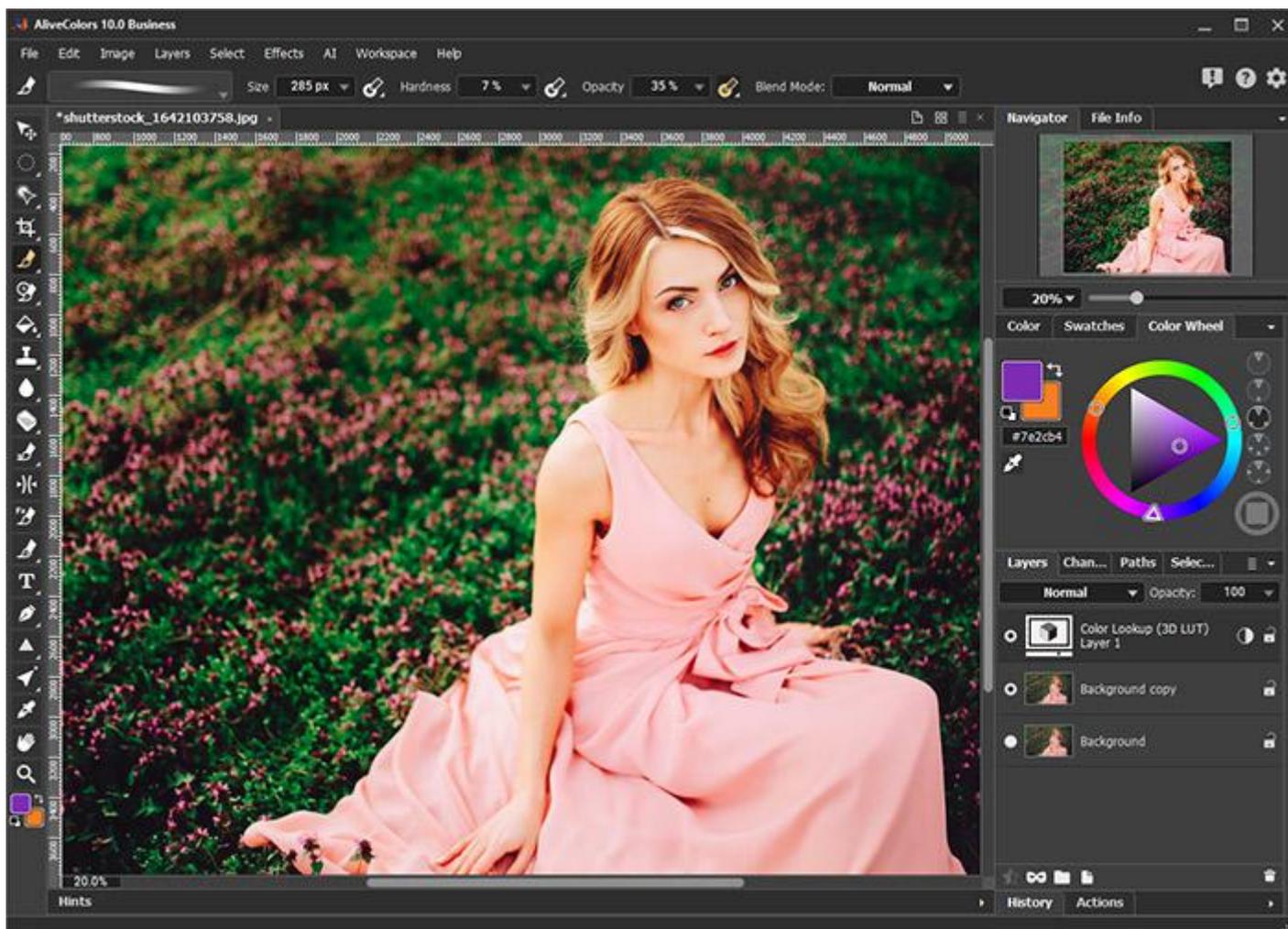
Workspace of AliveColors

Elements of the Program Window:

The main part of the program's window is taken by the **Image Window**.

It's possible to open multiple images at the same time. Each image appears in a separate tab at the top of the **Image Window**. You can switch between the images by clicking on the tab name.

Image Tabs

To the right of the image tabs, the following buttons are found:

- ⎘ - the button creates a new file;

- ⊞ - the button shows thumbnail previews of opened files;

- ☰ - the button displays the list of opened images;

- ☒ - the button closes an active file.

Right-click the tab bar to open the context menu with available commands.

In the upper part of the program's window, you can see the **Control Panel** with the following menu options:

The **File** menu contains basic commands to manage files: Open, Save, Print, Close, Exit, etc.

Using the **Automate** command, you can process multiple files at once.

The **Preferences...** command opens the program settings dialog box.

The **Edit** menu is used to edit the content of a document and the history of changes.

The **Image** menu allows you to adjust the scale, size, and color mode of an image. It also offers commands for tone and color adjustments.

Assign Profile. The command replaces the profile with the selected one without affecting the data. Visually, the image will change, but the data at each point will remain the same.
Convert to Profile. The command replaces the profile with the selected one, the data is recalculated, but the visual image does not change.

The **Layers** menu contains commands for working with layers.

The **Select** menu contains commands for working with selections.

The **Effects** menu contains a number of enhancement and stylization filters and effects. Here you can find a list of built-in and installed plugins.

The **AI** (Artificial Intelligence) menu contains neural filters designed to improve images.

The **Workspace** menu controls the appearance of the program. It offers the following commands and menu items:

The **Customize Workspace** command allows to edit the workspace properties.

The **Panels** menu item defines which panels are displayed in the program window.

The alignment commands (**Rulers**, **Grid**, **Guidelines**, and others) are used to arrange and align layers and objects.

The **Help** menu provides information about the program. The menu provides the following items:

Tutorial. The command opens the User Manual (F1 key).

About AliveColors. The command displays information about the current version and license of the program.

Activation. Using the command, you can register the program and change the license type.

What's New? The command opens a web browser window providing information about new versions of AliveColors.

Technical Support. Use this command to contact AKVIS Support Team.

AliveColors on the Web. The command opens the home page of the graphics editor.

Subscribe to AliveColors News. Use this command to subscribe to AliveColors Newsletter and stay tuned with the latest news!

About Plugins. Select the name of any plugin to get information about its version and the status of your license.

Under the Control Panel there is the **Tool Options** panel with the parameters of an active tool.
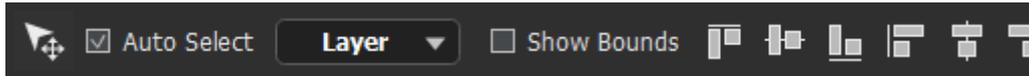
Options Panel of the Move Tool

The Tool Options panel shows the basic parameters of the tool. To display all parameters, click on the tool icon on the left side of the Tool Options or right-click within the **Image Window**.

In the right part of the Tool Options panel you can see the following icons:

The button ![icon] opens a window showing the latest news about AliveColors.

The button ![icon] opens the help files of the program.

The button ![icon] calls the Preferences dialog box that allows to change the program's options.

The program contains some panels with specific functions: Navigator, Toolbar, Color, Swatches, Color Wheel, History, Actions, Layers, Channels, Selections, and File Info.

The parameters of the selected effect or adjustment layer are shown in the **Settings Panel**.

The **Hints** panel displays a short description of the panels, tools, and options when the mouse cursor is hovering over them.

The panels can be easily moved, combined, scaled, aligned, and hidden.

USING THE PROGRAM

AliveColors is the all-in-one graphics software for detailed image editing and retouching, high-quality photo enhancement, creating stylization effects as well as professional painting and drawing.

Follow the basic processing steps:

Step 1. Run the **AliveColors** image editor.

Step 2. Open a file (supported formats: TIFF, BMP, JPEG, PNG, RAW, SVG, PSD, WEBP, and AKVIS) or create a new image.

To open an image, click the **Open File** button 📤 in the start screen window, select the **File -> Open** command in the menu, or press `Ctrl`+`O` on Windows, `⌘`+`O` on Mac.

Alternatively, you can drag an image shortcut directly to the program workspace. When dragging into an opened file, the image will be added as a new layer.

You can load multiple selected files from disk into a single document as separate layers, using the **Load Files into Layers** command in the **File -> Automate** menu.

You can view the recently opened files on the start screen. You can also select in the menu: **File -> Recent Files**.
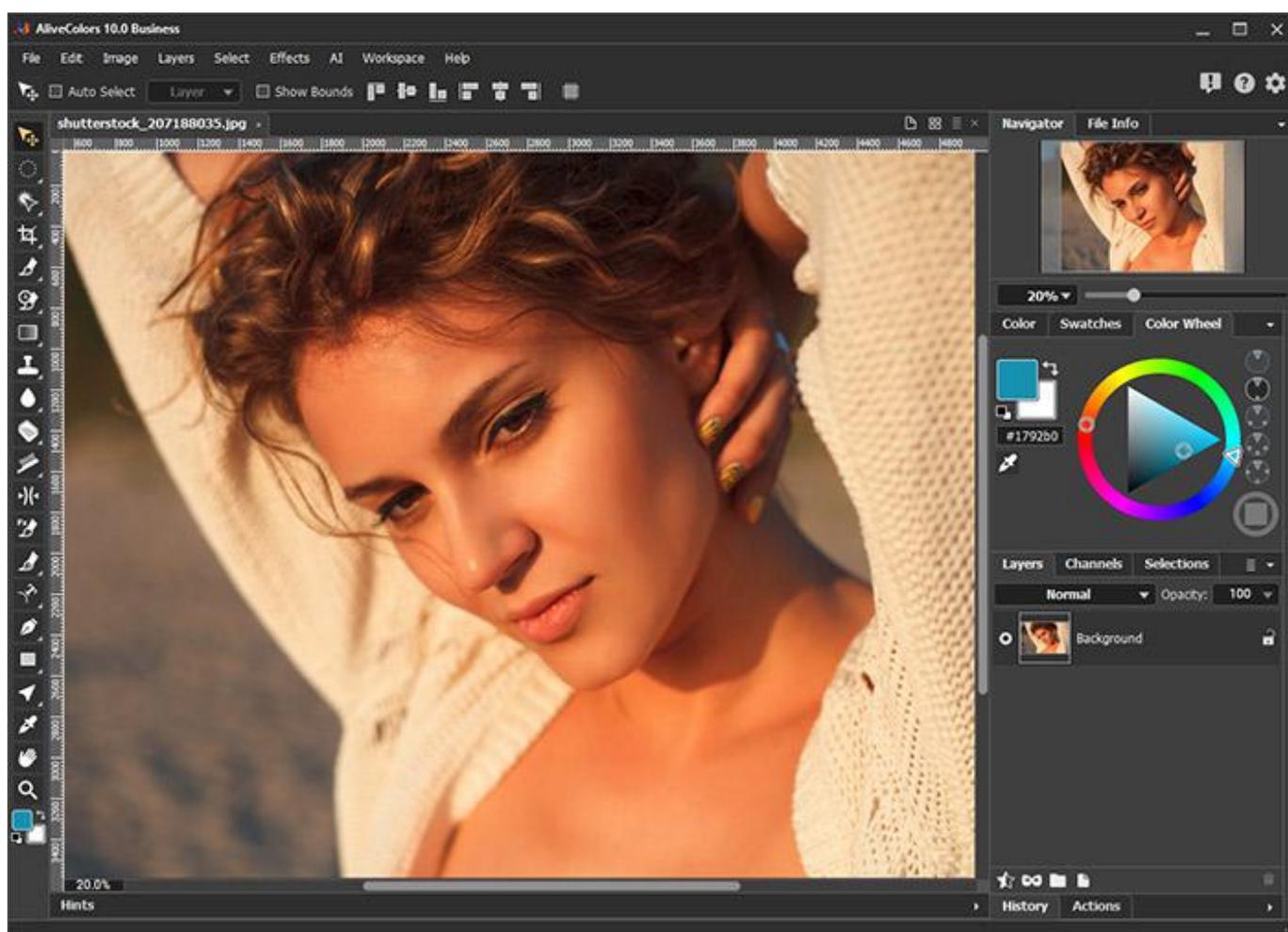
AliveColors Window

It is possible to open multiple images at once.

Step 3. You can adjust the color and hue of an image by selecting **Image -> Adjustment**.

Step 4. To edit the image, use appropriate tools from the **Toolbar**.

Step 5. Apply effects and filters to the image by using the **Effects** menu in the Control Panel.
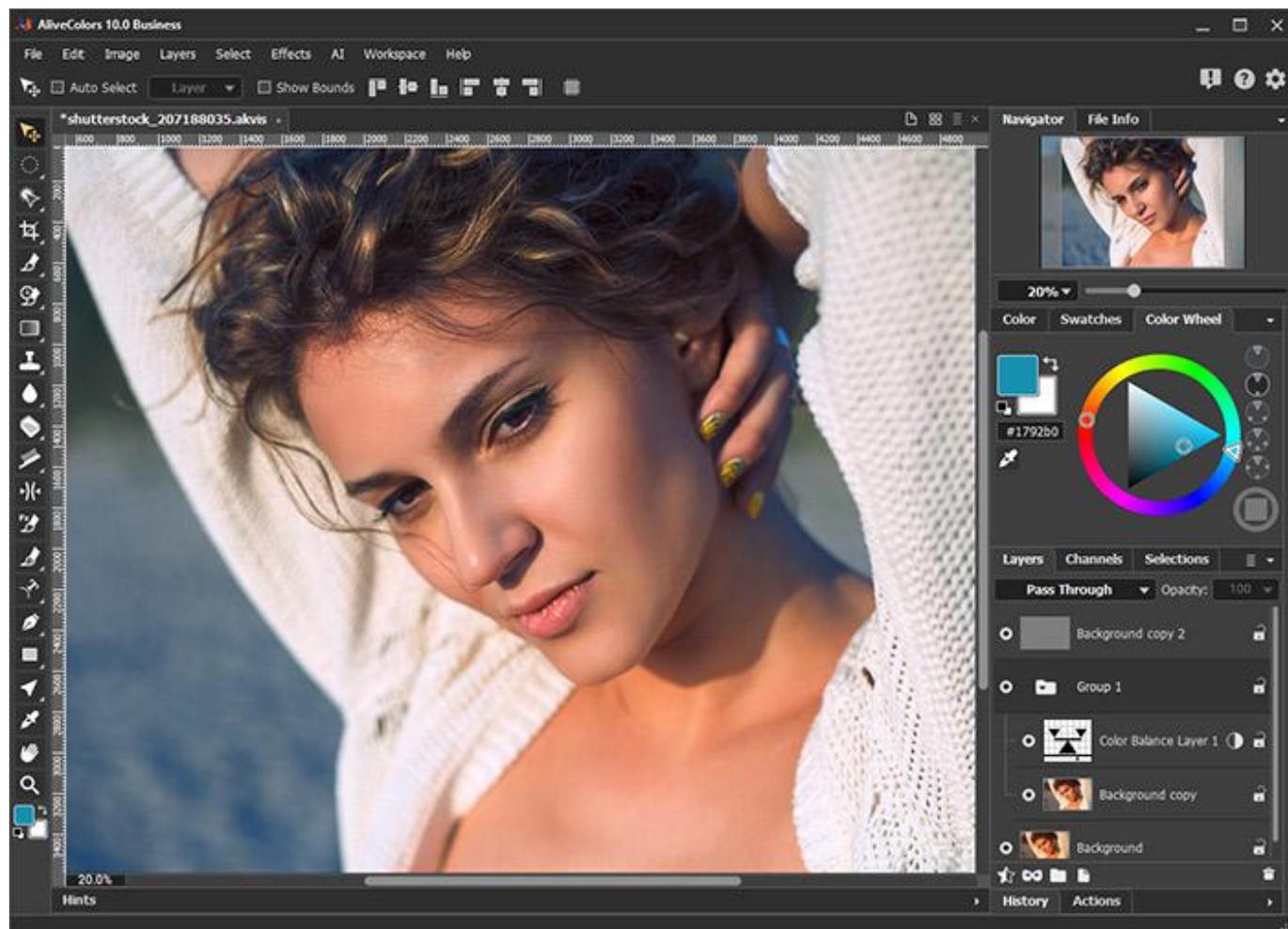
Image Editing in AliveColors

Step 6. To save the result, use the command **File -> Save As** or the key combination `Ctrl`+`Shift`+`S` on Windows, ⌘+⇧+`S` on Mac.

In the **Save As** dialog box, enter a name for the file, select a format (TIFF, BMP, JPEG, PNG, SVG, WEBP, PDF, PSD, or AKVIS) and indicate a target folder.

> **Note:** If your image has multiple layers, you can use the **AKVIS** format to save all checkpoints, all types of layers, selections, and masks. The end result can be saved in any supported format.

Use the command **File -> Save** or the key combination `Ctrl`+`S` on Windows, ⌘+`S` on Mac to replace the original image with the edited one.

You can save each layer of the image to a separate file using the **File -> Save Layers to Files** command. When saving, select the folder, file name, and desired format.

Using the **File -> Save for Web** command, you can prepare and save an image for posting on the Internet. The dialog box allows you to select the optimal format, quality, and file size.
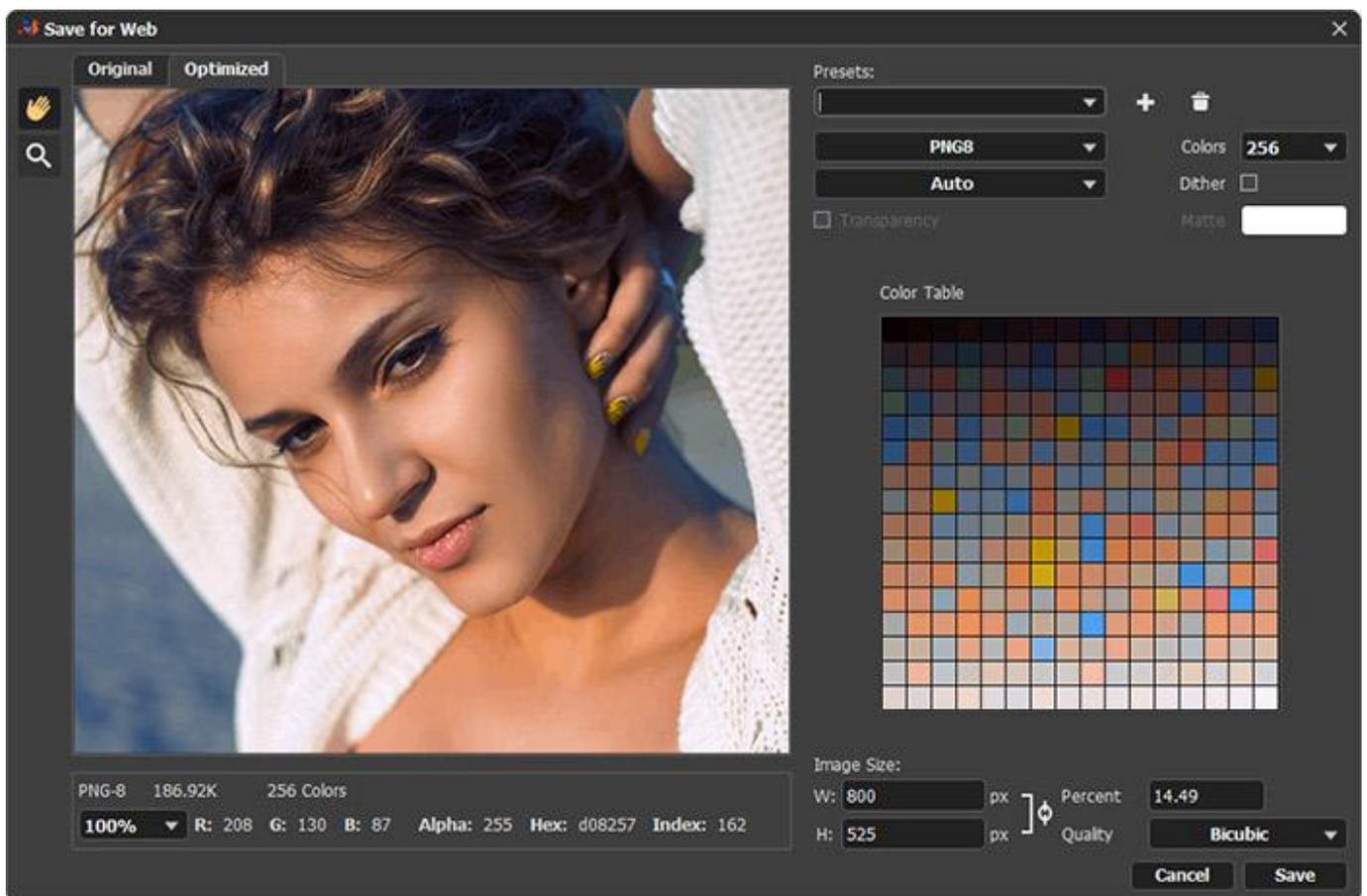
Save for Web

Step 7. To print the image, select **File -> Print** or use the keyboard shortcut `Ctrl`+`P` on Windows, `⌘`+`P` on Mac.

Step 8. Use one of the options to close the active image:

   - press the button ⊠ in the image tab;

   - press the button ⊠ on the right of the image tabs;

   - select the command **File -> Close** in the Control Panel;

   - use the keyboard shortcut `Ctrl`+`W` on Windows, `⌘`+`W` on Mac.

Step 9. Use one of the options to exit the program:

   - press the X symbol in the top right corner of the program window;

   - select **File -> Exit** from the Control Panel;

   - use the keyboard shortcut `Ctrl`+`Q` on Windows, `⌘`+`Q` on Mac.

COLOR PROFILE SETTINGS

Color profiles are needed to accurately and predictably transfer color to different output devices (screens, printers, etc.)

All devices have different color rendering capabilities. Therefore, it is necessary to make sure that the colors on them look as similar as possible. For this purpose, color profiles (or ICC profiles) are used - files that contain information about the color gamut of a particular device.

You can configure a working profile in the **Preferences** ⚙ dialog box, in the **Profile** tab.
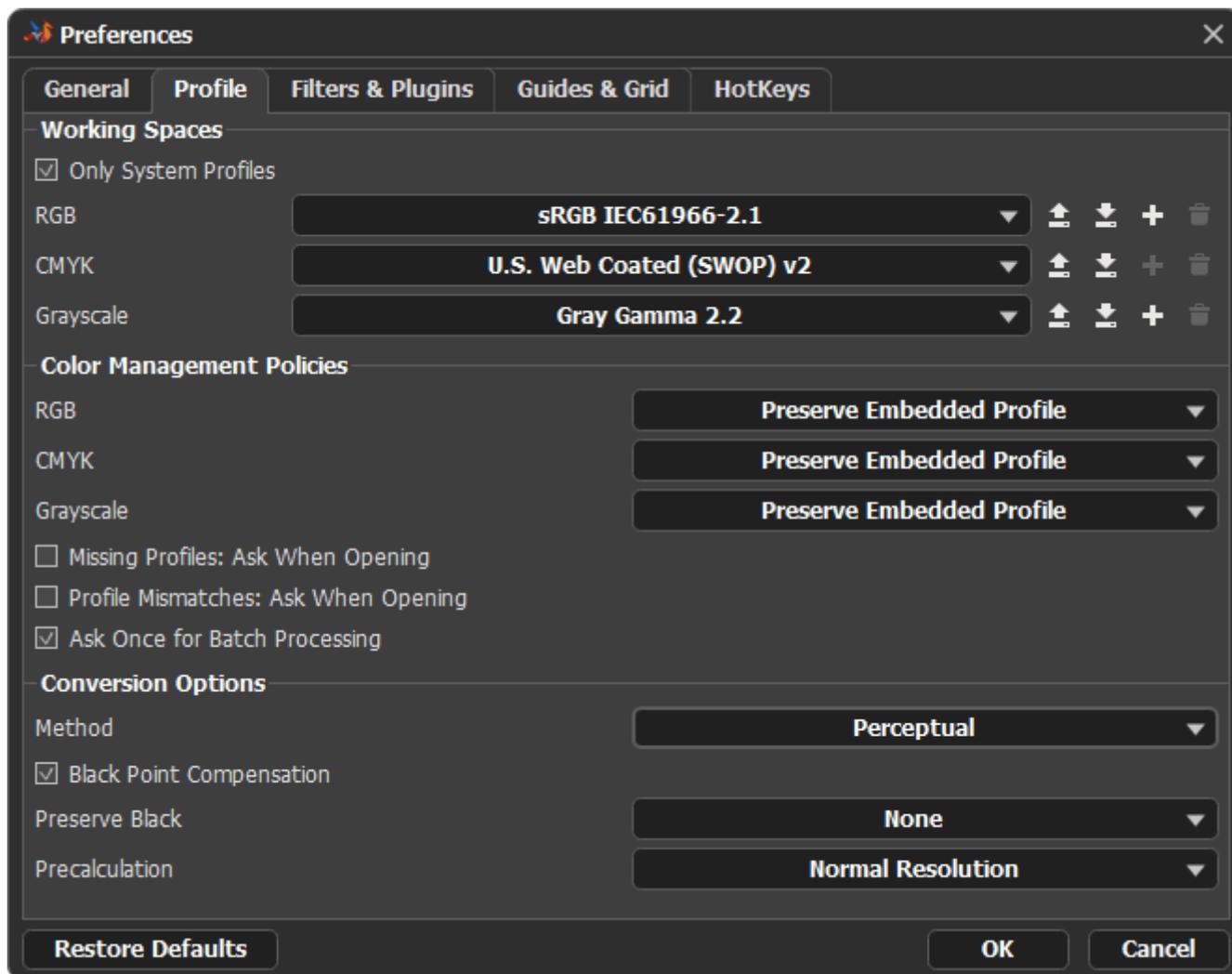
Working Spaces. Each color model has its own workspace profile.

Only System Profiles. When the check-box is enabled, the list displays system profiles, as well as those imported or created by the user. When it's disabled, all found profiles are displayed.

> **RGB**. Specifies the working profile of the RGB color space.
> **CMYK**. Specifies the working profile of the CMYK color space.
> **Grayscale**. Specifies the working profile of the Grayscale color space.

Import Profile ⬆. Load a color profile from the disk.

Export Profile ⬇. Save color profile to the disk.

New Profile ![icon]. It is possible to create a custom profile for RGB and Grayscale spaces. lick the icon and set the settings for the new profile.

Remove Profile ![icon]. Delete a color profile from the list.

Color Management Policies. When you open an image with an embedded color profile that does not match the working space profile, the program determines how to handle the data using the **Color Management Policies**.

This section defines the color management method for a specific color space. It takes one of two values for each color space:

> **Preserve Embedded Profile**. Preserves the document's color profile.
> **Convert to Working Profile**. Converts into the profile specified in the **Working Spaces** section.

The following check-boxes enable/disable the display of a message when opening an image with an inappropriate or missing profile.

> **Missing Profiles: Ask When Opening**. If the check-box is enabled, when opening an image that does not contain an embedded profile, a message will be displayed with several options.

> **Profile Mismatches: Ask When Opening**. If the check box is enabled, then when opening an image containing an embedded profile that differs from the working profile, a message will be displayed with several options.

> **Ask Once for Batch Processing**. If the check-box is enabled, during batch processing of images containing embedded profiles different from the working profile, the question will be asked once, and the answer will be applied to all subsequent processed files. If the check-box is disabled, the message will appear for each opened file with an incompatible profile.
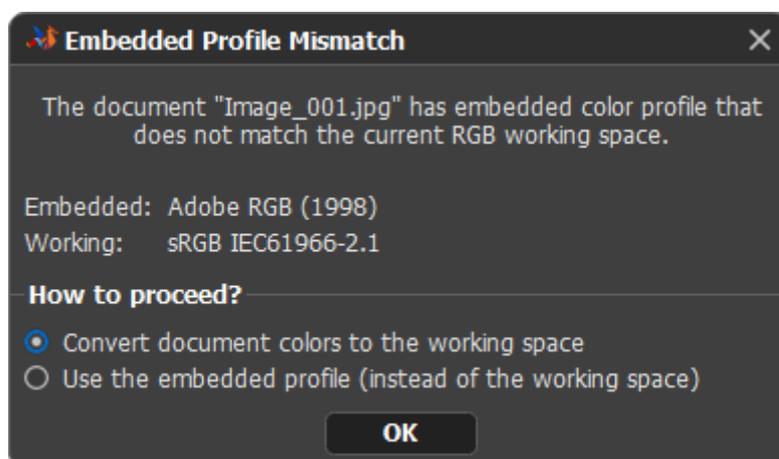
Conversion Options

> **Method**. A method for converting colors between color spaces.

> > **Perceptual**. When converted, it preserves relative color differences so that they appear natural to the human eye.
> > **Saturation**. Achieves high color saturation even at the expense of color reproduction accuracy.
> > **Relative Colorimetric**. Achieves compliance of average relative Lab coordinates of original and adjusted colors with the white point setting.

Absolute Colorimetric. Achieves maximum correspondence between the absolute Lab coordinates of the original and adjusted colors.

Black Point Compensation. When the check-box is enabled, the dynamic range of the source space is matched to the range of the target space.

Preserve Black. Preserving black when converting to CMYK space.

None.
Black Ink Only.
All Inks.

Precalculation. Accelerate color calculation.

None. Precalculation is disabled.
Normal Resolution. Uses the standard color table.
High Resolution. Uses the extended color table.

To accept the changes in the **Preferences** window, click **OK**. If necessary, you can return the original parameter values by clicking the **Restore Default** button.

To change the profile of an open document, use the **Image** menu commands:

Assign Profile. The command replaces the profile with the selected one without changing the data. The image will visually change, but the data at each point will remain the same.
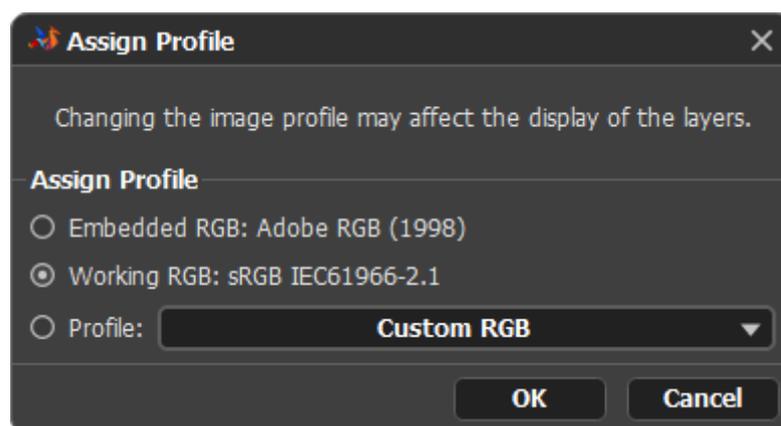
Convert to Profile. The command replaces the profile with the selected one, the data is recalculated, but the image does not change visually.
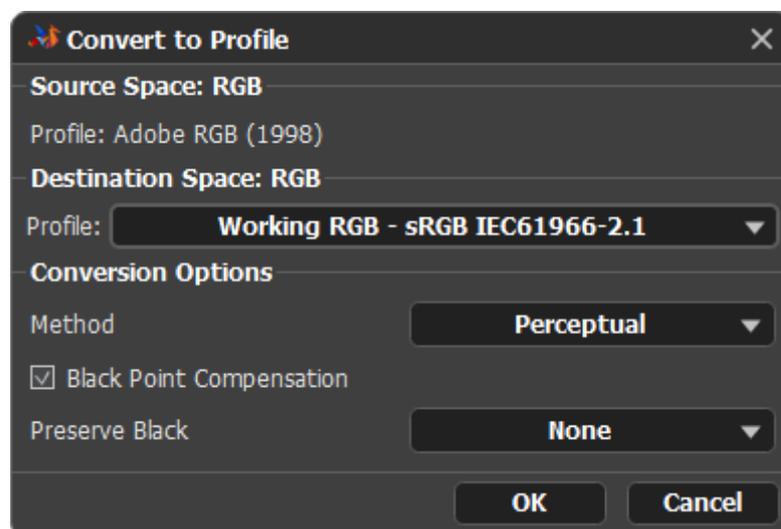
CREATING A NEW IMAGE

The **AliveColors** graphics editor lets you create new images from scratch.

To create a new image, select **File -> New...** in the menu, click ⬜ on the start screen, or use hotkeys: `Ctrl`+`N` on Windows, `⌘`+`N` on Mac.
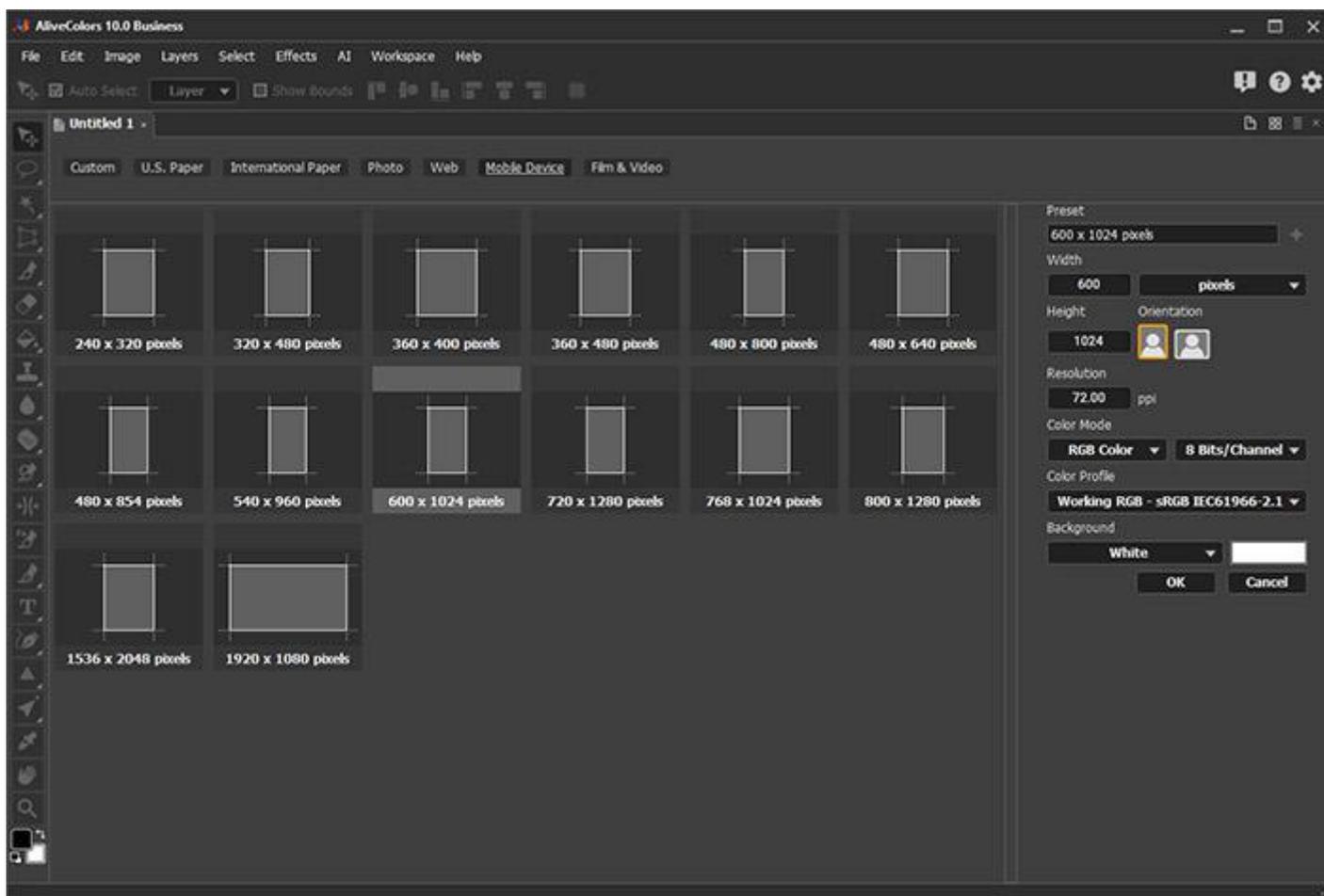
Creating a New Image

Select any presets group:

> **Custom**,
> **U.S. Paper**,
> **International Paper**,
> **Photo**,
> **Web**,
> **Mobile Device**,
> **Film & Video**.

After selecting a presets group, presets thumbnails appear in the central window. Choose any preset and, if necessary, adjust the following parameters:

Set the size of the document in the **Width** and **Height** fields.

The **Units** drop-down list shows the units of measurement (pixels, inches, centimeters, etc.).

The **Resolution** parameter determines the number of pixels in an image (level of detail) and is measured in pixels per inch (ppi).

Choose the **Orientation** of the document - **Portrait** 🔲 or **Landscape** 🔲. **Portrait** orients the image vertically (height is greater than width), while **Landscape** orients the image horizontally (width is greater than height).

In **Color Mode** drop-down-list, choose one of the following color schemes: Grayscale, RGB, CMYK, or Lab. The modes differ in how they handle color. After you have chosen a color model, select a color depth from the list below: 8 Bits/Channel, 16 Bits/Channel, or 32 Bits/Channel.

In the **Color Profile** drop-down list, select a profile for the document being created.

Use the **Background** option to set the color of the background layer. To use the custom background, select **Custom...** and choose color in the color selection dialog.

To save the settings as a new preset, click the **Save Preset** button ➕. Its name appears in the field next to it. By default, the name consists of the selected document size, color mode and depth and can be changed by entering any combination of letters and numbers in the field. After pressing the `Enter` key, a new preset appears in the center window of the **Custom** presets group.

To delete a user preset, select it in the list and click the **Delete Preset** button 🗑.

Click **OK** to create a new document with the specified parameters.

Click **Cancel** to close the dialog box without creating a new document.

AKVIS FORMAT

The software offers the special **AKVIS** format which lets you losslessly save a working draft of your project into a file.

To save a file in the **.akvis** format, go to the main menu and select **File -> Save As**. In the dialog box, choose a destination folder, type a filename, and select **AKVIS Document (*.akvis)** from the **Format** list.

To load a file, use the command **File -> Open**.

The **AKVIS** file contains the state of an image at the moment it was saved, all layers (raster, text, adjustment, shape) and groups, with their properties, masks, paths, and selections as well as manually created checkpoints added during your work (in **History**).

The **AKVIS** format provides helpful opportunities to work with files:

1. saving a document structure (layers, their groups and properties);
2. saving text, adjustment, and shape layers without rastering them;
3. saving masks and layer effects in the document structure;
4. saving checkpoints (the possibility to revert to a previous state);
5. saving selections and paths of the same panels;

We recommend you to use the **AKVIS** format to save a draft or a backup copy.
You can save the final result using **JPG**, **TIFF**, **BMP**, **PNG**, **TGA**, **SVG**, **WEBP**, **PDF** formats.

COLOR MODES

AliveColors allows to modify the color depth and the color space of an image. To view the list of available color modes, go to the Control Panel and select **Image -> Mode**.

The program offers 4 color modes:

RGB Mode is a standard color model. Every RGB image contains three color channels: **R**ed, **G**reen, and **B**lue. The color of a pixel is a combination of these three primary colors. When the value of every channel is zero, the result is pure black.
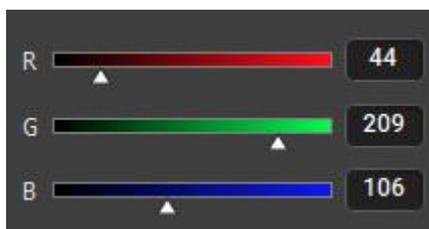
CMYK Mode is a standard color model used in offset printing. A CMYK image consists of four channels: **C**yan, **M**agenta, **Y**ellow, and blac**K**. The color of a pixel is defined by the value of each color component (from 0 to 100%). The lower the value, the lighter the color.
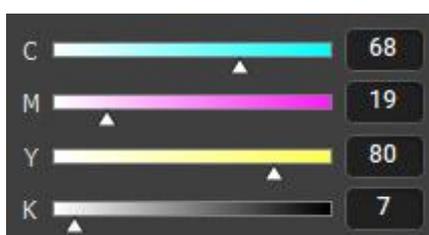
Lab Mode. This color model is based on perception of color by the human eye. The luminance component (**L**) can take values from 0 to 100; the color components **a** (from green to purple) and **b** (from blue to yellow) have values between -128 and 127.
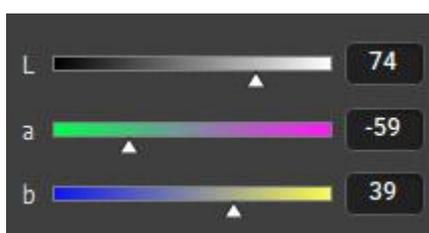
Grayscale Mode. This mode uses different shades of gray for different colors. When applying this mode, only one channel is available - *Gray*. In 8-bit images, there can be up to 256 shades of gray.
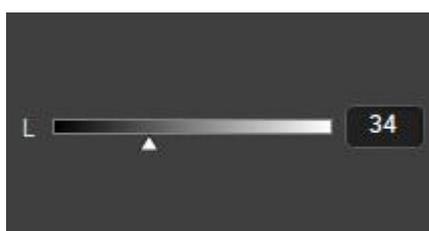
In this menu, you can also adjust the color depth: **8 bits per channel**, **16-bit per channel**, or **32 bits per channel**.

To display the colors on the screen in the RGB mode, three colors/channels are used. In images with *8 bits/channel*, each color channel can have 256 variations (2^8 = 256). Therefore the three channels can reproduce up to 16.8 million colors per pixel (256^3).

With images with *16 bits/channel* and *32 bits/channel*, even more colors can be reproduced per pixel.

IMAGE RESIZING

Read how to resize an image using **AliveColors** image editor. Alternatively, you can watch the video tutorial.

You can save the image resizing settings as **Presets**. Find all available presets in the drop-down list. If you modify the parameters, the preset name automatically changes to **Custom**, and the **Save Custom Preset** button ➕ appears next to the list. To save the current settings, press this button.

A new preset is automatically assigned a name (for example, *Custom_1*, *Custom_2*, etc.) that can be changed as needed by entering any combination of letters and numbers in the highlighted field. After pressing `Enter`, a new preset will appear in the drop-down list.

To remove a user preset, select it and press the **Delete Custom Preset** button 🗑.

Click 📥 to export user presets to a *.presets* file. To load the presets into the program, press on 📤.

Image Size:

To change the size of an image, you can use the command **Image -> Image Size**.
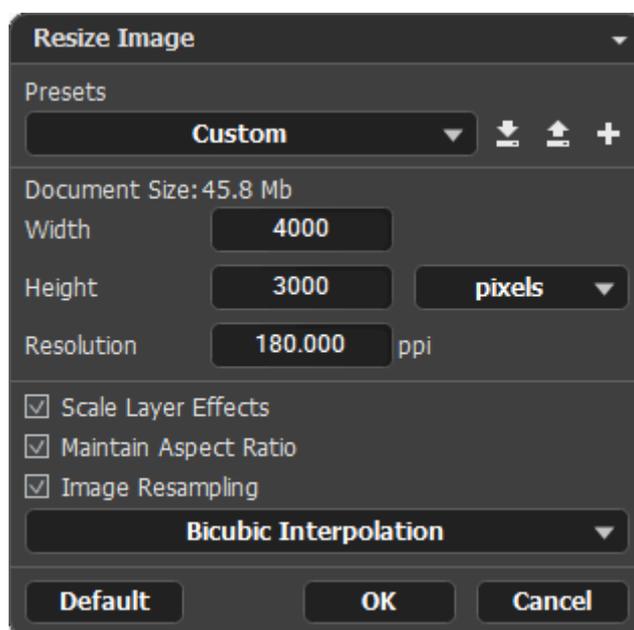
Resize Image Dialog Box

- The size of the current document is defined by **Width** and **Height** values. To resize an image, enter desired values in the relevant fields. Possible units (pixels, inches, centimeters, millimeters, points, picas, and percentages) are listed in the drop-down menu.
- **Resolution**. The parameter determines the density of pixels in an image (level of detail) and calculates the number of pixels per inch (ppi).
- **Scale Layer Effects**. If the check-box is enabled, the layer effect will be scaled proportionally with the image size. If the check-box is disabled, the original size of the effect remains unchanged.
- **Maintain Aspect Ratio**. Enable the check-box to maintain the proportions of an image (width and height).
- **Image Resampling**. If the check-box is enabled, you can change the size and resolution of an image independently of each other (and change the total number of pixels in an image).

  If the check-box is disabled, you can either resize an image or its resolution. The program automatically adjusts the remaining value to maintain the total number of pixels.

- If the **Image Resampling** check-box is enabled, you can choose a **Resampling Method**. This option determines how the pixels are added or deleted.

Resampling Methods:

Nearest Neighbor - a fast but less precise method;

Bilinear Interpolation - an optimal method delivering an average quality;

Bicubic Interpolation - the most accurate, but also the slowest method.

Reducing Image (Using Resampling Technique)
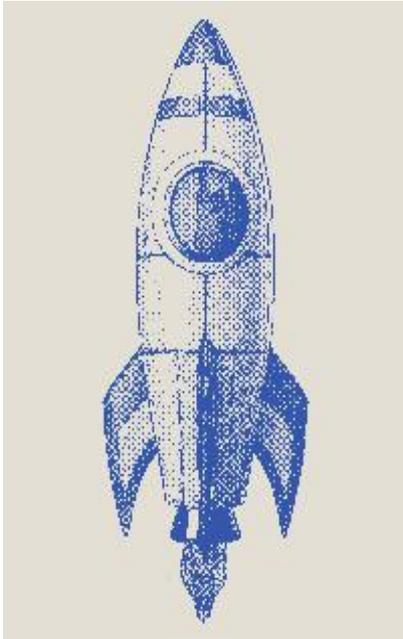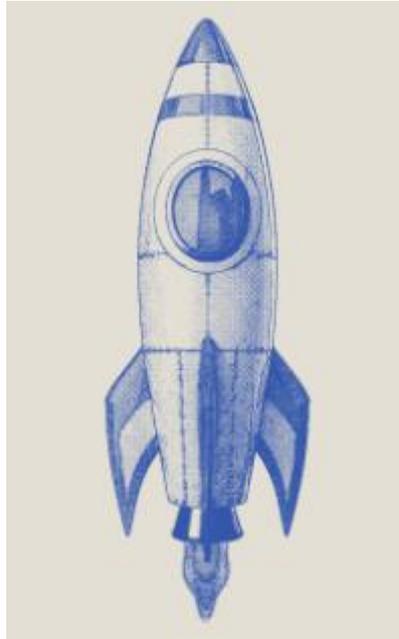
| Nearest Neighbor | Bilinear Interpolation | Bicubic Interpolation |
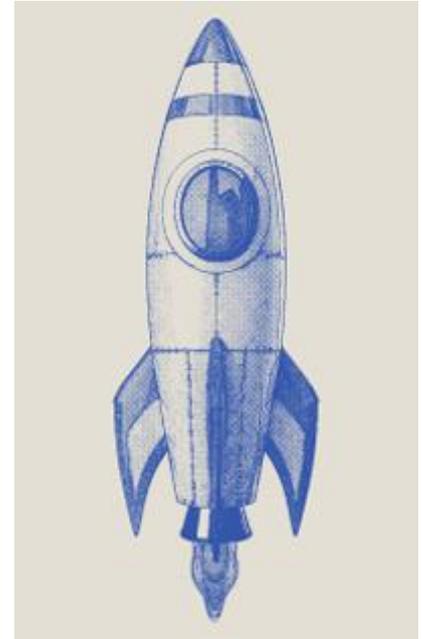
To resize the image, click **OK**. To exit the dialog without saving any changes, click the **Cancel** button.

Canvas Size:

Canvas is a workspace containing all the image layers and has a specific size. To change the size of a document, you have to change the size of its canvas.

Open the **Resize Canvas** dialog box using the command **Image -> Canvas Size**.
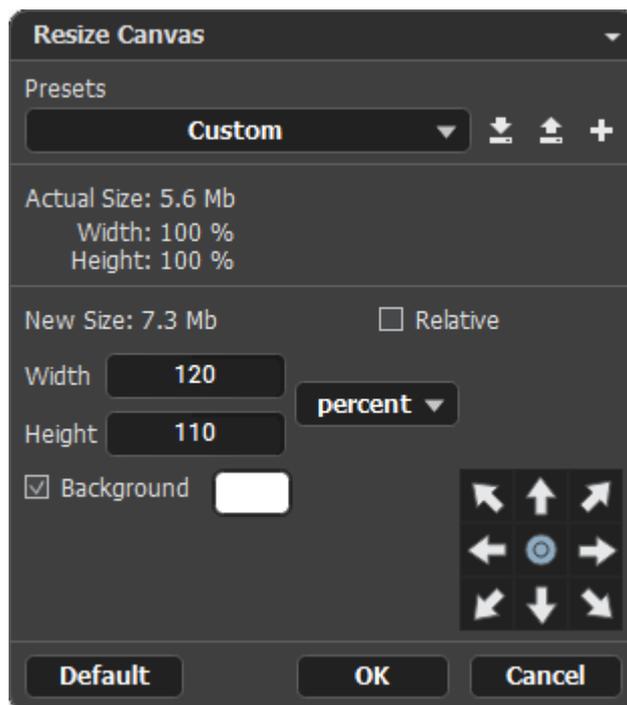
Resize Canvas Dialog Box

- The **Actual Size** section displays the current size in megabytes. The width and height are shown in the chosen measurement unit.
- In the **New Size** section you can change the size of a document by entering values in the **Width** and **Height** fields. If you increase the working area, an image will be enlarged by the border size. If you reduce the workspace, the edges of the picture will be cut off. Available units (pixels, inches, centimeters, millimeters, points, picas, and percentages) are listed in the drop-down list.
- **Relative**. If the check-box is checked, enter the desired values in the **Width** and **Height** fields. If the check-box is unchecked, enter the values by which the canvas size should be increased or decreased from its current size. To increase the canvas, set a positive value. To reduce the canvas, set a negative value.
- To adjust the **Position** of the resized image on the canvas, use eight arrow signs. The central point indicates the position of an image on the canvas.
- If the **Background** check-box is turned on, you can specify the color of the added edges. Call the **Select Color** dialog by clicking the color plate. If you disable the check-box, the added areas will be transparent.

> **Note**. The color edges can be added only to the lower layer. The borders in other layers are transparent.

Increasing Canvas Size

To change the size of the canvas, press **OK**. To exit the dialog without applying any changes, click the **Cancel** button.

WORKING WITH GRAPHICS TABLET

The **AliveColors** editor allows you to use a graphics tablet for creating or editing images. When working with a graphic tablet, you can dynamically change the appearance of strokes based on how much pressure you apply to your stylus when drawing as well as how you tilt and rotate it.

You can also use the stylus to perform mouse functions (tool selection, color selection, parameter change, etc.).

As an example, we consider working with a graphics tablet using the **Color Brush** tool ![icon].

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or right-click the image.
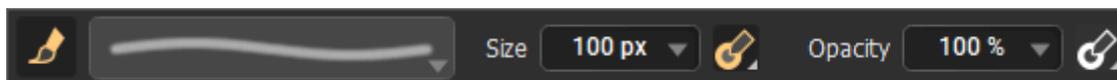
For the tool options that can be controlled with the stylus, a button with a drop-down menu is available. Use the left mouse button to enable/disable the assignment of the chosen stylus option. Right-click or hold down the left mouse button to open the drop-down list where you can select which stylus option will correspond to this brush parameter:

Pressure - the parameter depends on the pressure of the stylus;

Rotation - the parameter depends on the rotating of the stylus around its axis;

Tilt - the parameter depends on the tilting of the stylus.

Let's assign the size of the brush to the pressure of the stylus. The weak pressure of the stylus results a thin stroke, the strong pressure results a wide stroke up to (but not exceeding) the size of the brush specified in the **Tool Options** panel.

Thin Stroke   Wide Stroke

You can assign several tool parameters to a single stylus option. Let's consider the case of assigning the pressure of the stylus to the **Size** and **Opacity** parameters. The weak pressure results a thin transparent stroke, the strong one results a wide opaque line. The thickness and opacity of the drawn line will not exceed the specified values of the tool parameters.

| Thin Transparent Stroke | Wide Opaque Line |

Clicking the **Default** button in the brush options will restore the original values. All assignment settings will be disabled.

BATCH PROCESSING

AliveColors supports the **Batch Processing** feature that lets you automatically apply the same settings to a series of images and save you time and effort. Batch processing does not block the program interface, so you can simultaneously edit other images. Watch the video tutorial on how to automatically process multiple images.

Even if you have never used this feature before, you will find no difficulties in using it. Just create an **Action** and apply it to a folder full of images.

Note: Not all commands can be recorded in an action.

Follow the instructions:

Step 1. Create two new folders, for example: **"Source Files"** and **"Result Files"**. Place original images into the **"Source Files"** folder. The results will be saved in the **"Result Files"** folder.

Step 2. Open one of the original images in **AliveColors**. We will use this photo to adjust the parameters and create an action.

Original Image

Step 3. In the **Actions** panel, click **Create New Set** button ▪. Enter a name for a new set of actions, for example, **"Sample"**. You can edit the name by double-clicking on it.

If you already have a set for the actions, you can select it.
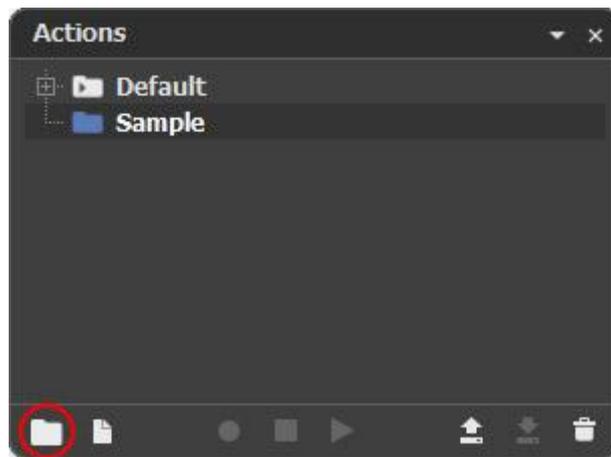
Actions Panel

Step 4. Press **Create New Action** and enter a name, for example, **"Resize"**.
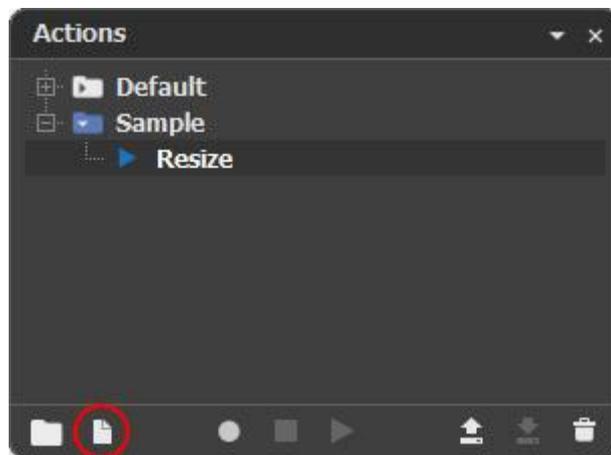
New Action

Press the **Record** button to run the recording of the action.

Step 5. Perform the operations and commands you want to record. For example, call the **Resize Image** dialog box (**Image -> Image Size**) and adjust the settings.
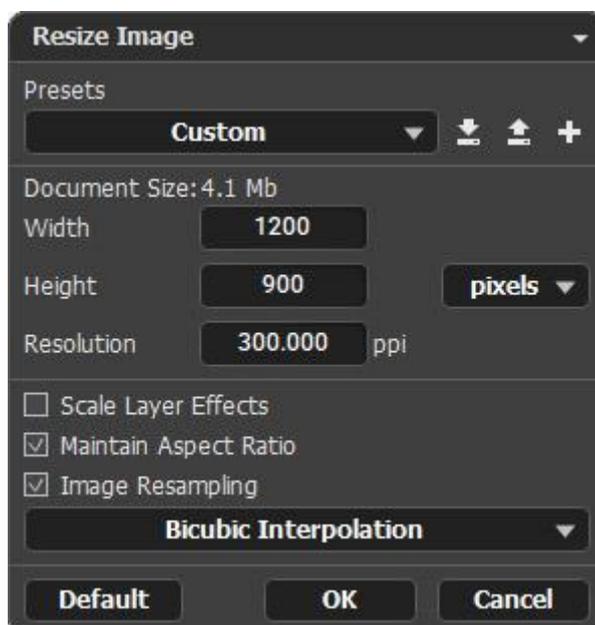
Image Resizing Dialog Box

Click the **OK** button. The resized image appears in the editor's window.

Step 6. Stop the recording by pressing **Stop** ▣ at the bottom of the **Actions** panel.
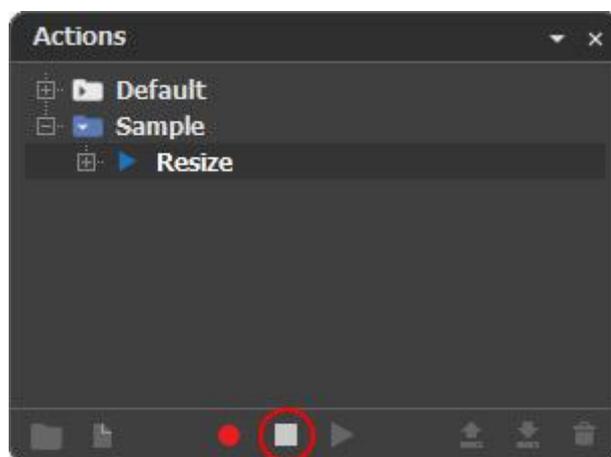
Action recording is stopped

Step 7. The action is created and you can start the batch processing. In the **File** menu, choose **Automate -> Batch Processing** and set the parameters.

In the **Source Folder** field, choose the folder which contains the photos to be processed.

In the **Target Folder**, choose the folder where the processed files will be saved.

You can check **Include Subfolders** to process all images in all subfolders of the selected folder (keeping the structure).

In the **Save As** list, select a file format.

In the **Save RAW As** list, select a format for saving RAW files.

Click ⚙ to call up a dialog box where you can configure the saving options for the selected file format.

In the **File Name** field, specify the names of the output files:

> **Source Name** - the processed files will be saved with their original names.
> **Add Suffix** - the specified character set will be added to the original names.
> **New Name** - the names of all files will be replaced with the specified name with the addition of a sequence number.

In the actions list, select the **"Sample"** group and then the **"Resize"** action.
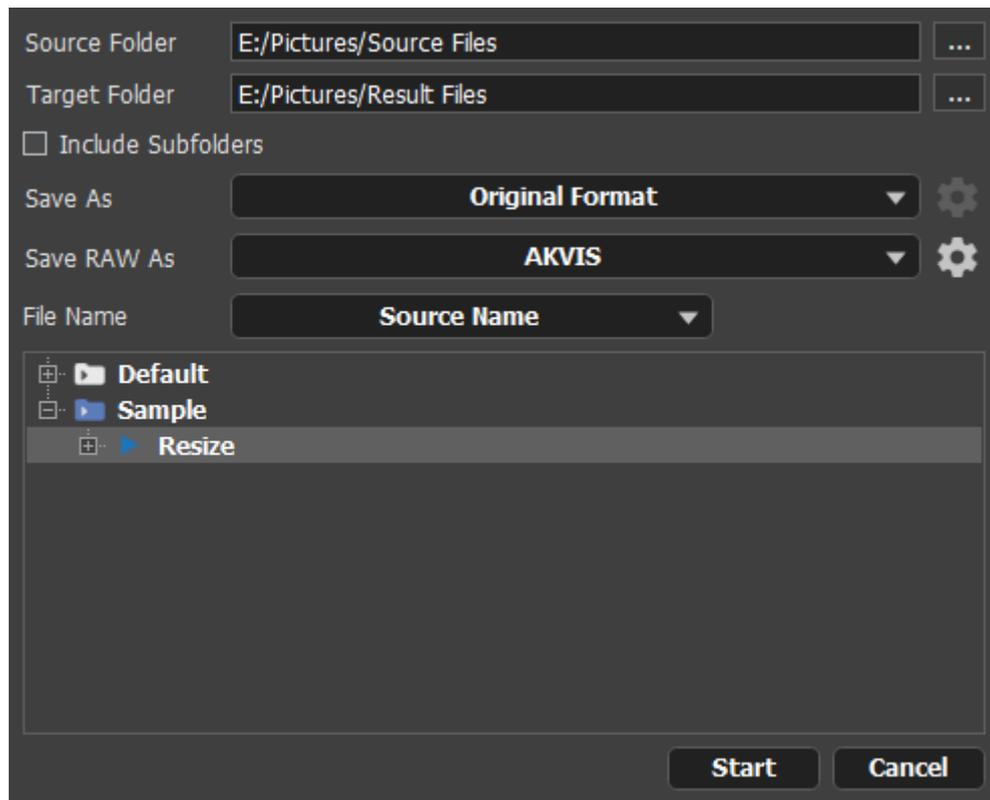
Batch Processing Tab

Step 8. Press **Start** to run the processing. **AliveColors** processes all the photos in the **"Source Files"** folder and then saves them to the **"Result Files"** folder.

To interrupt the process, close the **Batch Processing** tab.

BATCH CONVERSION

AliveColors allows you to convert a series of images from one format to another. Batch conversion does not block the program interface, so you can simultaneously edit other images.

Select in the menu: **File -> Automate -> Convert...**
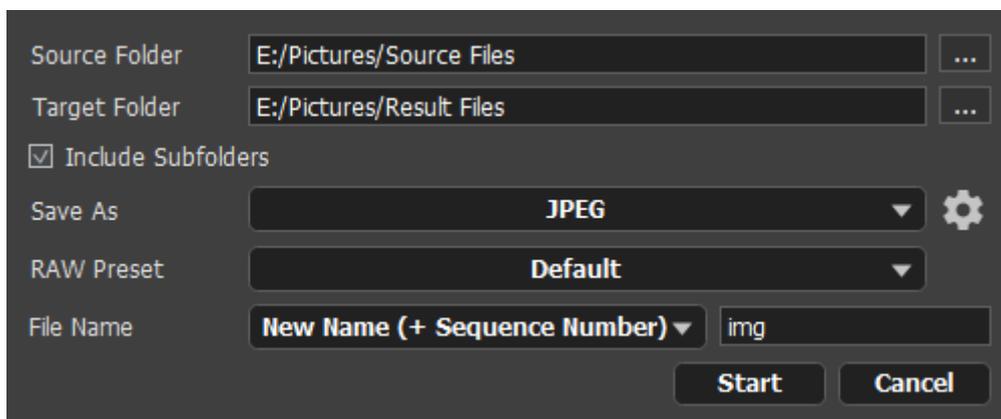
Batch Conversion

Conversion Options:

In the **Source Folder** field, choose the folder with original images.

In the **Target Folder** field, choose the folder to save the files.

Enable **Include Subfolders** to process all images in all subfolders of the selected folder (keeping the structure).

In the **Save As** list, select a file format.

Click ⚙ to call up a dialog box where you can configure the saving options for the selected file format.

In the **RAW Preset** list, you can select one of the presets for processing RAW files during conversion. You can create new presets in the **RAW Processing** mode.

In the **File Name** field, specify the names of the output files:

Source Name - the processed files will be saved with their original names.
Add Suffix - the specified character set will be added to the original names.
New Name - the names of all files will be replaced with the specified name with the addition of a sequence number.

Click **Start** to run image processing. **AliveColors** will process all the images in the **Source Folder**, one by one, and will save them to the **Target Folder** with the selected format.

To interrupt processing, close the **Batch Conversion** tab.

PRINT IMAGES

To open the **Print** options, select in the menu **File -> Print** or use the hotkeys: `Ctrl`+`P` on Windows, `⌘`+`P` on Mac.
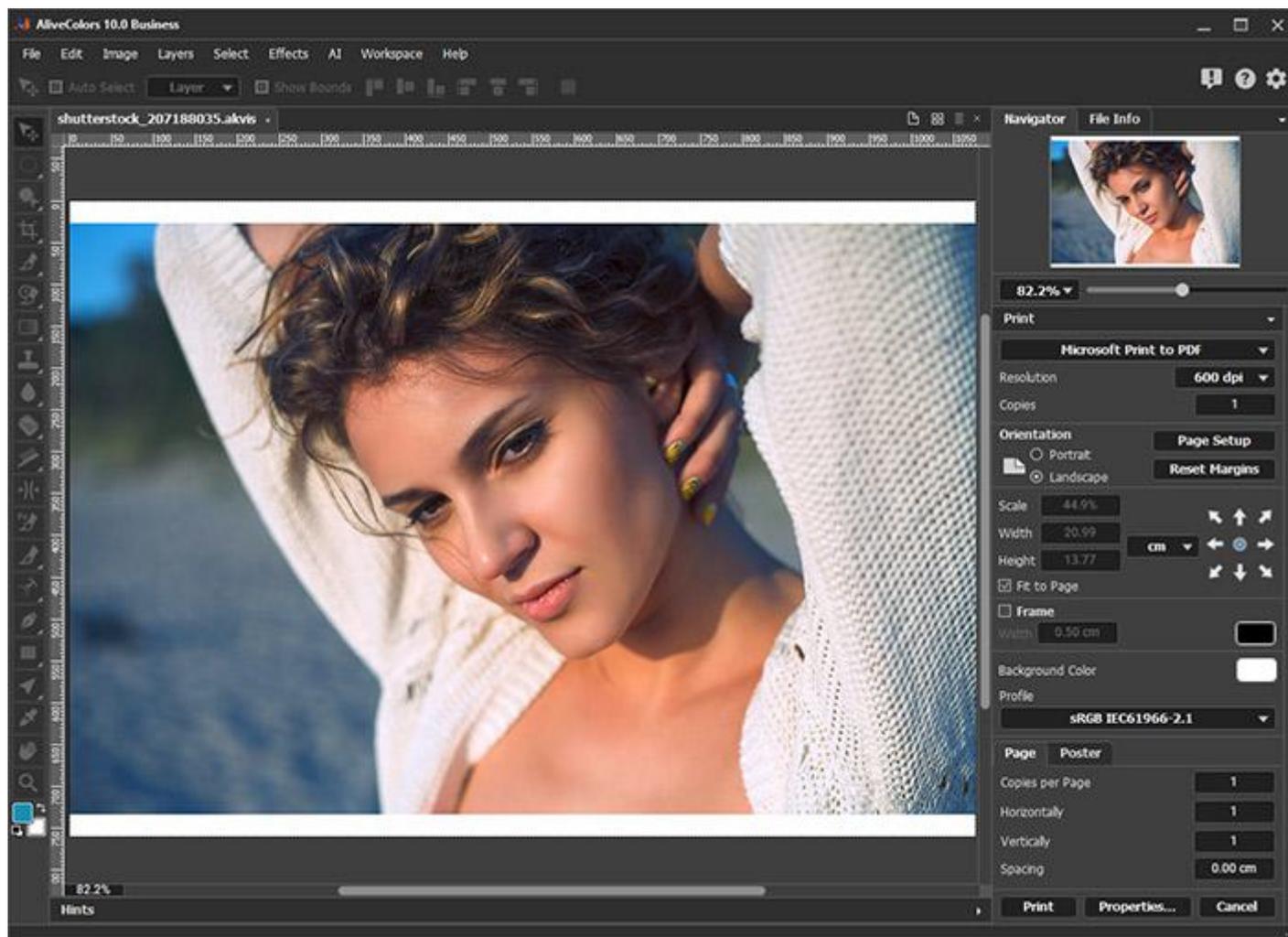
Print Options in AliveColors

Adjust the parameters appearing in the **Settings Panel**:

Choose a printer from the list of available devices, set the desired resolution, as well as the number of copies to print.

In the **Orientation** group, set the position of paper: **Portrait** (vertically) or **Landscape** (horizontally).

Click the **Page Setup** button to open a dialog box to choose the size of the paper and its orientation, as well as the print margins.

Press the **Reset Margins** button to return the page margins to the default size.

Change the size of the printed image adjusting the parameters **Scale**, **Width**, **Height** and **Fit to Page**. These parameters have no effect on the image itself, just on the print version. You can change the size of the printed image by entering any value in %, or by entering new values in **Width** and **Height**.

To adjust the size of the image to the paper size, select **Fit to Page**.

Move the image on the page with the mouse or align it using the arrow buttons.

You can activate **Frame** for the image and adjust its width and color.

Choose the **Background Color** by clicking on the color plate.

In the **Profile** drop-down list, select the profile to convert the image before being sent to the output device.

In the **Page** tab, you can adjust printing of the multiple copies of the image on a single sheet.
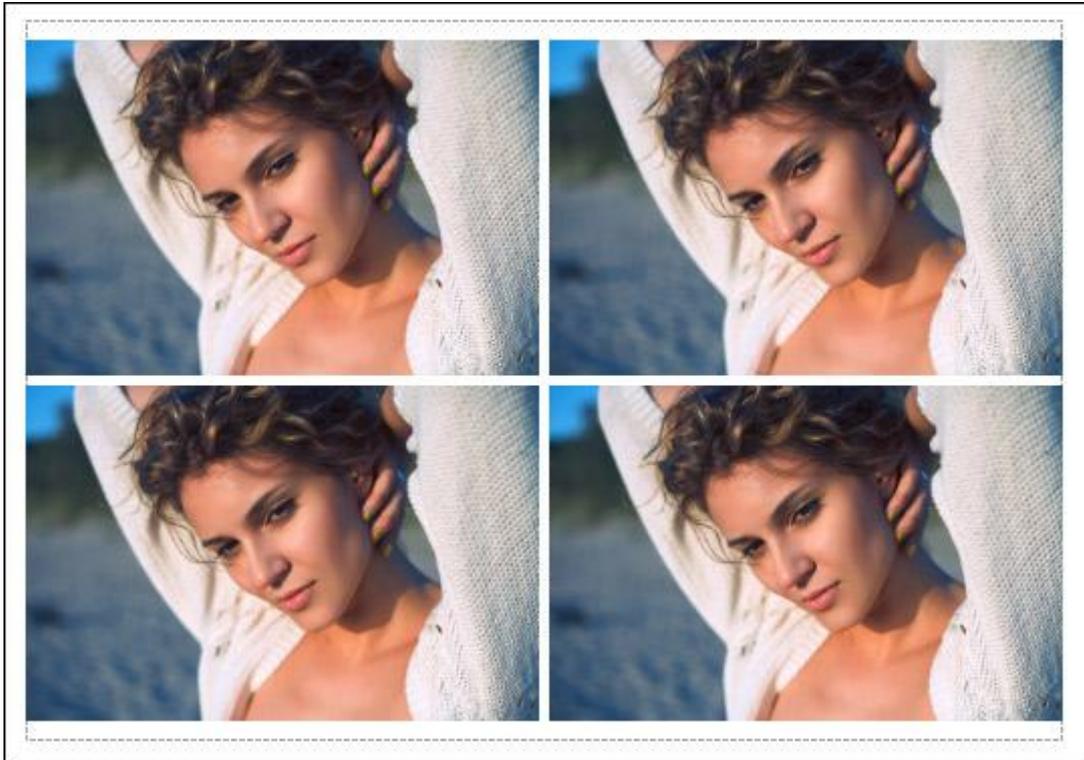
Print Page

- ◦ **Copies per Page**. It lets you specify the number of copies of the image on one page.
- ◦ **Horizontally** and **Vertically**. These parameters indicate the number of rows and columns for the copies of the image on the page.
- ◦ **Spacing**. The parameter sets the margins between the copies of the image.

In the **Poster** tab, it's possible to customize printing of the image on multiple pages for the subsequent junction into a large picture.
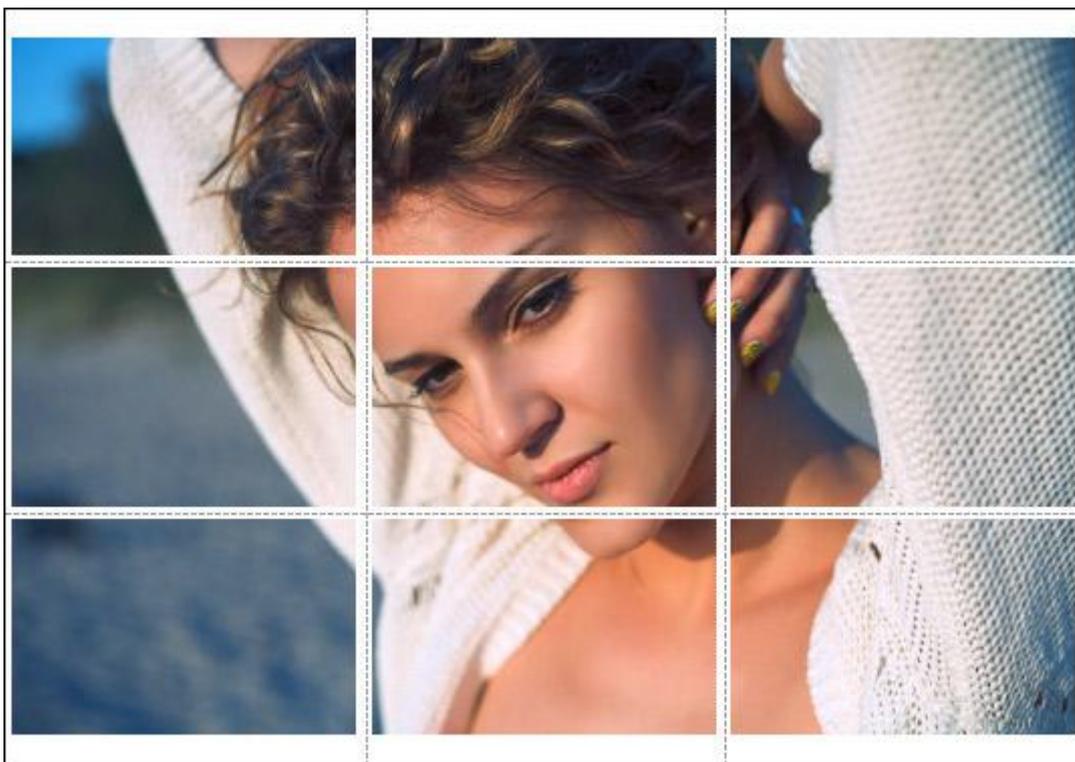
Print Poster

- ◦ **Pages**. If the check-box is enabled, you can specify the maximum number of the pages in which the image will be divided. The image scale will be adjusted to fit this number of the sheets. If the check-box is disabled, the program will automatically select the optimal number of the pages in accordance with the actual size of the image (scale = 100%).
- ◦ **Glue Margins**. If the check-box is enabled, you can adjust the width of the padding for bonding sheets. Margins will be added to the right and to the bottom of each part.
- ◦ **Lines of Cut**. Activate the check-box to display the cut marks in the margins.
- ◦ **Show Numbers**. With the enabled check-box, a sequence number of each part, by a column and a row, will be printed in the margins.

To print the image with the chosen parameters, press the **Print** button.
To cancel and close the printing options click on **Cancel**.

Click the **Properties...** button to open a system dialog box that enables you to adjust the settings and send the document to print.

PREFERENCES

You can open the **Preferences** dialog box using the ⚙ button in the upper right corner of the program window or using the **File -> Preferences...** command. It contains several tabs with different parameters:

General
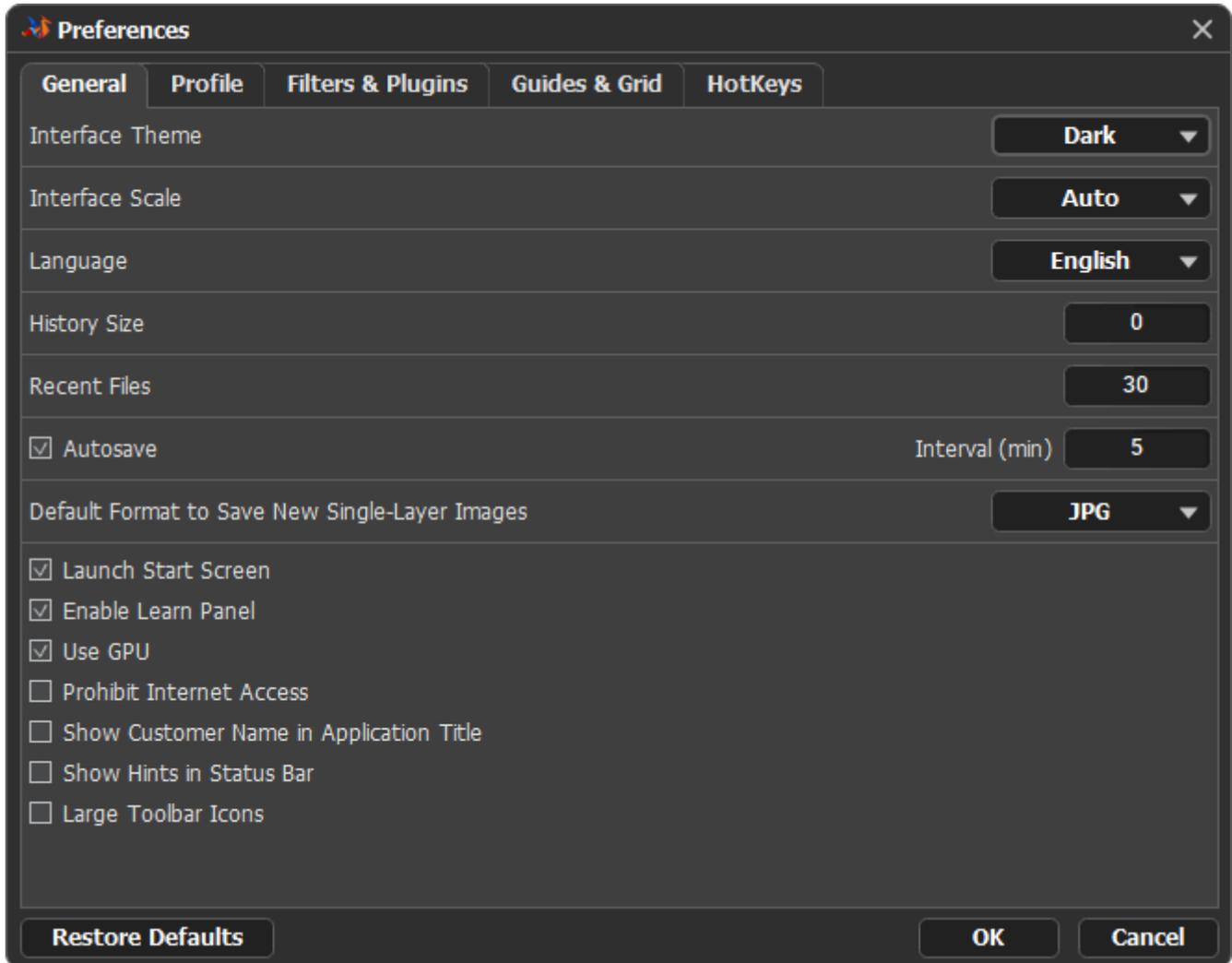
- **Interface Theme**. Select a style of the program interface: **Dark**, **Light**, or **Gray**.
- **Interface Scale**. Choose the size of the interface elements. When it is set to **Auto**, the program workspace will automatically scale to fit the screen resolution.
- **Language**. Select an interface language from the drop-down list.
- **History Size** (0-100). This parameter defines the number of document states displaying in the **History** panel. If the value is set to 0, the panel contains an unlimited number of states.
- **Recent Files** (5-30). The number of recent documents. The option allows recently closed files to be quickly re-opened.
- **Autosave**. If the check-box is enabled, a recovery file is automatically generated at the specified time interval. It helps you retrieve unsaved files after an accidental closure or crash.
- **Default Format to Save New Single-Layer Images**. Set a *default* extension for saving new single-layer files (JPG, PNG, TIFF, or AKVIS). You can change the file type in the Save As dialog box.

- **Launch Start Screen**. If the check-box is enabled, the Image Window provides quick access to creating a new file and opening previously used files. To pin a document in the list of recently opened files, click the button ➤ next to it. To unpin the document, press the button ◉.

- **Enable Learn Panel**. If the check-box is enabled, the panel with links to tutorials appears at the bottom of the Start Screen.

- **Use GPU**. The check-box lets you turn on GPU acceleration.

- **Prohibit Internet Access**. Enable the check-box to block the program from connecting to the Internet. In this case, some features will become unavailable: the latest news, a feed with video lessons, and the program activation through a direct connection to the server.

- **Show Customer Name in Application Title**. If the check-box is enabled, the license owner's name is shown in the program title. It's the name that was used when activating AliveColors.

- **Show Hints in Status Bar**. When the check-box is enabled, a hint for the selected option is displayed at the bottom of the program window. It's a text line with a brief description of the panels, filters, tools, parameters when the mouse cursor is hovering over them.

- **Large Toolbar Icons**. When the check-box is active, the tool icons become larger.

Profile. Color profiles are necessary to accurately and reliably transfer color to different output devices (screens, printers, etc.). They help to standardize the appearance of images. Learn more about color profile settings here.
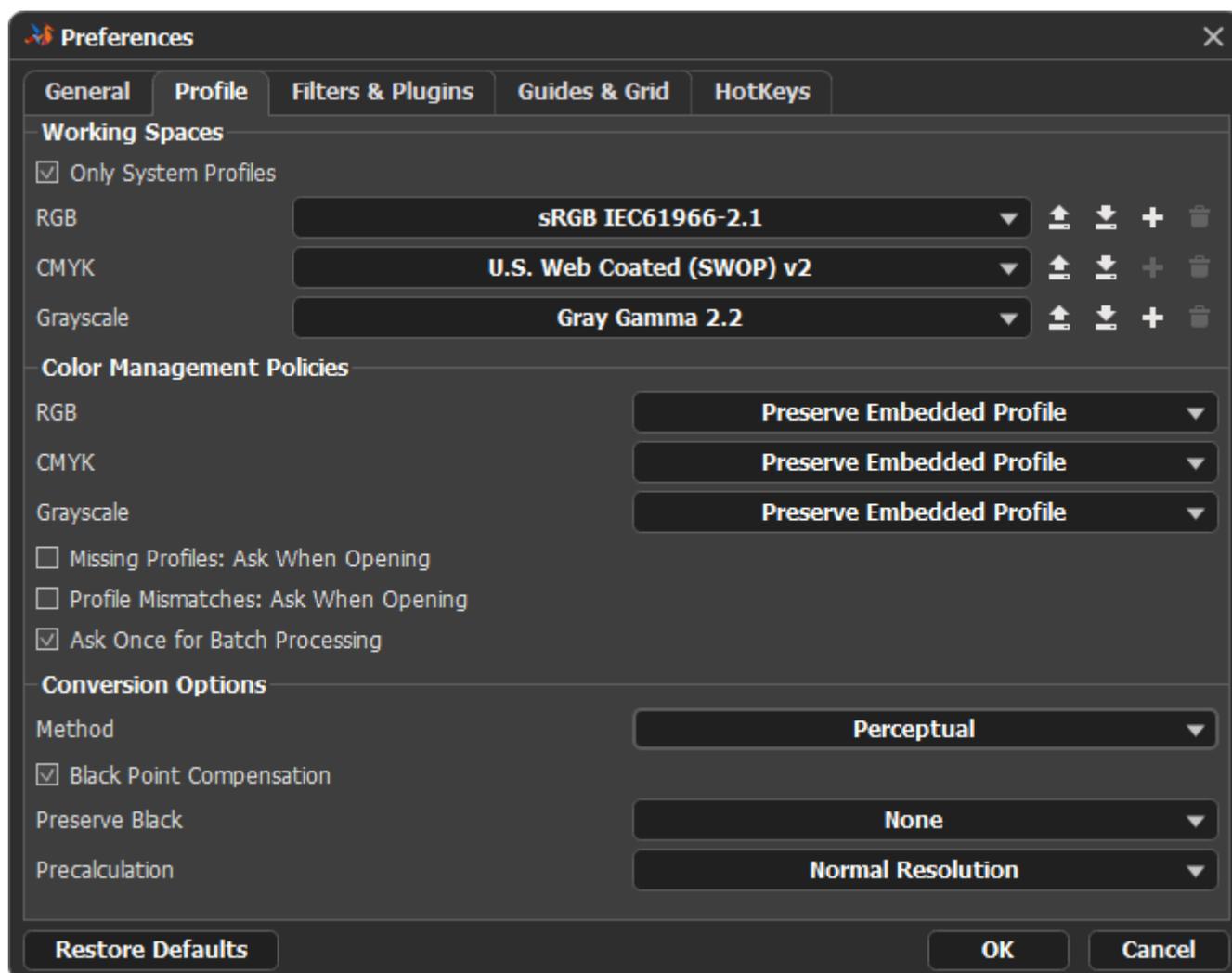
Filters & Plugins
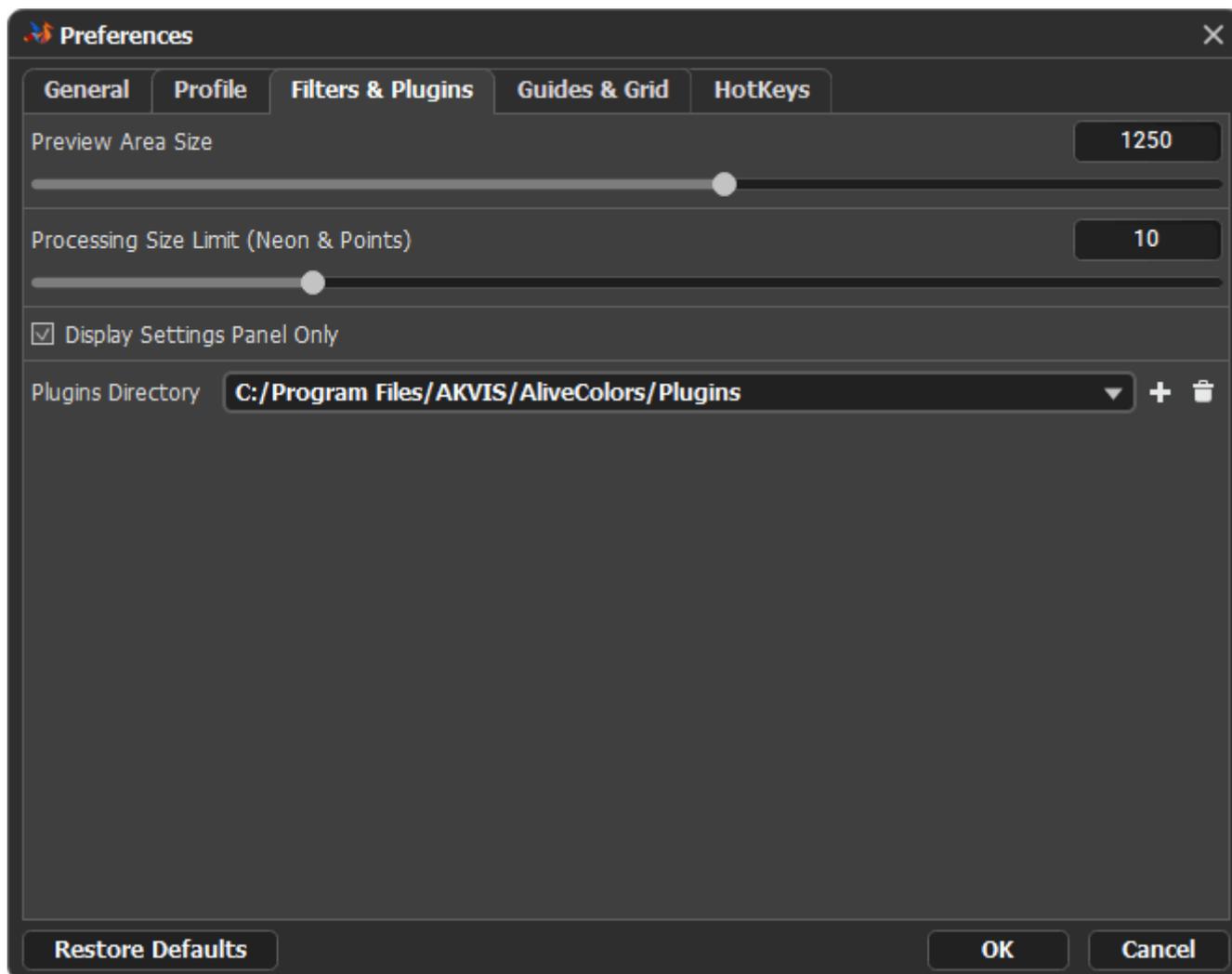
- **Preview Area Size** (in pixels). The parameter sets the size of the preview window used in effects and adjustments. The size of the area can vary from 200x200 px to 2,000x2,000 px. You can manage the displaying of the preview window by enabling/disabling the **Fixed Preview Area** check-box in the parameter panel.
- **Processing Size Limit (Neon & Points)** (in megapixels). The parameter works only for the built-in Neon and Points plugins. It allows you to speed up the calculation by temporarily reducing the size of the file being processed. When the file size (in megapixels) does not exceed the specified number, the image is processed in the usual way. If the size of the uploaded file is larger, then during the process the image will be reduced, processed and increased to its original size.
- **Display Settings Panel Only** check-box. Enable the check-box to display only the Settings Panel when launching the effects and filters. All other panels attached to it will be hidden (except for Toolbar, Navigator, and Hints).
- **Plugins Directory**. Specify the path to external plugins compatible with the AliveColors image editor. To add a new path, click the button ➕ and select a directory. Press on 🗑 to remove a path.

Guides & Grid
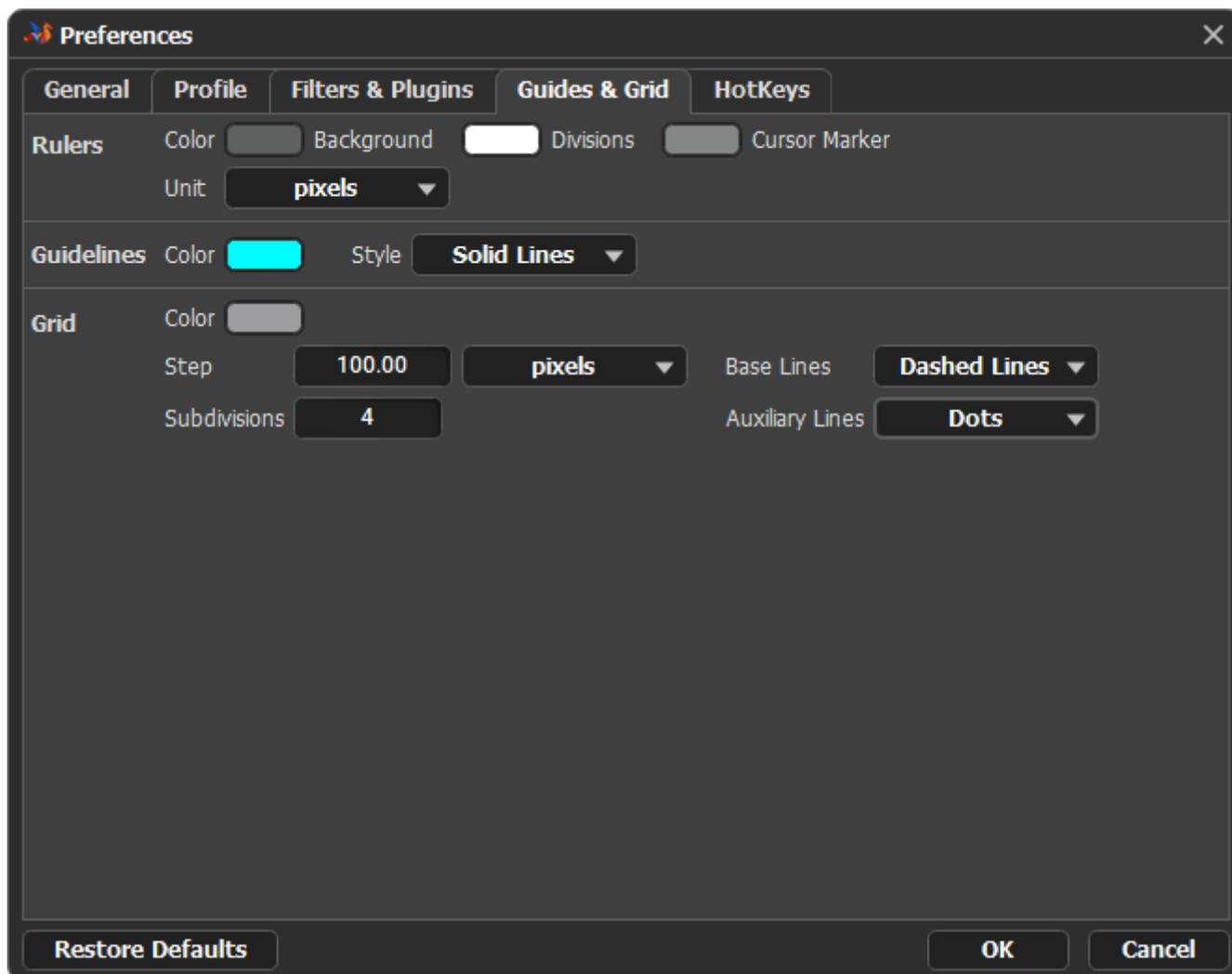
You can show/hide the guideline elements using the **Workspace** menu. The parameters are divided into three groups:

- In the **Rulers** section, you can adjust the color of the ruler lines:

    You can change the **Color** of each element by clicking the corresponding color plate: Background, Divisions, Cursor Marker.

    Select a **Unit** of measurement in the drop-down list or by clicking a ruler with the right mouse button.

- In the **Guidelines** section, you can change the appearance of guidelines:

    Select a **Color** of guidelines by clicking on the color plate.

    In the **Style** drop-down list, specify the type of lines: Solid Lines, Dashed Lines, or Dots.

- Using the **Grid** section, you can change the appearance of the grid, which consists of base lines and auxiliary lines.

    Color of the grid lines can be changed by clicking on the color plate.

    Step adjusts the grid spacing between the major lines. You can change units for this option.

Subdivisions - this option defines the spacing between auxiliary lines.

You can adjust a view mode for the grid lines (Lines, Dashed Lines, Dots).
There are two drop-down lists for each type of lines: **Base Lines** and **Auxiliary Lines**.

HotKeys. Using this tab, you can customize the keyboard shortcuts.

Commands				
New...	Ctrl+N			
New From Clipboard	Ctrl+Shift+N			
Open...	Ctrl+O			
Close	Ctrl+W			
Close All	Ctrl+Alt+W			
Save	Ctrl+S			
Save As...	Ctrl+Shift+S	Ctrl+Alt+S		
Save for Web...	Ctrl+Alt+Shift+S			
Print...	Ctrl+P			
Exit	Ctrl+Q			
Undo	Ctrl+Z			
Redo	Ctrl+Y			
Flip State	Shift+Z			
Cut	Ctrl+X	F2		
Copy	Ctrl+C	F3		
Copy Merged	Ctrl+Shift+C			
Paste	Ctrl+V	F4		
Free Transform...	Ctrl+T			
Erase	Del			
Zoom In	+	Ctrl++	=	Ctrl+=
Zoom Out	-	Ctrl+-	_	Ctrl+_
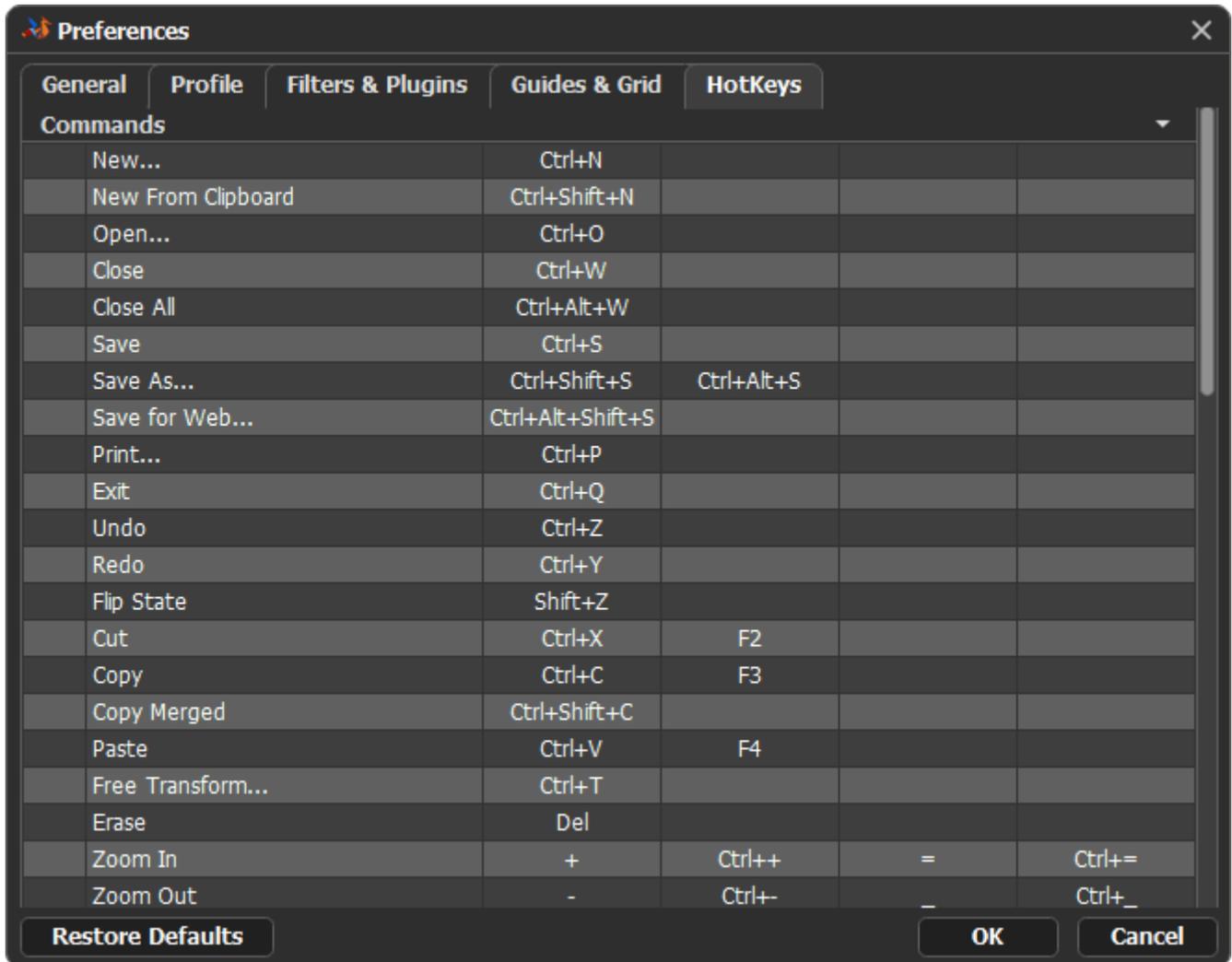
To save changes made in the **Preferences**, press **OK**. If necessary, click **Restore Defaults** to reset to the default settings.

HOTKEYS

Using the keyboard shortcuts (so-called *hotkeys*) can simplify and speed up the processing. To activate a tool, you can either click its icon or use a shortcut.

Below is a list of shortcuts which can be used in **AliveColors**. To change a shortcut, use the **HotKeys** tab in the program's **Preferences** (click ⚙ in the upper right corner of the program window).

Windows	Mac	
		Basic Commands:
`Ctrl`+`N`	`⌘`+`N`	Create a New Image
`Ctrl`+`Shift`+`N`	`⌘`+`⇧`+`N`	Create a New Image from the Clipboard
`Ctrl`+`O`	`⌘`+`O`	Open an Image
`Ctrl`+`W`	`⌘`+`W`	Close an Image
`Ctrl`+`Alt`+`W`	`⌘`+`Option`+`W`	Close All Images
`Ctrl`+`S`	`⌘`+`S`	Save an Image
`Ctrl`+`Shift`+`S`	`⌘`+`⇧`+`S`	Save an Image as...
`Ctrl`+`Alt`+`Shift`+`S`	`⌘`+`Option`+`⇧`+`S`	Save for Web
`Ctrl`+`P`	`⌘`+`P`	Print an Image
`Ctrl`+`Z`	`⌘`+`Z`	Undo the Last Action
`Ctrl`+`Y`	`⌘`+`Y`	Redo the Last Action
`Shift`+`Z`	`⇧`+`Z`	Back to the Last Action (switching between two states in History)
`F1`	`F1`	Open Tutorial
`Ctrl`+`Q`	`⌘`+`Q`	Exit the Program
		Scaling:
`+` or `Ctrl`+`+`	`+` or `⌘`+`+`	Zoom In
`-` or `Ctrl`+`-`	`-` or `⌘`+`-`	Zoom Out
`Ctrl`+`1`	`⌘`+`1`	Original Size (100%)
`Ctrl`+`0`	`⌘`+`0`	Scale an Image to the Window
`Alt`+`→`	`Option`+`→`	Scale an Image to Fit the Window Width
`Alt`+`↓`	`Option`+`↓`	Scale an Image to Fit the Window Height
		Adjustments:
`Ctrl`+`L`	`⌘`+`L`	Levels
`Ctrl`+`Shift`+`L`	`⌘`+`⇧`+`L`	Auto Levels
`Ctrl`+`Alt`+`Shift`+`L`	`⌘`+`Option`+`⇧`+`L`	Auto Contrast
`Ctrl`+`M`	`⌘`+`M`	Curves
`Ctrl`+`U`	`⌘`+`U`	Hue/Saturation
`Ctrl`+`B`	`⌘`+`B`	Color Balance
`Ctrl`+`I`	`⌘`+`I`	Invert
`Ctrl`+`Alt`+`Shift`+`B`	`⌘`+`Option`+`⇧`+`B`	Black & White
`Ctrl`+`H`	`⌘`+`H`	Equalize
`Ctrl`+`Shift`+`U`	`⌘`+`⇧`+`U`	Desaturate

Resizing:

`Ctrl`+`Alt`+`I`	`⌘`+`Option`+`I`	Resize an Image
`Ctrl`+`Alt`+`C`	`⌘`+`Option`+`C`	Resize Canvas

Layers:

`Ctrl`+`Alt`+`G`	`⌘`+`Option`+`G`	Create/Remove Clipping Mask
`Ctrl`+`G`	`⌘`+`G`	Group Layers
`Ctrl`+`Shift`+`G`	`⌘`+`⇧`+`G`	Ungroup Layers
`Ctrl`+`,`	`⌘`+`,`	Show/Hide Layers
`Ctrl`+`Shift`+`]`	`⌘`+`⇧`+`]`	Bring to Front
`Ctrl`+`]`	`⌘`+`]`	Bring Forward
`Ctrl`+`[`	`⌘`+`[`	Send Backward
`Ctrl`+`Shift`+`[`	`⌘`+`⇧`+`[`	Send to Back
`Ctrl`+`E`	`⌘`+`E`	Merge Selected Layers
`Ctrl`+`Shift`+`E`	`⌘`+`⇧`+`E`	Merge Visible Layers

Selections:

`Ctrl`+`A`	`⌘`+`A`	Select All
`Ctrl`+`D`	`⌘`+`D`	Deselect
`Ctrl`+`Shift`+`D`	`⌘`+`⇧`+`D`	Reselect
`Ctrl`+`Shift`+`I`	`⌘`+`⇧`+`I`	Invert Selection
`Ctrl`+`X`	`⌘`+`X`	Cut Selection
`Ctrl`+`C`	`⌘`+`C`	Copy to Clipboard
`Ctrl`+`Shift`+`C`	`⌘`+`⇧`+`C`	Copy Contents of All Layers
`Ctrl`+`V`	`⌘`+`V`	Paste from Clipboard
`Ctrl`+`J`	`⌘`+`J`	Layer via Copy
`Ctrl`+`Shift`+`J`	`⌘`+`⇧`+`J`	Layer via Cut
`Ctrl`+`Alt`+`R`	`⌘`+`Option`+`R`	Refine Edges
`Delete`	`Delete`	Remove Selected Areas

Tools:

`V`	`V`	**Move** Tool
`Ctrl`+`T`	`⌘`+`T`	**Transform** Tool
`M`	`M`	Basic Selection Tools: **Rectangular Selection**, **Elliptical Selection**, **Lasso**, **Polygonal Lasso**
`W`	`W`	Quick Selection Tools: **Magic Wand**, **Quick Selection**, **Object Selection**
`C`	`C`	**Crop** Tool
`O`	`O`	View Mode for Grid while Cropping
`Shift`+`O`	`⇧`+`O`	Flip Grid while Cropping
`T`	`T`	Text Tools: **Text** and **Fit Text to Path**
`I`	`I`	**Eyedropper** Tool
`H`	`H`	**Hand** Tool
`Z`	`Z`	**Zoom** Tool

B	B	Standard Drawing Brushes: **Color Brush**, **Color Pencil**, **Spray**, **Recolor Brush**, **Texture Brush**
E	E	Erasing Tools: **Eraser** and **History Brush**
G	G	Filling Tools: **Paint Bucket** and **Gradient Fill**
S	S	Cloning/Healing Tools: **Clone Stamp** and **Chameleon Brush**
K	K	Sharpening Tools: **Blur**, **Sharpen**, and **Smudge** Tools
O	O	Lighting Tools: **Lighten**, **Darken**, and **Saturation** Tools
J	J	Retouching Tools: **Tuning Brush**, **Spot Remover**, **Red Eye Remover**, **Teeth Whitening**
D	D	Deformation Tools
X	X	FX Brushes
P	P	Pen Tools
U	U	Vector Shape Tools
A	A	Path and Direct Selection Tools
[and]	[and]	Decrease/Increase Brush Size
N +mouse wheel	N +mouse wheel	Change the size of the brush
Shift +[and Shift +]	⇧ +[and ⇧ +]	Decrease/Increase Brush Hardness
		Scroll an Image in a Window (the **Hand** tool is temporarily active while you hold down the spacebar)
		Panels (enable/disable):
F5	F5	Expanded Tool Options Panel
F6	F6	**Color** Panel
F7	F7	**Layers** Panel
F8	F8	**File Info** Panel
F9	F9	**Actions** Panel
		Auxiliary Lines:
Ctrl +R	⌘ +R	Show Rulers
Ctrl +'	⌘ +'	Show Grid
Ctrl +;	⌘ +;	Show Guidelines
Ctrl +Shift +;	⌘ +⇧ +;	Snap to Edges
Ctrl +Alt +;	⌘ +Option +;	Fix Guidelines
		In addition:
Ctrl +F	⌘ +F	Apply the Last Effect
Shift +mouse click	⇧ +mouse click	Draw a Straight Line

PANELS

AliveColors is the full-featured graphics editor for image creation and processing.

The program offers a wide range of tools located on the **Toolbar**.

The **Navigator**, **Color**, **Swatches**, **Color Wheel**, **History**, **Layers**, **Channels**, and **Selection** panels are irreplaceable in the professional image editing process.

The **Hints** panel displays a short description of the panels, tools, and options when the mouse cursor is hovering over them.

You can move the panels by clicking and dragging their titles, combine the panels and attach them to the window edges.

To show or hide any of the panels, use the menu **Workspace -> Panels**.

    Navigator
    Toolbar
    Layers
       — **Layer Effects**
       — **Layer Mask**
       — **Vector Mask**
       — **Clipping Mask**
       — **Blend Modes**
       — **Blend by Brightness**
    Channels
    Paths
    Selection
    History
    Color
    Swatches
    Color Wheel
    Actions
    File Info

NAVIGATOR

The **Navigator** allows fast scaling and moving of image areas as well as going back to the entire image view. Here you can see the reduced copy of an image. The frame shows the part of the image that is now visible in the **Image Window**; other areas outside the frame are shaded. Drag the frame to make other parts of the image visible. To move the frame, bring the cursor inside the frame, press the left mouse button and, keeping it pressed, move the frame in **Navigator**.

To scroll the image in the **Image Window** you can press the spacebar on the keyboard and drag the image with the left mouse button. Use the scroll wheel of the mouse to move the image up/down: by keeping the Ctrl key on Windows, ⌘ on Mac pressed – to the left/to the right, by keeping the Alt key on Windows, Option on Mac pressed – scale the image. Right-click on the scroll bar to activate the quick navigation menu.

Use the slider to scale the image in the Image Window. When moving the slider to the right, the image scale increases; when moving it to the left, the image scale reduces.

You can also change the image scale by entering a value into the scale field and pressing the button Enter on Windows, Return on Mac. The drop-down menu shows some frequently used values.

Standard scale presets are listed in the **Image -> Scaling** menu:

Actual Size (Ctrl+1 on Win, ⌘+1 on Mac) - the image is displayed at its original size (100%);

Fit to View (Ctrl+0 on Win, ⌘+0 on Mac) - the image is fully visible in the Image Window;

Fit Width (Alt+→ on Win, Option+→ on Mac) - the image is scaled to fit the window width;

Fit Height (Alt+↓ on Win, Option+↓ on Mac) - the image is scaled to fit the window height;

Fill Window - the image is scaled to fill the Image Window completely.

To zoom in an image, use the menu command **Image -> Zoom In** or the keyboard shortcuts + or Ctrl++ on Windows, ⌘++ on Mac. To zoom out an image, use the command **Image -> Zoom Out** or the keyboard shortcuts - or Ctrl+- on Windows, ⌘+- on Mac.

You can move the **Navigator** panel to any area of the screen, combine it with other panels, scale, or collapse.

TOOLBAR

The **Toolbar** contains the groups of image editing tools. Click the relevant buttons to activate the Selection Tools, Standard Brushes, Retouching Tools, Deformation Tools, FX Brushes, Artistic Brushes, Text Tools, Shape Tools, or Common Tools.

The basic parameters of the selected tool are shown in the **Tool Options** panel or by right-clicking on the image. To view the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key.

Buttons marked with a small triangle at the bottom, contain a submenu of additional tools, which can be selected by either right-clicking or by pressing and holding the left mouse button. All the tools of this group will be displayed in the drop-down menu. Click on the desired tool with the left mouse button to select it.
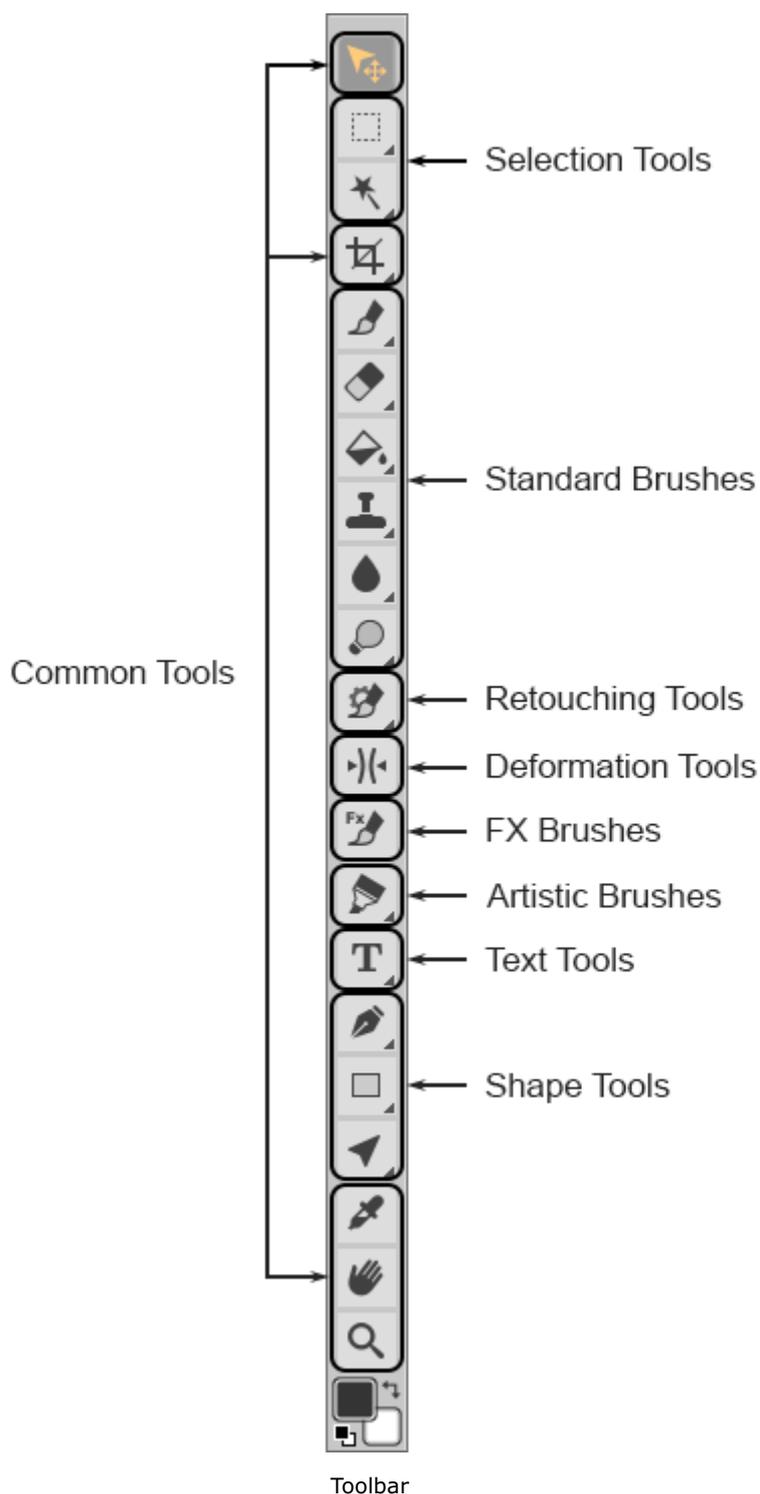

Toolbar

At the bottom of the Toolbar, there is a color control box. The upper square displays the foreground color, the lower one - the background color. Double-click one of them to open the Select Color dialog. To swap colors, press ⬒. Reset to the default colors (main is black, background is white) by pressing ⬓.

You can dock the Toolbar to the left or right edge of the program window or position it anywhere on the screen. Drag the Toolbar by clicking and holding the upper part of the bar.

LAYERS PANEL

The **Layers** panel lets you work with layers (sets of pixels which can be edited separately) and groups of layers.
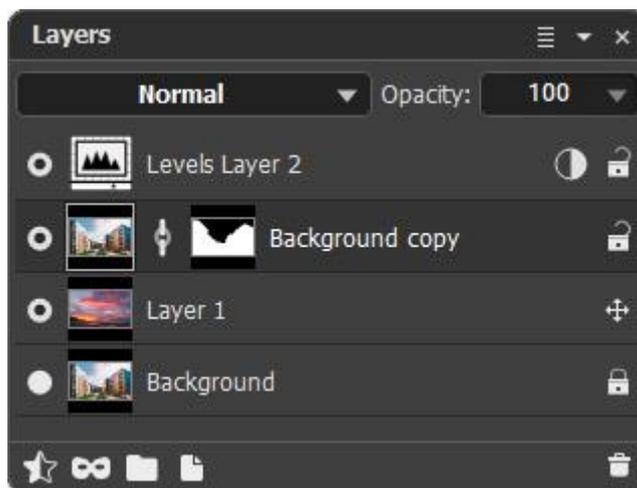
Layers Panel

The panel contains a list of layers. It remains empty until you open an image or create a new document.

The active (editable) layer is highlighted in gray. To select another layer, click its name or thumbnail. To select multiple layers, click them while holding down Ctrl. To select multiple contiguous layers, click the first layer and then Shift-click the last layer.

To rename a layer, double-click the layer's name next to it's thumbnail, then type a new name and press Enter.

You can change the thumbnail size by pressing the button ≣ at the top of the **Layers** panel.

To the left of a layer's thumbnail is a visibility icon ●/◎, which allows you to turn the visibility of a layer on or off. Editing tools cannot be used on a layer when its visibility is turned off. To toggle a layer's visibility, left-click the icon.

> **Note:** The layers contained in a group are visible only if the group's visibility is turned on (regardless of the visibility of separate layers).

There are several layer types:

> **Raster Layer** is a basic layer type which allows applying brushes and filters. Other layers can be rasterized by using the **Rasterize Layer** command.

> **Adjustment Layer** is marked with an ◐ icon to the right of the layer name. This layer contains the result of an adjustment being applied. Click the mark to open the Adjustment Layer settings panel.

> **Shape Layer** is marked with a △ icon to the right of the layer name. This layer type is used to create and edit vector shapes. Click the mark to open the Shape Layer settings panel. The layer is created automatically when using the shape tools.

> **Text Layers** are used to add inscriptions to images. They are created automatically when using the text tools.

You can change the order of the layers by dragging them up and down in the panel.

Right-clicking on a layer opens a menu of commands. The available menu items depend on the layer type and the number of selected layers.
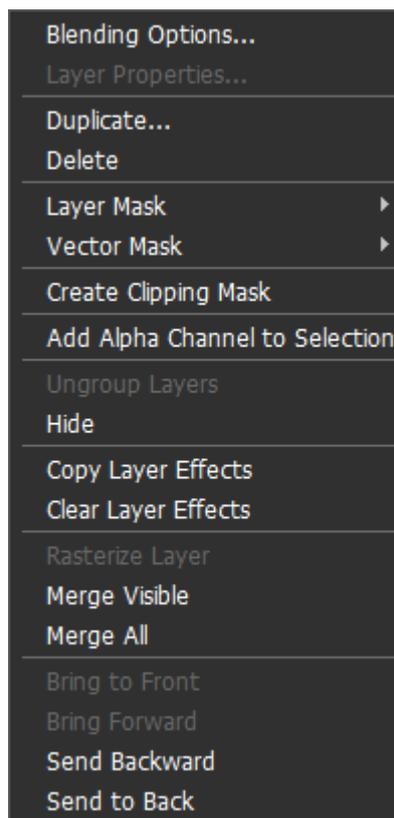
Blending Options. The command opens the blending options dialog box.

Layer Properties. The command opens the separate parameter menu of an adjustment or a shape layer.

Duplicate. The command creates a copy of the selected layer or group of layers. You can copy the layer to a new document as well as to an open document. The copy direction can be set in the dialog box. You can copy the selected layer or group of layers by dragging it with the mouse while holding down the $Shift$ + Alt keys on Win ($⇧$ + $Options$ on Mac).

Also, you can copy the layer to another image by moving the layer icon to the open document tab.

Delete. The command deletes the selected layer or group.

Layer Mask. The submenu contains commands for creating and working with a raster (pixel) layer mask.

Vector Mask. The submenu contains commands for creating and working with a vector mask.

Create/Release Clipping Mask. The command adds the selected layer to a clipping mask or removes the layer from it.

Add Alpha Channel to Selection. The command creates a selection which combines the alpha channel with the selection channel.

Subtract Alpha Channel from Selection. The command creates a selection which includes all the selection channel contents excluding the alpha channel.

Intersect Alpha Channel with Selection. The command creates a selection which includes the common parts of the alpha channel and the selection channel.

Group Layers. The command combines selected layers into a group.

Ungroup Layers. The command quickly separates layers from the selected group.

Show/Hide Layers. The command enables/disables the displaying of contents of layers/groups.

Copy Layer Effects. The command allows you to copy the selected or all layer effects to the clipboard.

Paste Layer Effects. The command allows you to add the copied effects to the selected layer.

Clear Layer Effects. The command allows you to remove the selected or all layer effects.

Rasterize Layer. The command converts any layer to a regular (raster) layer.

Create Path from Text. The command creates a vector path from the active text layer.

Convert to Vector Shape. The command converts the selected text layer to the shape layer.

Merge Layers. The command merges the selected layers into a single layer.

Merge Group. The command merges visible layers of the group into a single layer. The new layer is placed in the main list instead of the group. Invisible layers disappear.

Merge Clipping Mask. The command merges all layers of the clipping mask into one raster layer.

Merge Visible. The command combines all visible layers into one layer.

Merge All. The command combines all visible layers, discarding the invisible ones, into one layer.

Bring to Front. The command moves the selected layer to the top of the list.

Bring Forward. The command swaps places between the selected layer and the layer above it.

Send Backward. The command swaps places between the selected layer and the layer below it.

Send to Back. The command moves the selected layer to the bottom of the list.

The Lock icon next to each layer prevents the layer from further editing. Click on the icon to select a lock mode.
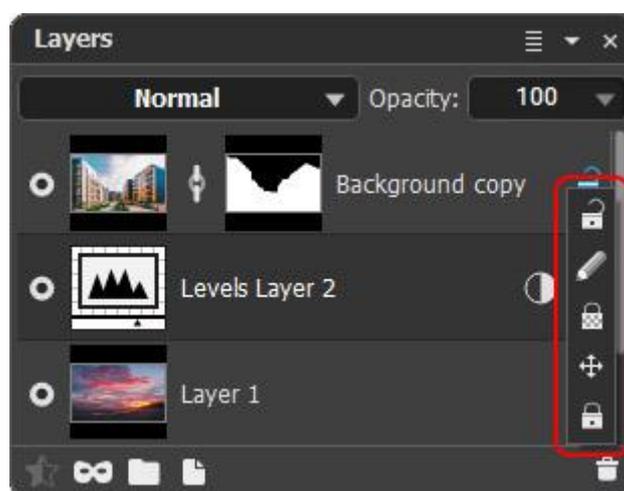
Lock Modes

Unlock 🔓 - this icon means the layer is in an unlocked state (editable).

Lock Image Pixels ✏️ protects the opaque pixels of a layer from any changes made by drawing/ editing tools.

Lock Transparent Pixels 🔒 (only for raster layers) prevents changes to the transparent pixels.

Lock Position ✛ prevents a layer from being moved.

Lock All 🔒 prevents any changes to a layer.

Double-click a layer's thumbnail to open the **Blending Options** menu. Close the menu by pressing Esc (changes will be ignored) or by clicking outside of the menu window (changes will be saved).

The **Blending Options menu** looks like this:
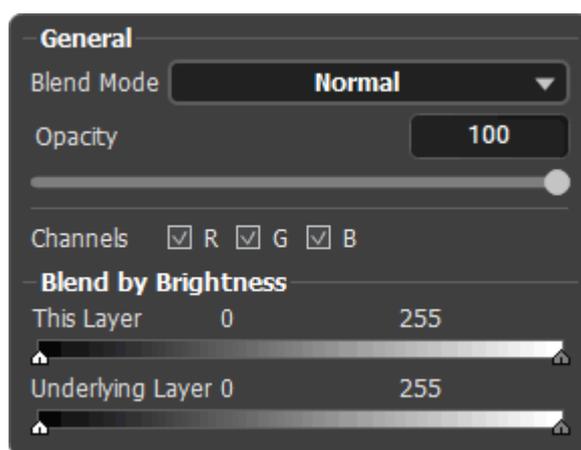
Blend Mode determines how the pixels on one layer are blended with those on the layer below it.

Opacity (0-100) affects the visibility of other layers below the selected layer. If a layer has an opacity of 0%, it will be completely transparent (invisible). The intermediate opacity value results in partial permeability of the pixels on that layer. At 100% opacity, only the pixels on that layer are visible. Transparent and translucent areas are filled with a checkerboard pattern.

For blend modes other than normal, **Opacity** affects their influence on forming a blended image.

> **Note: Blend Mode** options and **Opacity** parameters are also displayed at the top of the **Layers** panel and can be adjusted without opening the menu.

Channels mode controls independent color channels. Enable the check-boxes to select color channels involved when blending layers.

Blend by Brightness controls the visibility of pixels on the active layer and layers below it based on their brightness.

The buttons at the bottom of the panel are used as follows:

The **Add Effect** button ⭐ opens the Layer Effects menu. Use its commands to change the appearance of a layer.

The **New Mask** button 🔗 allows you to create a layer mask and a vector mask. Clicking the button once will display a thumbnail of the pixel mask, and clicking it again will display a thumbnail of the vector mask.

The **New Group** button ▣ allows you to combine multiple layers into one set. When you click on this button in the **Layers** panel, elements will be created named Group 1, Group 2, etc. By moving a folder you can move all of the layers within it together.

To add a layer to a group, drag it to the folder while holding down the left mouse button and release it when it is above the folder. You can remove a layer from a group in a similar way. If you drag the folder to the 🗋 button at the bottom of the panel, a copy of the folder along with its sub-layers will be created.

To group multiple layers, select them and press the ▣ button or use the command **Layers -> Group Layers**.

To ungroup the layers, select a group and use the menu command **Layers -> Ungroup**.

To rename a group, double-click on its name, enter a new value and press `Enter`.

Click on the folder to open/close the group. When a group is opened 🔽, its constituent layers can be moved, deleted, or edited individually. If the active group is closed ▶, new layers will be created above.

You can change a **Blend Mode** for a *group* of layers. By default, the **Pass Through** mode is selected for a group in the blend modes list, that is the layers inside the group interact with each other (and the layers below) in the usual way - as if they are not grouped.

When other blend modes are used, the group behaves as if all layers inside it are combined into one layer, which interacts with the layers outside the group based on the chosen blend mode. In this case, blend modes of individual layers in the group are valid only within that group, and have no affect on layers outside of the group.
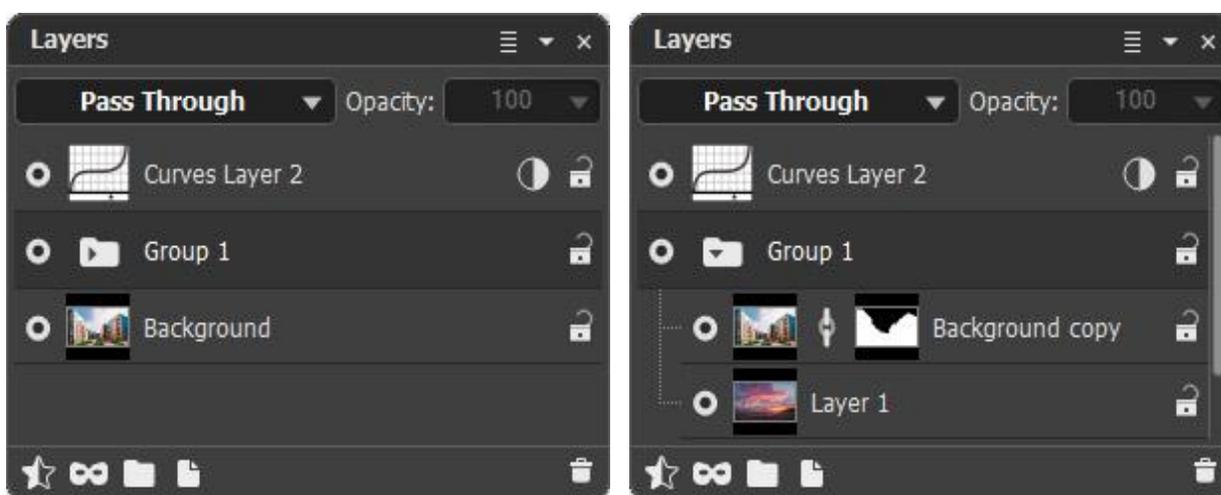
Closed Group   Opened Group

The **New Layer** button 🗋 creates a new layer above the active layer or in the active group. If you drag a layer (or group) to this button while holding the left mouse button and then release the left mouse button, a copy of that layer (or group) will be created. When creating a new layer a pop-up menu appears, letting users specify a layer type - raster, adjustment, or shape.

When choosing an **adjustment layer** from the list, you can specify what kind of adjustment is required. Adjustment layers contain settings which affect the underlying layers without changing their pixel values.

The settings of the adjustment layers overlap with the settings in the Adjustment menu: **Image -> Adjustment**.

The **Delete** button ⬛ removes the selected layer/group. Drag a group to this button to delete the group along with all of its contents. If a group is selected, and then the button is pressed, it's possible to delete the group with or without its contents (your choice).

> **Note:** It is impossible to delete all layers.

LAYER EFFECTS

You can add **Layer Effects** to the selected layers to change the appearance of their contents. To add an effect, click ⭐ in the **Layers** panel or call the command **Layers -> Layer Effects**.

Emboss
Bevel
Deboss
Stroke
Inner Shadow
Inner Glow
Satin
Color Overlay
Outer Glow
Outer Shadow

Layer Effects

Layer effects are applied to a particular layer or group of layers. When you change the contents of a layer, the effects are applied to the new content.

Layer effects can be moved between layers by dragging them with the mouse cursor.

You can use the commands:

> **Copy Layer Effects** - to copy the selected effects to the clipboard.

> **Paste Layer Effects** - to add the copied effects to the selected layer.

> **Clear Layer Effects** - to remove the selected or all layer effects.

You can also copy effects from one layer to another by dragging them with the mouse cursor while holding down the `Shift`+`Alt` keys on Windows, `⇧`+`Options` on Mac.

Layer Effects:

> **Bevel & Emboss** (**Emboss**, **Bevel**, **Deboss**). The effects in this group add volume to the layer.

> > **Emboss**. The effect imitates the relief surface; both the current and the underlying layer are affected.

Emboss

Bevel. The effect imitates the relief surface; only the current layer is affected.
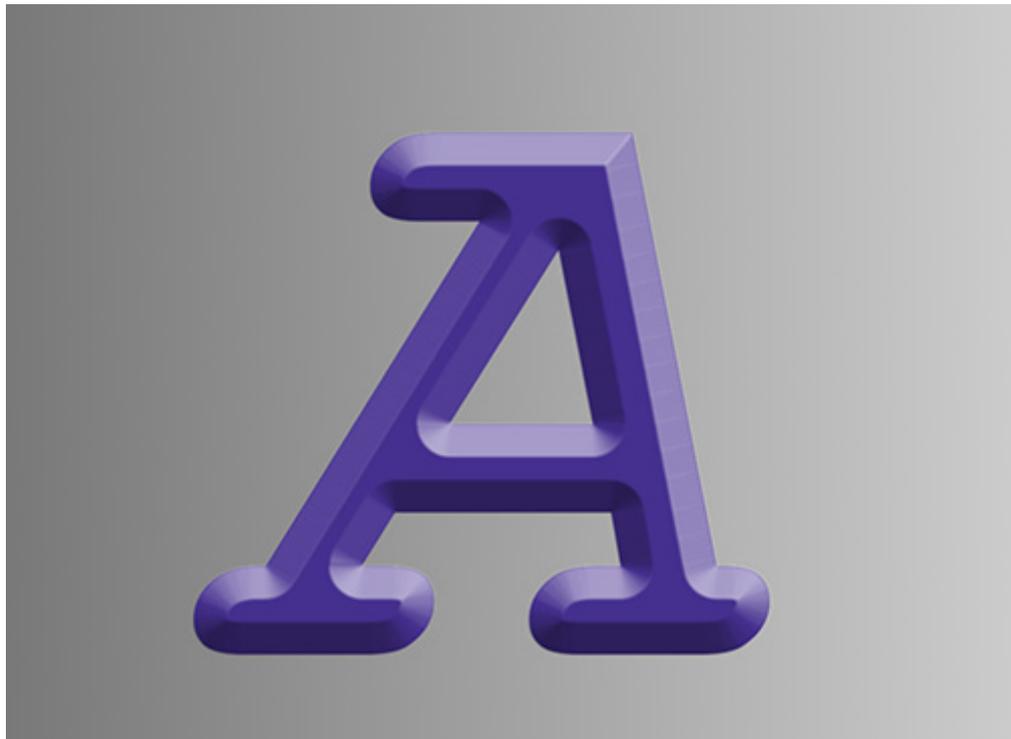
Bevel

Deboss. The option imitates the stamping effect.

Deboss

Parameters of the effects group:

Blend Mode. The parameter determines how the effect blends with the pixels of the current layer.

Shadow Opacity (0-100). The parameter controls the opacity of the shadow.

Shadow Color. To change the color of the shadow, call the Select Color dialog box by clicking on the color plate.

Highlight Opacity (0-100). The parameter determines the opacity of the highlight.

Highlight Color. To change the color of the highlight, call the Select Color dialog box by clicking on the color plate.

Smoothing (0-50). The parameter determines the sharpness of the effect. The higher the value, the more blurred the effect.

Size (1-200). The parameter specifies the width of the effect. The higher the value, the larger the size of the relief.

Angle (-180..-180). The parameter adjusts the position of the light source. Depending on the value, the arrangement of light and dark areas changes. When holding down the `Shift` key, the angle will change in increments of 5°, when holding down the `Ctrl` key, in increments of 10°.

Altitude (0-90). The parameter sets the height of the light source. At higher values, the shadow becomes darker.

Depth (1-150). Specifies the depth of the effect. The higher the value, the stronger the relief.

Shift (1-99). The parameter moves the semi-transparent effect border within the blurred area. At higher values, the effect shifts inwards; at lower values - outwards.

Stroke. The effect outlines the contents of the layer with the chosen color.

Stroke

Effect Parameters:

Blend Mode. The parameter determines how the effect blends with the pixels of the current layer.

Color. To change the color of the contour, call the Select Color dialog box by clicking on the color plate.

Opacity (0-100). The parameter defines the transparency of the effect.

Size (1-250). The parameter determines the thickness of the contour.

Blur (0-50). The parameter specifies the sharpness of the contour. The higher the value, the more blurred the contour.

Shift (1-99). The parameter moves the contour within the blurred area. At higher values, the effect shifts inwards; at lower values - outwards.

Position. From the drop-down menu, select the position of the effect: Outside, Inside, or Center.

Inner Shadow and **Outer Shadow**. The effects add the shadow to the layer.

Inner Shadow. The shadow appears inside the boundaries of the layer.

Inner Shadow

Outer Shadow. The shadow appears outside the boundaries of the layer.

Outer Shadow

Parameters of the effects group:

Blend Mode. The parameter determines how the effect blends with the pixels of the current layer.

Color. To change the color of the shadow, call the Select Color dialog box by clicking on the color plate.

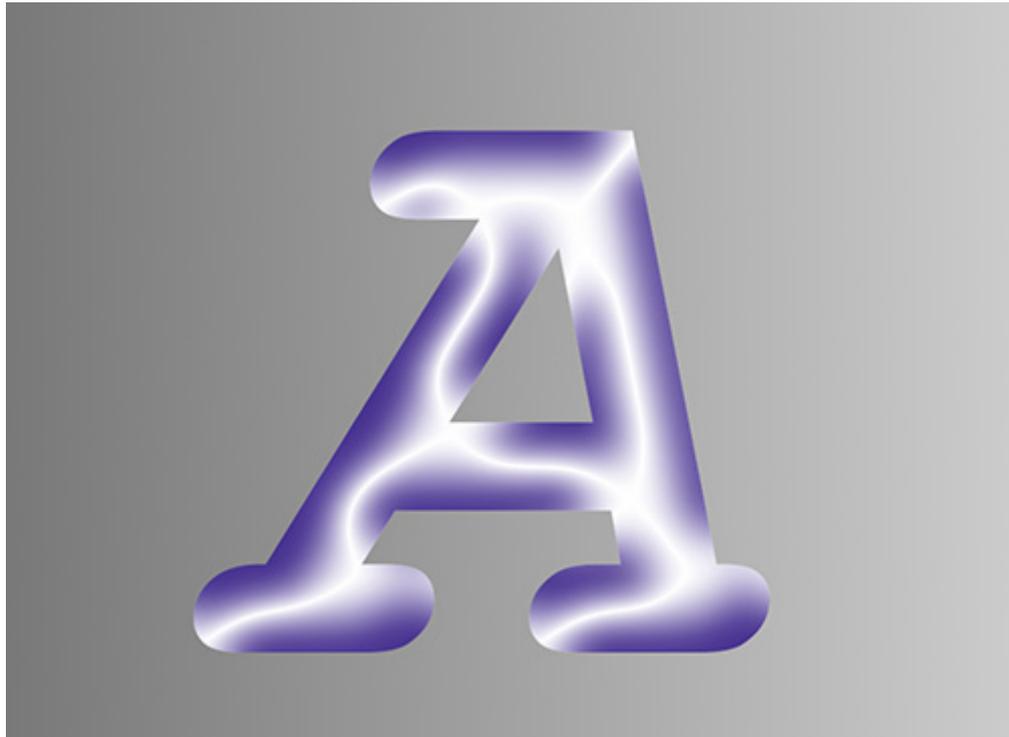**Opacity** (0-100). The parameter defines the transparency of the effect.

Distance (0-3000). The distance between the shadow and the object/layer casting the shadow.

Angle (-180..-180). The parameter adjusts the position of the light source. Depending on the value, the position of the shadow changes. When holding down the `Shift` key, the angle will change in increments of 5°, when holding down the `Ctrl` key, in increments of 10°.

Choke (0-100) (for the **Inner Shadow**). The parameter pulls the inner shadow's edges toward the center before blurring.

Spread (0-100) (for the **Outer Shadow**). The parameter expands the outer shadow's edges before blurring.

Size (0-250). Specifies the size of the shadow relative to the size of the object.

Layer Knocks Out. When the check-box is enabled, the layer content is cut out of the shadow.

Inner Glow and **Outer Glow**. The effects add color glow to the layer.

Inner Glow. The effect adds glow that emanate from the inside edges of the layer's content.
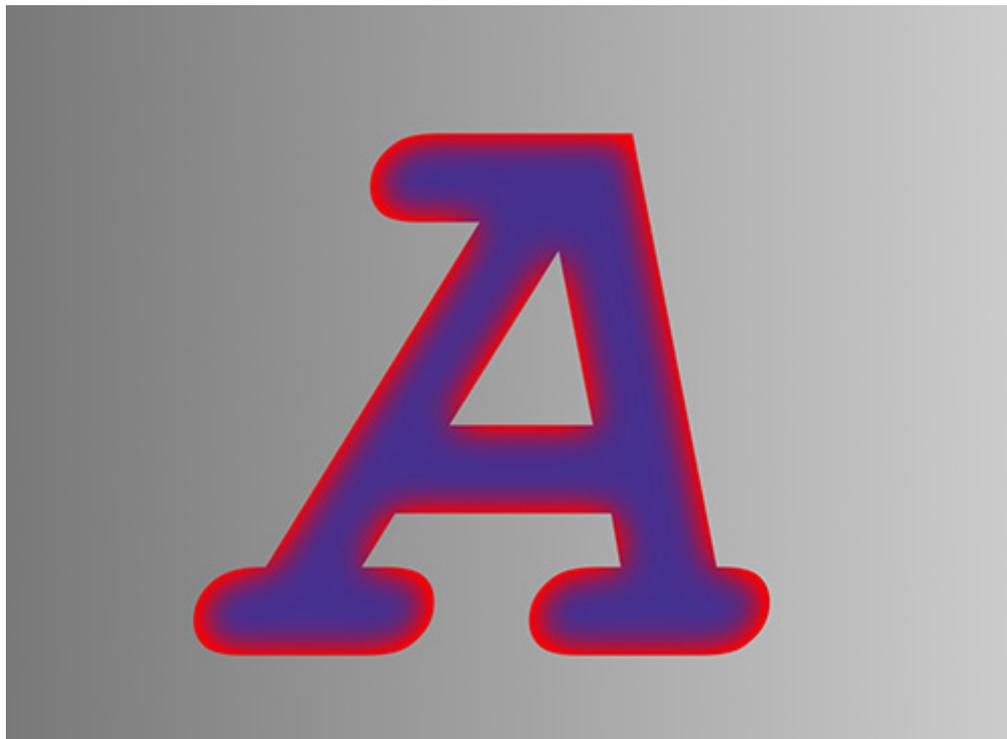
Inner Glow

Outer Glow. The effect adds glow that emanate from the outside edges of the layer's content.

Outer Glow

Parameters of the effects group:

**Blend Mode**. The parameter determines how the effect blends with the pixels of the current layer.

Color. To change the color of the glow, call the Select Color dialog box by clicking on the color plate.

**Opacity** (0-100). The parameter defines the transparency of the effect.

Choke (0-100) (for the **Inner Glow**). The parameter pulls the inner glow's edges toward the center before blurring.

Spread (0-100) (for the **Outer Glow**). The parameter expands the outer glow's edges before blurring.

Size (0-300). The parameter specifies the width of the glow.

Range (0-300). The parameter adjusts the glow range.

Satin. Creates the effect of light reflection in the current layer. To obtain the effect, two copies of the layer are created, filled with color, shifted and blurred.

Satin

Effect Parameters:

Blend Mode. The parameter determines how the effect blends with the pixels of the current layer.

Color. To change the color of the effect, call the Select Color dialog box by clicking on the color plate.

Opacity (0-100). The parameter defines the transparency of the effect.

Distance (0-300). The parameter adjust the size and position of the light reflection.

Angle (-180..-180). The parameter adjusts the direction along which the layer copies will be offset. When holding down the $\boxed{\text{Shift}}$ key, the angle will change in increments of 5°, when holding down the $\boxed{\text{Ctrl}}$ key, in increments of 10°.

Size (0-300). This parameter determines the amount of blur.

Invert. Enable the check-box to reverse the colors of the object and the effect.

Color Overlay. Fills the layer with the selected color.

Color Overlay

Effect Parameters:

Blend Mode. The parameter determines how the effect blends with the pixels of the current layer.

Color. To change the color of the effect, call the Select Color dialog box by clicking on the color plate.

Opacity (0-100). The parameter defines the transparency of the effect.

LAYER MASK

Using a mask, you can can hide portions of the layer and mask out the effect where desired.

The quickest way to create a layer mask is to press the button ⚬⚬ in the **Layers** panel.
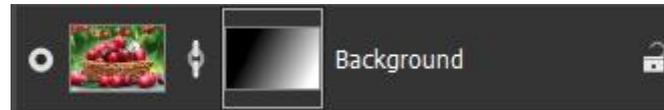
To create a mask, select one of the items in the menu **Layers -> Layer Mask**:

Reveal All - the command creates a transparent mask that reveals the entire layer.
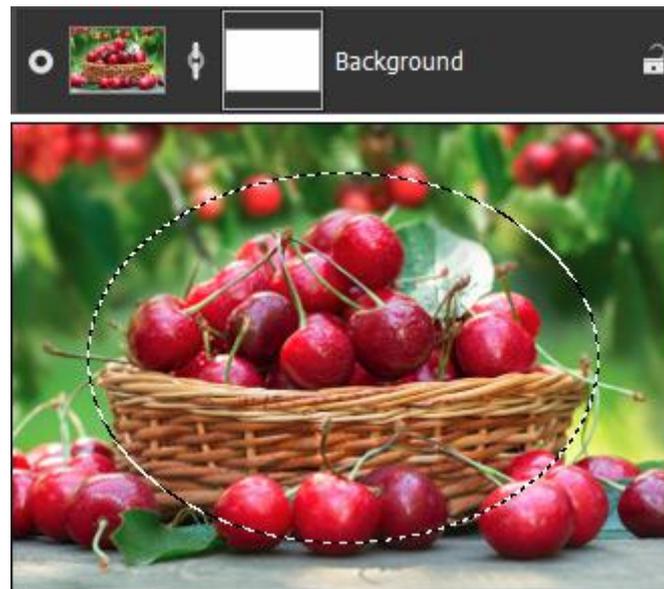
Hide All - the command creates an opaque mask that hides the entire layer.
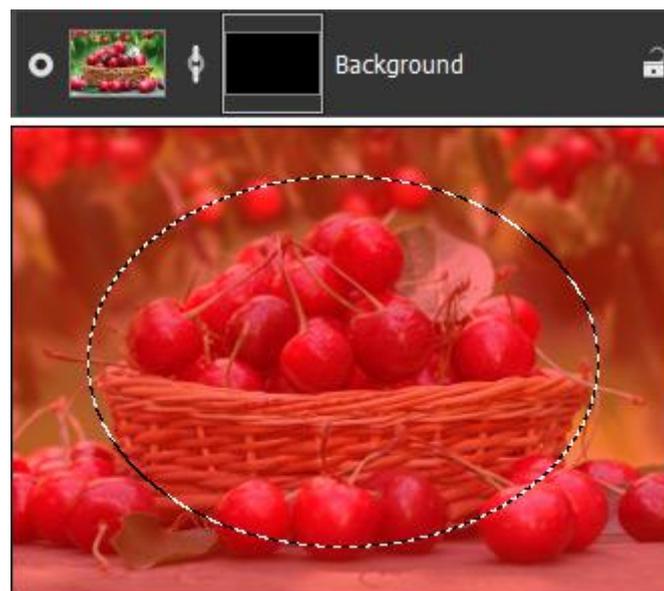
Reveal Selection - the command creates a mask that reveals the selection.
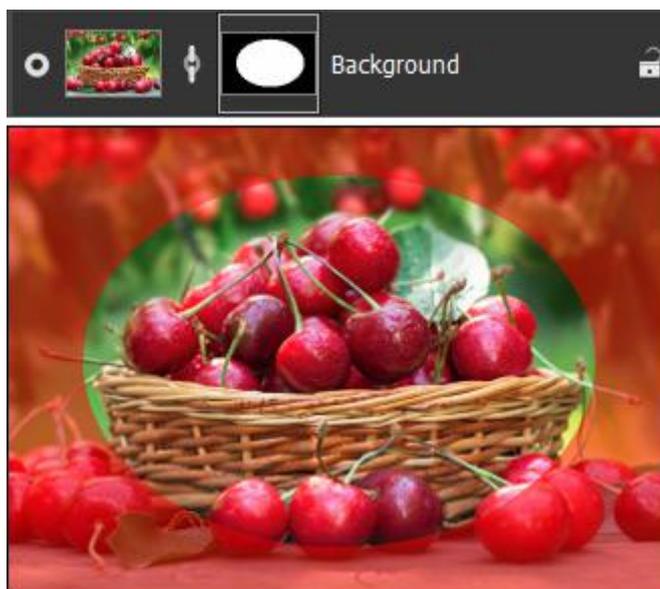
Hide Selection - the command creates a mask that hides the selection.
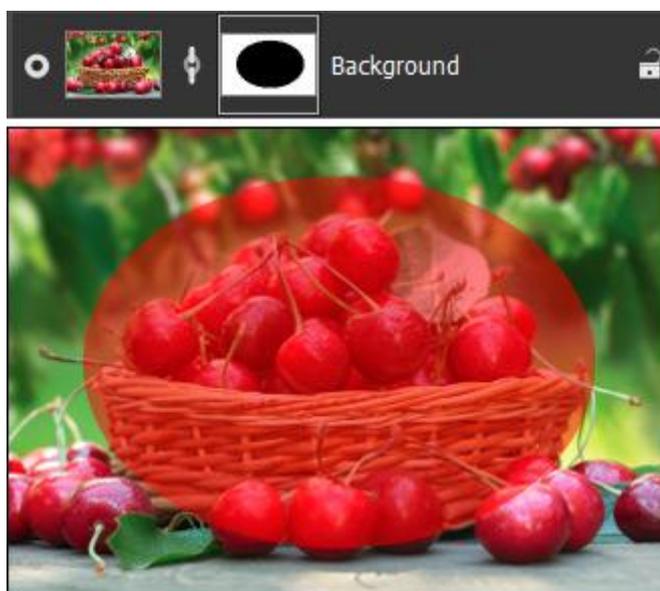
All the menu commands that are available as menu entries by right-clicking on the **Layers** panel.

You can edit the mask using the painting tools. Select a mask in the **Layers** panel by clicking on its thumbnail. Paint with black to create an opaque mask, paint with white to create a transparent mask; other colors will create a semi-transparent mask.

By default, the mask is linked to the active layer. To cancel/reestablish the link between the layer and mask, click ♦/♦ between the thumbnails or select **Layers -> Layer Mask -> Unlink/Link**. Unlinking them lets you shift the mask separately from the layer.

You can move the mask to another layer by dragging it with the mouse cursor. If you hold down the Shift + Alt keys on Windows (⇧ + Options on Mac), the active mask will be copied to the selected layer.

To invert a mask, select the **Invert Mask** command.

To remove a mask, select its thumbnail and click the button 🗑 or use the command: **Layers -> Layer Mask -> Delete**.

To disable/enable a mask, select the layer containing the mask and choose **Layers -> Layer Mask -> Disable/Enable**. When the mask is disabled, a "X" appears across its thumbnail, and the layer's content is shown without masking effects.
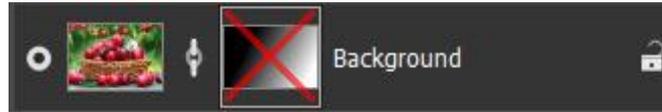
To add a mask to the selection, right-click its thumbnail in the **Layers** or **Channels** panel and select one of the following commands:

Add Mask to Selection - The command adds a transparent area of a mask to the selection.

Subtract Mask from Selection - The command subtracts transparent mask areas from the selection.

Intersect Mask with Selection - The command creates a selection containing the overlapping area of the selection and the transparent mask area.

To apply a mask to the layer, choose **Layers -> Layer Mask -> Apply** (only for raster layers). After the command is selected, the hidden layer parts become transparent.

You can adjust the mask view mode in the **Channels** panel. Click the icon to the right of the **Mask** channel and select a view mode in the drop-down menu.

 - grayscale mask;

 - trimap mask;

 - red semi-transparent mask in the source image;

 - inverted red mask;

 - black mask in the source image;

 - white mask in the source image.

You can improve the mask's edges by using the **Refine Edges** feature in the **Select** menu.

VECTOR MASK

Vector Mask is a resolution-independent mask created from a vector path. You can create a vector mask from an active path or selection. If there is no active path or selection, a mask the size of the entire document will be created.

Create a vector mask by clicking on the **Paths** or **Layers** panel. If the layer does not contain a mask, then when called this command from the **Layers** panel, a layer mask will be created first, and then a vector one will be created the next time you click it.

You can also create a vector mask by selecting one of the following items from the menu **Layers -> Vector Mask**:

Reveal All - the command creates a transparent vector mask that reveals the entire layer.
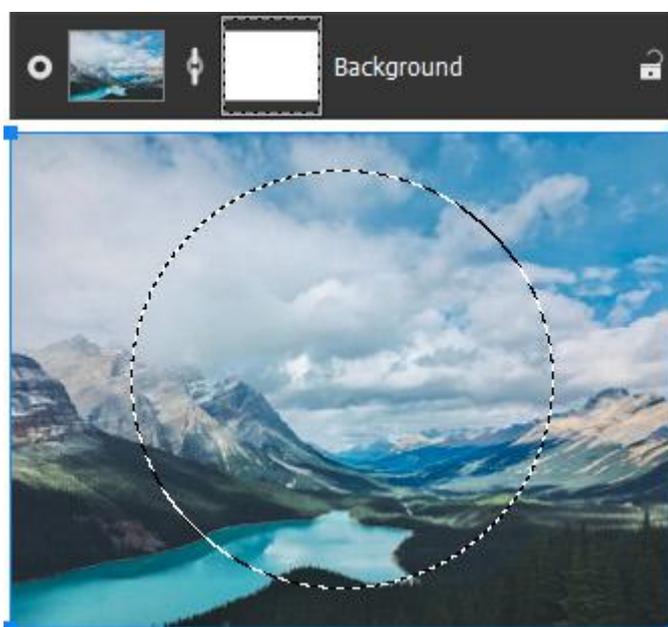
Hide All - the command creates an opaque vector mask that hides the entire layer.
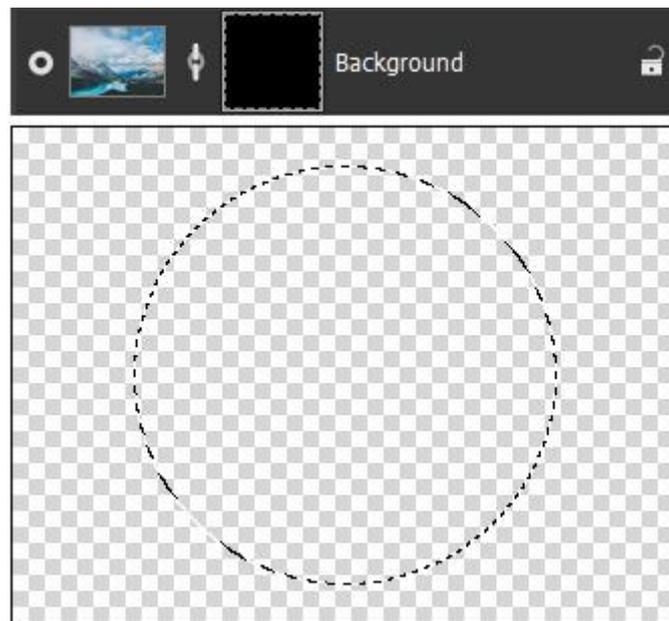
Reveal Path - the command creates a vector mask based on the active vector path.
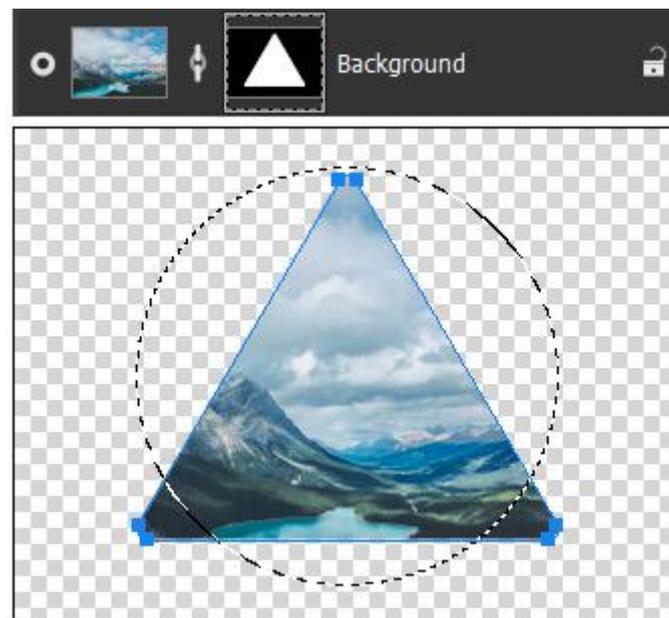
Reveal Selection - the command creates a vector mask that hides everything except the selected part of the layer.

Hide Selection - the command creates a vector mask that hides only the selected area of the layer.
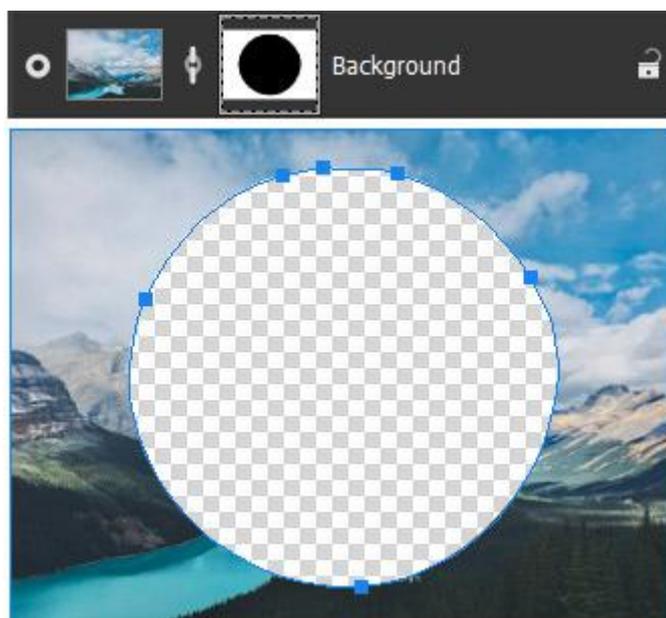
These commands can also be found in the menu called up by right-clicking a layer in the **Layers** panel, in the **Vector Mask** submenu.

When you create a vector mask, an element named **Vector Mask** will appear in the **Paths** panel. You can edit a vector mask using the **shape editing tools**. To do this, select the created vector mask in the **Layers** panel or the vector mask path in the **Paths** panel by clicking on the thumbnail.

By default, the mask is linked to the active layer. To cancel/reestablish the link between the layer and mask, click ⬦/⬦ between the thumbnails or select **Layers -> Vector Mask -> Unlink/Link**. Unlinking them lets you shift the mask separately from the layer.

You can move the vector mask to another layer by dragging it with the mouse cursor. If you hold down the Shift + Alt keys on Windows (⇧ + Options on Mac), the active mask will be copied to the selected layer.

To remove a mask, select its thumbnail and click 🗑 or use the command: **Layers -> Vector Mask -> Delete**. You can also delete a vector mask by deleting its path or by dragging the thumbnail to the trash icon at the bottom of the **Layers** or **Paths** panel.

To disable/enable a vector mask, select the layer with the mask and choose **Layers -> Vector Mask -> Disable/Enable**. When the mask is disabled, a "X" appears across its thumbnail, and the layer's content will be displayed without the mask.

To add a vector mask to the selection, right-click its thumbnail in the **Layers** panel and select one of the following commands in the **Vector Mask** submenu:

Add to Selection - The command adds an area of a vector mask to the selection.

Subtract from Selection - The command subtracts an area of a vector mask from the selection.

Intersect with Selection - The command creates a selection containing the overlapping area of the selection and the vector mask.

The command in the menu **Layers -> Vector Mask -> Apply** converts a vector mask into a layer mask. If the layer already contains a layer mask, the masks will be merged.

CLIPPING MASK

Clipping Mask allows you to use the contents of one layer or group of layers as a mask for the layers above.

A clipping mask consists of a base layer and clipped layers above it. The opaque areas of the base layer show where the content of the layers above will be displayed. The contents of clipped layers outside the mask (transparent areas) are hidden.

Clipping Mask

To create a clipping mask, you can use one of the methods:

  - select the **Create Clipping Mask** command in the **Layers** main menu;

  - select the **Create Clipping Mask** command in the **Layers** context menu;

  - press `Ctrl`+`Alt`+`G` hotkey;

  - left-click + `Alt` on the border between layers (the cursor will turn into ⬇).

The selected layer will be converted to a clipped layer, and the underlying layer will be converted to a base layer.

The name of the mask base layer will be underlined, and the clipped layers will be indented with an arrow ⬇.

When you create or move a layer into layers of the clipping mask, it will be automatically added to it. When moving a layer outside the clipping mask, it will be excluded from it.
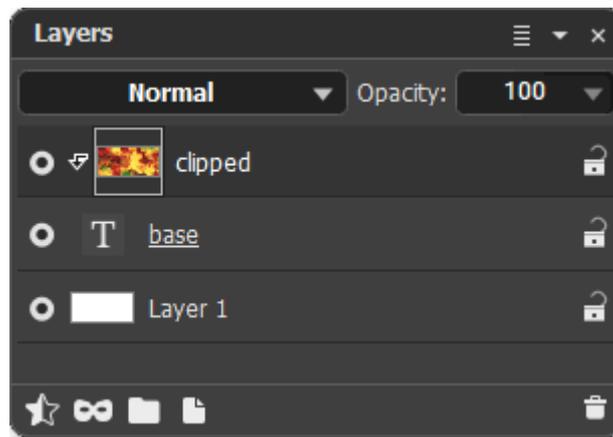
When you turn off the visibility of the base layer, the other layers of the clipping mask also become invisible.

To remove a layer from a clipping mask, you can use one of these methods:

- in the **Layers** panel, select the layer and use the **Release Clipping Mask** command;

- press `Ctrl`+`Alt`+`G` hotkey;

- left-click + `Alt` key on the border between layers.

This will exclude the selected layer and all layers above it from the clipping mask.

BLEND MODES

Blend modes let you mix the color and brightness of image layers. Below is an example of what can be achieved when combining two layers:

Upper Layer

Lower Layer

The program has **27 blend modes**. Each layer is set to **Normal** by default.

A blend mode can be chosen for a set (group) of layers. If **Pass Through** is chosen from the blend mode drop-down list, then layers in a group will interact with each other and layers below in the usual way, as if they are not grouped. If another blending mode is chosen the set behaves as if the layers have been merged into one layer, which interacts with layers outside of the group based on the chosen blend mode. In this case the blend modes applied to individual layers within a set are only valid within the group and do not affect layers outside of the group.

Basic Modes

Normal. No interaction occurs between the active and the lower layer, ie all pixels on the upper layer are displayed as usual. Blending in this mode can only be achieved by adjusting **Opacity**.

Dissolve. This works when **Opacity** is less than 100%. Lowering opacity randomly conceals pixels on the top layer, and pixels from the lower level are shown in their place.

Darken Modes

Darken. In this mode the top layer appears to be darker in color than the lower layer. Dark pixels on the upper layer will remain unchanged, while the white color will be transparent. The resulting image is derived from the least bright pixel values for each channel.

Multiply. The upper layer darkens the lower layer. Colors are combined in such a way that they become denser. The image darkens. The white color will be transparent. This mode can be used to restore faded or overexposed photos, impose shadows, or imitate a felt-tip marker.

Color Burn. In this mode, contrast is increased by blending the darker pixels on the lower layer with the color of the upper layer. White pixels on the layer become transparent. Shadows in this mode are more intense than in **Multiply**. It is often used to increase saturation in light areas, tinted glass, precious stones, in underlining details of collages, and to imitate the effect of Burn on an image.

Linear Burn. It works like **Color Burn** with a softer effect.

Darker Color. It compares the pixels of the top and bottom layers and displays those that are darker.

Lighten Modes

Lighten. In this mode the brighter areas of the top layer replace darker areas on the lower layer. Brighter pixels on the upper layer will remain unchanged, while black pixels will become transparent. The result is based on the brightest pixel values of both layers.

Screen. The upper layer brightens the lower, depending on its brightness. The black color on the upper layer becomes transparent. This mode can be used to brighten dark images, simulate glow, to blend an image with the lower layer, and with different types of glare.

Color Dodge. In this mode the image on the lower layer is brightened by decreasing contrast based on the color of the upper layer. The black color on the upper layer becomes transparent. The effect on light areas is even stronger than **Screen** mode. This mode can be used to create bright flashes and to match the contrast of an image with the background.

Linear Dodge. It works like **Color Dodge** with less effect.

Lighter Color. It compares pixels of the top and bottom layers and displays those that are lighter.

Contrast Modes

Overlay. This mode combines the effects of **Multiply** and **Screen** modes, blending the upper layer with the lower. The result depends on the brightness of pixels in the blended layers: if the pixels of the lower layer are darker than those on the upper layer, the image becomes darker (Multiply), if they are lighter than those on the upper layer, the image is lighter (Screen). It is well suited for enhancing low contrast detail and superimposing texture on an image. If the color of the top layer is gray (50%) there will be no effect.

Soft Light. The image is brightened based on the brightness of the upper layer. If the pixels on the upper layer are brighter than neutral (50%) gray the image is brightened; if they are darker than neutral gray, then the lower layer is darkened. If the top layer is neutral gray (exactly 50%), there is no effect. This mode is useful for adjusting the tones of a background when making a collage, so that an object inserted above the background will gently blend with it.

Hard Light. Similar to the previous mode, the image is darkened (Multiply) if the pixels on the upper layer are darker (darker than neutral gray), and lightened (Screen), if those pixels are lighter (lighter than neutral gray). The contrast of colors is higher than in Soft Light mode. If the upper layer is neutral gray (exactly 50%), there is no effect. This mode is useful for making the background texture of the lower layer visible on the upper layer.

Vivid Light. If the color of the top layer's pixel is darker than 50% gray, the image darkens due to the increased contrast. If the color of the pixel of the upper layer is lighter than 50% gray, the image lightens due to the contrast decrease. If the top layer is 50% gray, there is no effect.

Linear Light. If the color of the top layer's pixel is lighter than 50% gray, the image lightens due to the increase in brightness. If the color of the pixel of the upper layer is darker than 50% gray, then the image darkens due to the brightness decrease. If the top layer is 50% gray, there is no effect.

Pin Light. If the color of the pixel of the upper layer is lighter than 50% gray, then the pixels of the lower layer with a darker color are replaced, and those with a lighter color remain unchanged. If the color of the top layer's pixel is darker than 50% gray, then the lighter pixels in the lower layer are replaced, and the darker ones remain unchanged. The mode can be used for adding special effects.

Hard Mix. In this mode, the color of the resulting pixel is obtained by adding the color values of the pixels of the lower layer and the upper layer. If the resulting sum for any channel is 255 or more, then the value 255 is assigned to it, otherwise - 0. Therefore, for all blend pixels, the total values of the red, green, and blue channels will equal 0 or 255. As a result, the pixel colors are replaced with solid red, green, blue, cyan, magenta, yellow, white, or black, creating the posterization effect.

Comparative Modes

Difference. This mode displays the tonal difference between the contents of two layers. Colors are inverted based on the brightness of pixels on the upper and lower layers. If the color of the upper layer is white the colors of the lower layer are inverted, if it is black there no change. If the combined layers are not too dark or bright and are sufficiently saturated, some interesting effects can result. This mode can also be used to compare two images - if they differ by even one pixel, it will be displayed in black.

Exclusion. Similar to the previous mode, the inversion of color is determined by the brightness of pixels on the upper and lower layers. Pixels of intermediate colors will be shown in gray, reducing contrast. Blending with white inverts the colors of the lower layer; blending with black has no effect. This mode is useful for achieving various effects.

Subtract. In this mode, the final pixel color is determined by the difference between the color values of pixels in the layers. If the result of the subtraction is negative, the pixel becomes black.

Divide. The result color is obtained by dividing the color values of the lower pixels by the color values of the upper pixels. If we apply to the image its copy, it will turn completely white.

Component Modes

Hue. In this mode, the resulting pixels have the brightness and saturation from the lower layer and the color tone (hue) from the upper layer.

Saturation. In this mode, the resulting pixels use the brightness and hue from the lower layer and the saturation from the upper layer.

Color. In this mode, the resulting pixels have the brightness as in the lower layer and the hue and saturation as pixels in the upper layer. This mode can be used for image toning.

Luminosity. In this mode, the resulting pixels take the hue and saturation from the lower layer and the brightness from the upper layer.

BLEND BY BRIGHTNESS

Blend by Brightness is used to control the visibility of pixels on the active layer (This Layer) and the lower layer (Underlying Layer) based on their brightness. Each scale has two sliders. At the leftmost slider a pixel has a brightness of 0 (black); at the extreme right a brightness of 255.

Those pixels whose brightness falls within the values between the two sliders will be displayed (for the upper layer) and hidden (for the lower layer). Sliders hide pixels without removing them.

If a slider is moved while holding down Ctrl, the slider will be divided into two parts, which can then be moved independently of one another. Divided sliders set the tonal range between visible and invisible pixels, so you can achieve a more subtle effect with a soft color change.

Upper Layer   Lower Layer

Actions on the active layer (current layer):

Active Layer:
Hidden 0-150,
Visible 150-255

Moving the left slider hides dark pixels with lower brightness
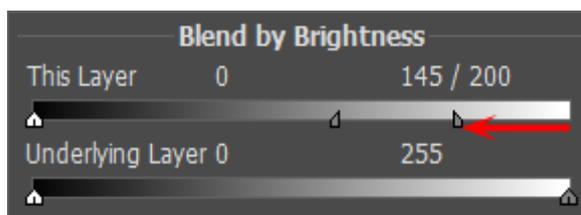
Active Layer:
Visible 0-145,
Transition 145-200,
Hidden 200-255

Moving the right slider hides light pixels with higher brightness
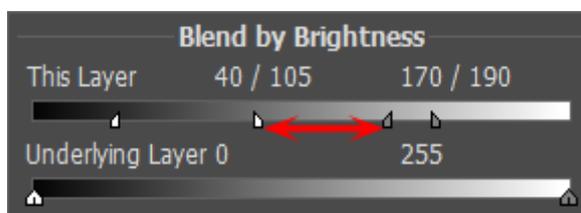
Active Layer:
Hidden 0-40,
Transition 40-105,
Visible 105-170,
Transition 170-190,
Hidden 190-255

Moving the sliders to the middle reveals only pixels
with brightness values within the range between the sliders

Actions on the lower layer (underlying layer):
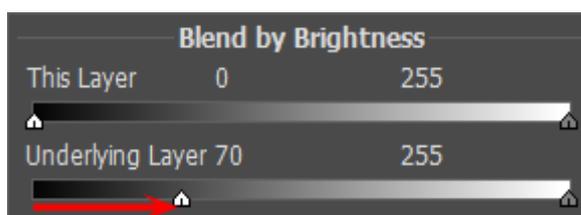
Lower Layer:
Visible 0-70,
Hidden 70-255

Moving the left slider makes the darker pixels of the lower layer visible on the upper layer
if their brightness is less than the specified value
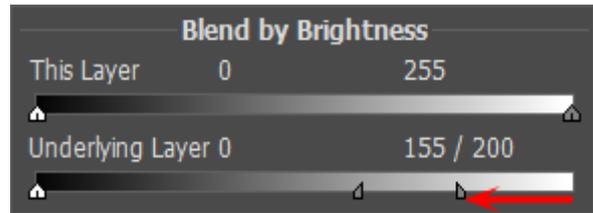
Lower Layer:
Hidden 0-155,
Transition 155-200,
Visible 200-255

Moving the right slider makes the lighter pixels of the lower layer visible on the upper layer,
if their brightness is more than the specified value
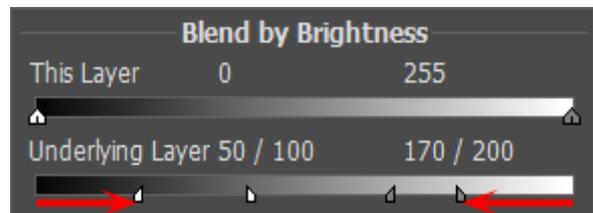
Lower layer:
Visible 0-50, Transition 50-100,
Hidden 100-170,
Transition 170-200, Visible 200-255

Moving the sliders to the center makes pixels from the lower layer visible on the upper layer
whose brightness values fall outside the range marked by the sliders

CHANNELS PANEL

The **Channels** panel lets you view and edit the image in separate channels. Channels are halftone images providing information about the brightness of color components. The channel list contains a composite image, color mode channels (RGB, CMYK, Lab, Grayscale), the transparency channel of the current raster layer (alpha channel), current selection channel, and the active layer mask channel. Each channel in the palette corresponds to a thumbnail image that displays all changes made to this channel.

You can adjust the size of thumbnails by clicking the button ≣ at the top of the **Channels** panel.

Channels Panel for CMYK

The active (editable) channel is highlighted with a dark gray background in the list. To select another channel, click its name. When selecting a single channel, the image is shown as grayscale.

Displaying Green Channel   Green Channel is Selected
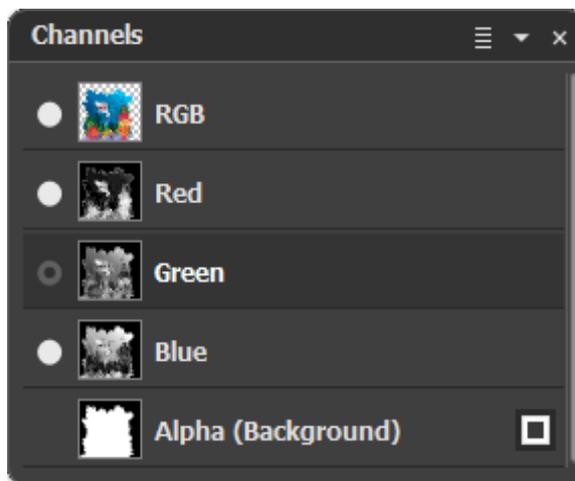
The visibility icon next to the inactive channel means that this channel is shown in the Image Window but is not editable. If several channels are visible, the image is displayed in color.

Displaying Green & Red Channels   Green & Red Channels are Selected
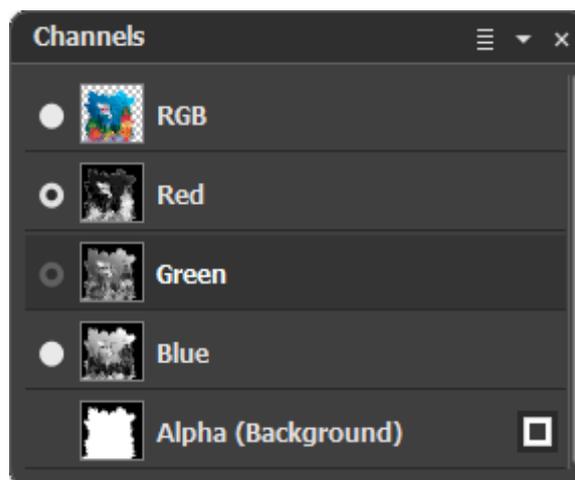
If you select the composite channel, all component channels become visible and active. The composite image is always located at the top of the list and is selected by default.

Displaying All Color Components   RGB Channel is Selected
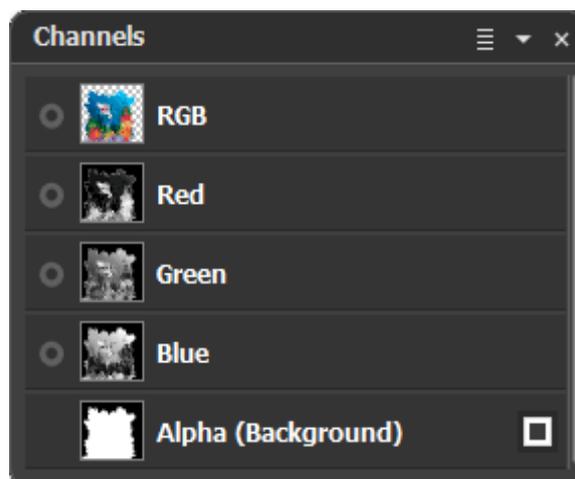
To edit a channel, use the usual drawing tools. Painting on a channel with white results in 100% intensity of the corresponding color. Different shades of color result in varying color intensity. The black color completely removes a color channel.

In the **Alpha** channel, by default, opaque areas are shown in white, transparent areas in black, and semitransparent areas in gray.

You can adjust the view mode for the alpha channel in the pop-up menu: Grayscale, Trimap, or Highlighted in Red.
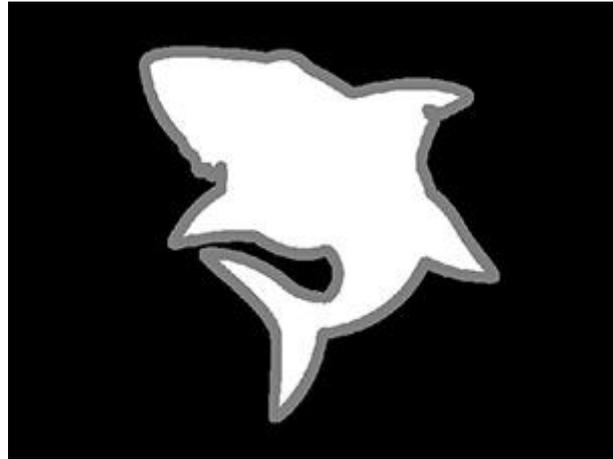
| Grayscale | Trimap |

Right-click the alpha channel to open the context menu with the following commands:

Clear Alpha Channel fills the alpha channel with white, and the layer has no transparent areas;

Add Alpha Channel to Selection combines the alpha channel with the selection or creates a selection from the alpha channel;

Subtract Alpha Channel from Selection removes the alpha channel from the selection channel;

Intersect Alpha Channel with Selection creates an intersection of the alpha channel and the selection channel.

The **Mask** channel displays the current layer mask, if available: black marks protected areas, white marks unprotected areas, gray marks the transition zone. The mask channel has 6 view modes.
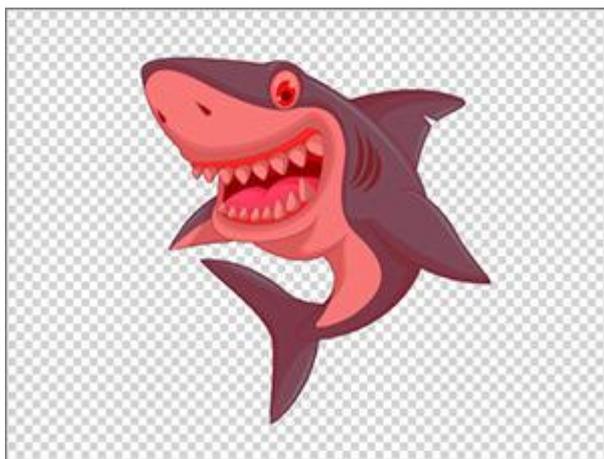
| Highlighted in Red | Inverted Red |

Right-click the mask channel to open the context menu with the following commands:

Remove Mask deletes the current layer mask;

Invert Mask inverts the selected mask;

Apply Mask merges the mask with the layer;

Add Mask to Selection adds the unprotected area of the chosen mask to the selection;

Subtract Mask from Selection removes the unprotected area of the chosen mask from the selection;

Intersect Mask with Selection creates a selection that includes common parts of the selection and the unprotected mask area.

The **Selection** channel indicates the area of the current selection: white marks selected areas, black marks unselected areas, gray marks the transition zone. For this channel, 6 view modes are available.

Black Background   White Background

Right-click the selection channel to open the context menu with the following commands:

Deselect cancels the selection;

Invert reverses the selection;

Reveal Selection adds a mask which hides everything but selected parts of the layer;

Hide Selection adds a mask hiding the selected area.

View Modes:

You can change the displaying of contents of the alpha, mask, and selection channels in the **Image Window** by clicking the icon to the right of the channel's name and choosing from the options:

- Grayscale,

- Trimap,

- Highlighted in Red,

- Inverted Red,

- Black Background,

- White Background.

PATHS PANEL

The **Paths** panel allows you to work with vector paths. It can contain the paths themselves, vector shapes, vector masks, text paths.

You can show/hide the **Paths** panel by selecting in the menu: **Workspace -> Panels -> Paths**.
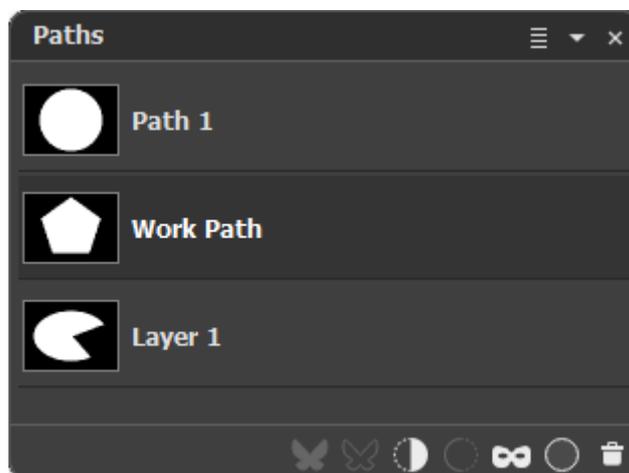
Paths Panel

In graphics design, a vector path is a vector shape's outline created with straight or curved segments. The paths are independent of resolution, they can be scaled to a larger size and not lose any image quality.

You can make paths using the **Shape Tools**. Each path can consist of several segments. When using a shape tool, a new path appears on the panel as a list item called *Work Path*, which is updated each time the tool is used. To save the current work path, give it a new name. To rename a list item, simply double-click on its name, enter a new name, and press Enter.

The active path is marked in the list with a darker highlight and is displayed on the image. To select another path, click on its name or its thumbnail. To deselect a path, left-click in a free space on the Paths panel.

You can change the thumbnail sizes in the menu, called by clicking the button ≡ next to the title of the **Paths** panel.

The following buttons are located at the bottom of the panel:

Fill Path . The button fills the active raster layer with the base color within the selected path.

Stroke Path . The button creates a stroke (outline) for the shape component using the selected tool with its current settings on the active raster layer.

Selection from Path . The button creates a selection along the selected path.

Path from Selection . The button creates a work path from the active selection.

New Vector Mask . The button creates a vector mask from a selected path.

New Path . The button creates a new empty path named *Path 1*, *Path 2*, etc. Dragging a path onto this icon will create a copy of it.

Delete . The button allows you to delete the selected path. You can also drag the path onto this icon.

Right-clicking a list item brings up a menu with commands:

Duplicate Path... Allows you to create a copy of a vector path. You can copy a path between images by dragging the selected path icon to the open image's tab.

Delete. Allows you to delete the selected path.

Make Selection... Allows you to create a selection from the selected path. By choosing one of the commands in the dialog, you can specify the option for interacting with an existing selection.

Fill Path... Fills the active raster layer with the base color within the selected shape component.

Stroke Path... Creates a stroke for the shape component using the selected tool with its current settings on the active raster layer.

SELECTIONS PANEL

The **Selections** panel allows users to handle multiple selections simultaneously.
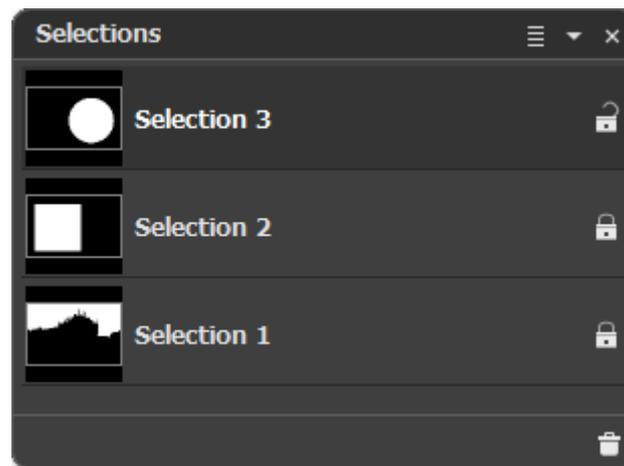
Selections Panel

The panel contains a list of selections. If there are no selections for this image, the list is empty.

When creating selections, new items appear in the list with the names: *Selection 1*, *Selection 2*, etc. To rename a selection, double-click it in the list, enter a new value and press `Enter`.

The current (editable) selection is highlighted in gray in the list, and its contour is marked with a dotted line. To choose another selection, click on its name or thumbnail. To hide the contours of the selection, use the standard keyboard shortcut `Ctrl`+`D` on Windows, ⌘+`D` on Mac, or the command **Select -> Deselect** (in this case, there are no active elements in the panel list).

To change the size of thumbnails, press the button ≡ at the top of the **Selections** panel.

To the right of the selection name you can find a lock icon 🔒/🔓 . If the element is unlocked, the selection tools remove the current selection and create a new one. If all elements are locked, a new item will be added to the list when creating a new selection.

The current selection can be viewed and edited in the **Channels** panel.

To delete the current selection, press 🗑 at the bottom of the panel or drag and drop the item onto this button.

HISTORY PANEL

The **History** panel shows the list of every change made to a file. By clicking on an item in the list, you can revert the file to a previous state.

At the top of the panel, next to the thumbnail of an image, there is information about the file: its name, size (in pixels), color mode, profile, date and time of creation.
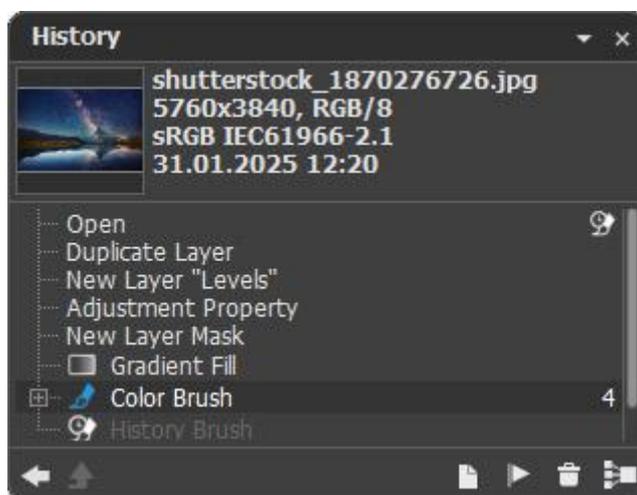
History of Changes

The history of changes is arranged in a linear fashion. This means that if you return to any intermediate state and apply an action, all actions on the list after it will be permanently removed, except for the control points (which will be placed at the top of the list). Selecting **Open** from the list returns the file to its initial state (before changes were applied).

All changes made are shown with their corresponding icon. Any successive changes made by the same tool (two or more) are arranged in a group; the number of elements in a group is shown by a number to the right of the icon. The list of elements in a group can be collapsed and reopened by pressing the "+" icon to the left of the tool's icon.

After applying the filter or effect in the program, you can back to it and edit the result. To do this, click the "+" icon in the **History** panel next to the effect's name and choose **Result**. The opened Effect dialog box displays the last used settings. After the editing is done, all the subsequent history states are deleted.

The possible number of states in the History panel can be adjusted in the Preferences.

The following buttons are at the bottom of the **History** panel:

Undo/Redo - History State ⬅/➡. The button allows you to switch between two last states in the list.

Exit Artistic Cloning/Deformation Mode ⬆. The button allows you to exit the Artistic Cloning mode of the Chameleon Brush tool or the Deformation mode, applying all changes made in these modes.

New Document from Current State 📄. The button allows you to create a new document using the settings at the current processing point.

Create Checkpoint ▶. The button allows you to save individual states of the history. A checkpoint is any document state saved with a default name (Checkpoint 1, Checkpoint 2, etc.) with no history of obtaining that state. To rename a checkpoint, double-click its name, enter a new value, and press `Enter`.

Delete States 🗑. The button allows you to remove all states below the selected one, keeping all checkpoints at the top of the list. If this button is pressed while a checkpoint is selected, the checkpoint will be deleted.

Collapse Group ▶▮. The button collapses the list in a group and combines it into one state, removing the individual history of each element.

You can also edit the history using the **Edit** menu commands:

Undo cancels the last action. If you use this command several times, a series of the last actions will be canceled. The hotkey is `Ctrl`+`Z` on Windows, ⌘+`Z` on Mac.

Redo allows you to restore the canceled action.The hotkey is `Ctrl`+`Y` on Windows, ⌘+`Y` on Mac.

Undo/Redo - History State - this command allows you to switch between the current and the previous state of the document. The command is the analogue of the buttons ← and → in the **History** panel. The hotkey is `Shift`+`Z` on Windows, ⇧+`Z` on Mac.

The **Purge** menu is used for permanent data deletion:

    History clears the whole history, except the initial and current states, as well as checkpoints.

    Clipboard deletes the contents of the clipboard.

    Clear All clears both the history and the clipboard.

Attention: The commands in the **Purge** menu cannot be canceled!

COLOR PANEL

The **Color** panel displays the color component values for the selected color. The set of color components will vary for different color modes.

The foreground (upper) and background (lower) colors are displayed in two large squares. Double-clicking on any of them opens the **Select Color** dialog. To swap colors press ⬆. Reset to the default colors (main is black, background is white) by pressing ▣.

Right-clicking opens a menu of available color modes: Grayscale, RGB, Lab, and CMYK.
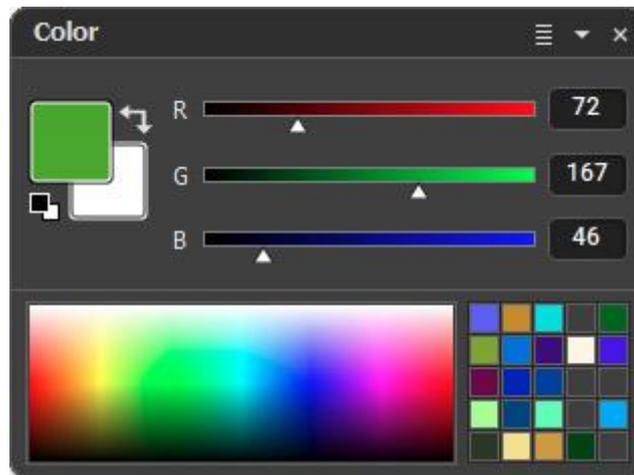
Color Panel

By moving sliders or entering numerical values into the fields, one can change the individual color values of the selected color. At the bottom of the panel is a small spectral bar; bringing the cursor over this will cause it to take the form of an eyedropper. To choose a color, click with the eyedropper within the bar.

The empty squares at the top are used to store frequently used (custom) colors. To add a color to the box, drag it from the large color square. To change the main color to that in a box, left-click the box. Right-click the color to remove it from the box.

Select Color Dialog:

Select Color Dialog Box

Most of the window is occupied by a square box, where you can choose a color and adjust its saturation. Using the vertical gradient stripe and the slider on the right side you can change the color brightness.

Three squares at the top display the last used colors.

Below, you can choose a color space (**RGB**, **Lab**, or **HSL**) and set the color if you know the exact values of its components.

Also, you can choose a color by entering its hexadecimal code in the **Web Colors** field. The six-digit code consists of three pairs: the first pair describes the amount of red, the second pair - the amount of green, and the third pair - the amount of blue. For example, "000000" is black and "ff0000" is red.

In the boxes located below, you can save the frequently used colors. Just drag the color from an upper large square. Press the **Add to Custom Colors** button to add the current color to a box.

SWATCHES PANEL

The **Swatches** panel contains a collection of frequently used colors. Select a color from the set by clicking the left mouse button, and it will be set as the main color. Press ≡ to access the control menu, which duplicates the functions of the buttons below.
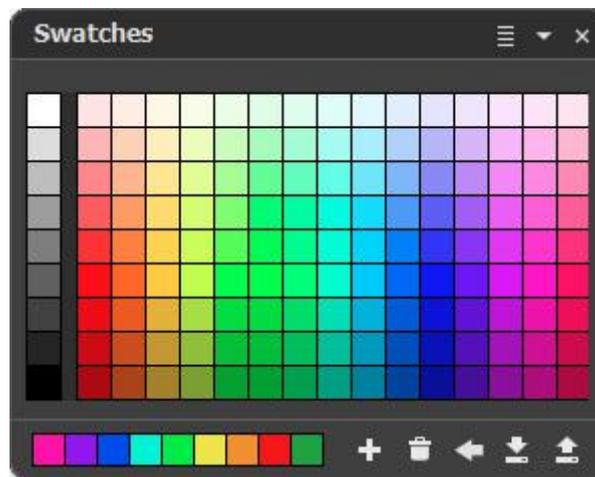
Swatches Panel

The squares at the bottom of the panel keep the last used colors. Left-click the cell to replace the main color with the specified one.

The commands from the context menu and the buttons at the bottom of the panel have the following uses:

Add Swatch ⊞ - adds the current color to the collection of swatches.

Delete Swatch 🗑 - removes a color (drag it to the basket).

Reset ◀ - resets the collection of swatches to their original settings.

Import Swatches ⬆ - loads a saved swatch collection (a **.swatches** file).

Export Swatches ⬇ - opens a dialog box to save the swatches.

COLOR WHEEL

You can change the current color using the **Color Wheel** panel. Most of the panel is occupied by a spectral color ring that allows you to easily fine-tune color settings and select perfect color combinations.

Color Wheel Panel

Adjust the color using one of the color markers. The number and position of markers can be adjusted using 5 large round buttons at the top of the panel.

The central part of the color wheel is a triangular or square field.

Select the shape of the field by clicking / .

Move the small round marker vertically to adjust the brightness of the selected color or horizontally to adjust its saturation.

The foreground (upper) and background (lower) colors are displayed in two large squares. Double-click any of them to open the **Select Color** dialog. To swap colors, press . Reset to the default colors (main is black, background is white) by pressing .

In the field below, there is the six-digit html color code of the current foreground color.

Alternatively, you can pick colors using the **Eyedropper** tool .

ACTIONS

In the **Actions** panel, you can save a sequence of actions to be automatically applied to other images. The actions can be applied to individual documents or used for batch processing of files.

The actions are displayed in a list view and grouped into sets for convenience.
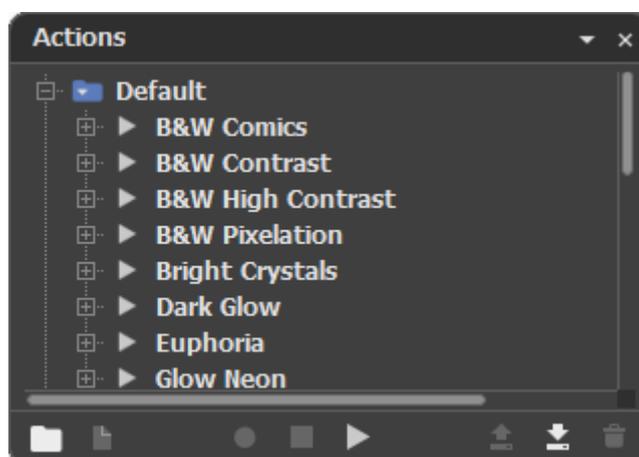
Actions List

At the bottom of the panel, there are the following buttons:

The **Create New Set** button ▣ creates a new action group. The grouping of actions allows you to organize them for easier use.

The **Create New Action** button ▤ creates a new action in the chosen set. Double-click the action's name (or the group's name) to edit it.

The **Record** button ⏺ adds commands to the selected action. After clicking the button, all the commands will be recorded until you stop recording.

> **Note:** Not all commands are recordable.

The **Play** button ▶ applies the selected action to the active image.

The **Stop** button ■ allows to stop recording or playing of an action.

The **Save** button ⏬ allows to save the selected action.

The **Load** button ⏫ allows you to load an action from disk.

The **Delete** button 🗑 removes the selected action or set of actions from the list.

When playing an action, it is added to the **History** list as a separate item. The recorded commands and their settings are displayed in the **Actions** panel.

FILE INFO

The **File Info** panel captures basic file metadata.

The information is divided into the following sections:

The **Basic** section displays the basic information about the image.

The **EXIF** section contains details about the capture recorded by the camera (automatically generated at the moment the picture is taken) including camera model, aperture, exposure settings, etc.

The **IPTC** section contains information that is added by the photographer or others. It includes a brief description of the photo, authorship, keywords, etc.

The **GPS** section displays the geographical coordinates of the shooting location.

The **XMP** section stores additional information about the photo added by graphics programs.

ADJUSTMENTS & ADJUSTMENT LAYERS

AliveColors is a powerful tool for editing and correcting photos.

The program offers a wide range of **Adjustments** and **Adjustment Layers** for tone and color correction of images:

> **Levels**
> **Auto Levels**
> **Auto Contrast**
> **Curves**
> **Brightness/Contrast**
> **Exposure**
> **Vibrance**
> **Hue/Saturation**
> **Photo Filter**
> **Color Balance**
> **Selective Color**
> **Color Lookup (3D LUT)** (See also **LUT Editor**.)
> **Invert**
> **Threshold**
> **Posterize**
> **Black & White**
> **Gradient Map: Solid/Noise**
> **Desaturate** (only as an adjustment)
> **Match Color** (only as an adjustment)
> **Replace Color** (only as an adjustment)
> **Equalize** (only as an adjustment)

All adjustments can be applied directly to the active layer with the **Image -> Adjustments** commands. You can also create an adjustment layer, that will affect the underlying layers without changing their contents, by selecting **Layers -> New -> Adjustment Layer** or using the button [ ] in the **Layers** panel.

When you select an adjustment from the list, the Settings Panel appears to the right by default. You can drag the panel to the place where you want it and the next time the panel will appear in the selected position.

It's possible to save the adjustment settings as **Presets**. Find all available presets in the drop-down list. If you modify the parameters, the preset name automatically changes to **Custom**, and the **Save Custom Preset** button [+] appears next to the list. To save the current settings, press this button.

A new preset is automatically assigned a name (for example, *Custom_1*, *Custom_2*, etc.) that can be changed as needed by entering any combination of letters and numbers in the highlighted field. After pressing `Enter`, a new preset will appear in the drop-down list.

To remove a user preset, select it and press the **Delete Custom Preset** button [ ].

Click [ ] to export user presets to a *.presets* file. To load the presets into the program, press on [ ].

LEVELS

The **Levels** adjustment is used for correcting the tonal range and color balance of an image by adjusting the brightness of its shadows, midtones, and highlights. Watch our video tutorial to learn more about the **Levels** adjustment.

Display the parameters of the **Levels** adjustment by selecting **Image -> Adjustments -> Levels...**

You can also use the **Levels** adjustment layer (**Layers -> New -> Adjustment Layer -> Levels...**) which will affect the underlying layers without changing their content.
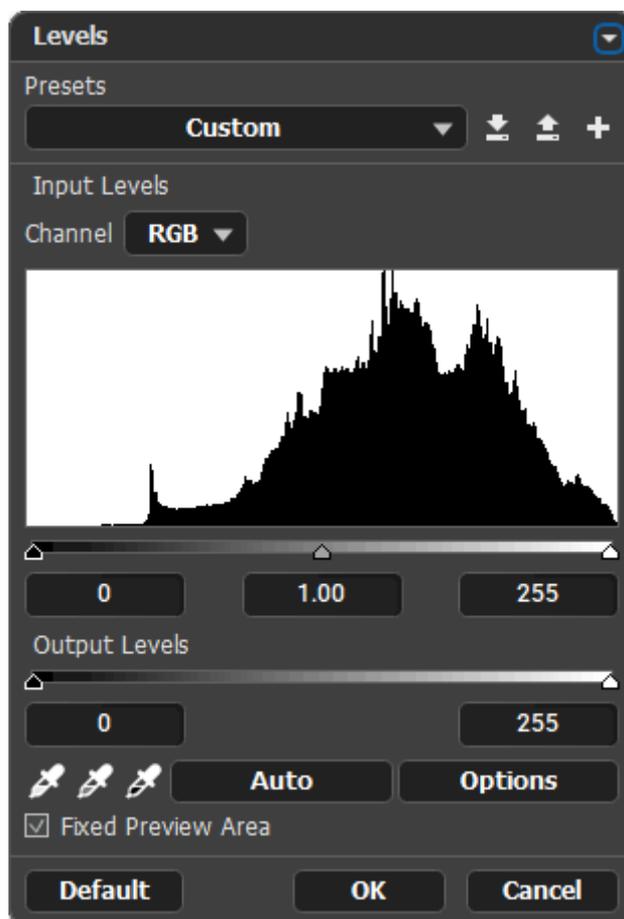
Levels

Settings and Controls:

The **Input Levels** section displays a histogram showing the initial distribution of brightness in the image.
Above the histogram there is a channels drop-down list. You can either adjust each channel separately, or use the composite color channel.
The right edge of the histogram represents pixels having the maximum brightness (white points). This point corresponds to the white slider. If the histogram does not reach the right side, there are no white pixels in the image. When you move the white slider to the left, the point against which the slider is located will assume the maximum brightness (255) and the pixels having this value will become white. The brightness of other pixels will be re-calculated accordingly. The image will get lighter.

Adjusting White Point

The left side of the histogram indicates the point of minimum brightness (black). This point corresponds to the black slider. If the histogram does not start at the left end, the image does not have any black pixels (brightness = 0). When you move the black slider to the right, the point against which the slider is located will assume the minimum brightness value. As a result this tone will become black, while other pixels will be re-calculated accordingly. The image will get darker.

Adjusting Black Point

The middle slider defines the tone of the image that will have the brightness of 128 (middle-gray tones). If you move the slider to the left, the mid-gray tones become lighter; if you move the slider to the right, the mid-gray tones become darker.

Adjusting Middle-Gray Point

Using [icon], [icon], and [icon] you can select the white, black, and middle-gray points directly from the image, respectively. The values will vary for each color channel, so choose a neutral gray image area as a sample. Otherwise, the image will be tinted.

In the **Output Levels** section, you can specify the range of brightness which affects the stretching of the range of input levels.

If the range of output levels is less than the range of input levels, the image becomes softer. Otherwise, the contrast will be increased.

By pressing the **Auto** button, the software adjusts the range of input levels automatically. The automatic correction affects only the levels of the separate color channels.

Click the **Options** button to open the **Auto Color Correction Options** dialog box.
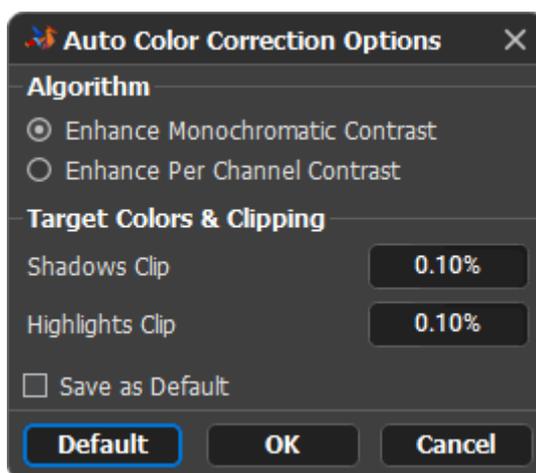
Auto Color Correction Options

Choose an **Algorithm**:

> **Enhance Monochromatic Contrast** clips all color channels using the same settings for each channel. As a result, the shadows become darker and highlights become lighter. This algorithm is applied when using the **Auto Contrast** command.

> **Enhance Per Channel Contrast** adjusts the color channels individually. The values of black and white pixels for each color channel are changed by different amounts. The resulting image can be tinted. This algorithm is applied when using the **Auto Levels** command.

The **Target Colors & Clipping** section displays the percentages of white and black pixels which will be removed from each end of the range.

Save as Default check-box. If the check-box is enabled, the specified parameter values will be used as default when using the **Auto** command.

Fixed Preview Area check-box. When the check-box is enabled, all changes are displayed in a small area indicated by the dotted line. When the check-box is disabled, the changes are applied to the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

AUTO LEVELS

The **Auto Levels** adjustment is used for tonal and color correction of images. It automatically cuts off the black and white point values in each color channel by different amounts. It allows you to quickly restore color balance in your photos.

To apply this adjustment, select in the menu: **Image -> Adjustment -> Auto Levels**.

Auto Levels

AUTO CONTRAST

The **Auto Contrast** adjustment is used for quick tonal correction of images. It automatically cuts off the black and white point values in each color channel by the same amount. It is used to quickly improve low-contrast images.

To apply this adjustment, select in the menu: **Image -> Adjustment -> Auto Contrast**.

Auto Contrast

CURVES

The **Curves** adjustment allows you to change the brightness and contrast of the entire image or in the local area. Watch our video tutorial to learn more about the **Curves** adjustment.

Select **Image -> Adjustment -> Curves...** to display the adjustment settings.

You can also use a **Curves** adjustment layer (**Layers -> New -> Adjustment Layer -> Curves...**) which will affect all underlying layers without changing their content.
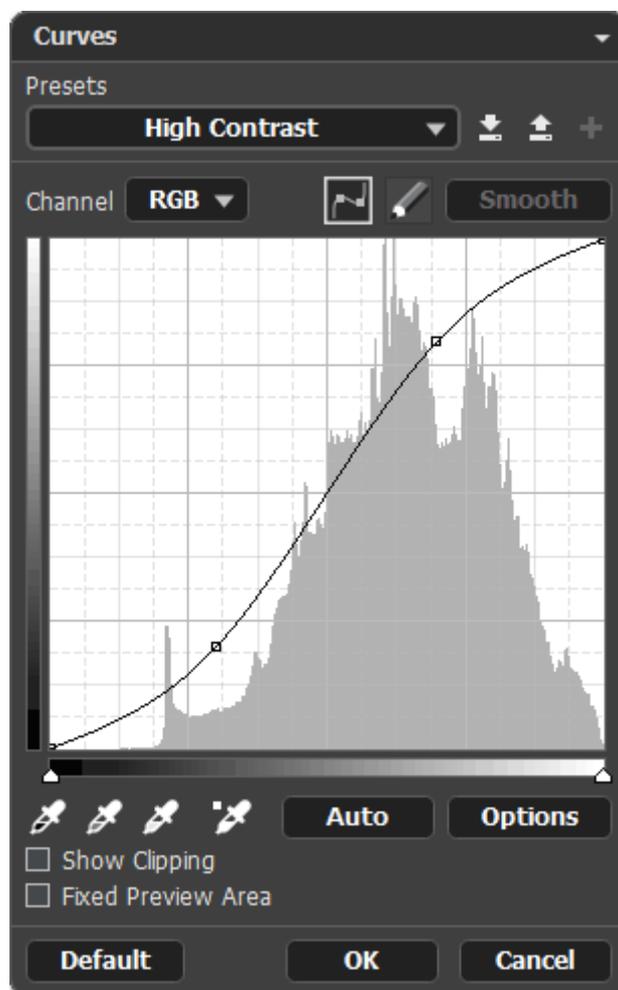
Curves

Settings and Controls:

Most of the dialog box is covered by the curves graph. You can adjust the curves either in each color channel or using in the composite channel. Select the desired channel in the **Channel** drop-down menu above the graph.

By default, the curve is a straight line having a slope of 45° and it does not reflect any changes. When you move any section of the curve above the diagonal line, the corresponding area of the image becomes lighter. When you move it below the diagonal line, the corresponding area becomes darker.
When you drag the entire curve above the diagonal line, the entire image becomes lighter. When you drag the entire curve below the diagonal line, the entire image becomes darker.

Curve Above the Diagonal Line   Curve Below the Diagonal Line

You can edit the curve in two ways:

In the mode ⌇ you can modify the curve by setting and dragging the control points.

In the mode ✎ you can draw a curve. Click **Smooth** to make the drawn curve appear smoother.
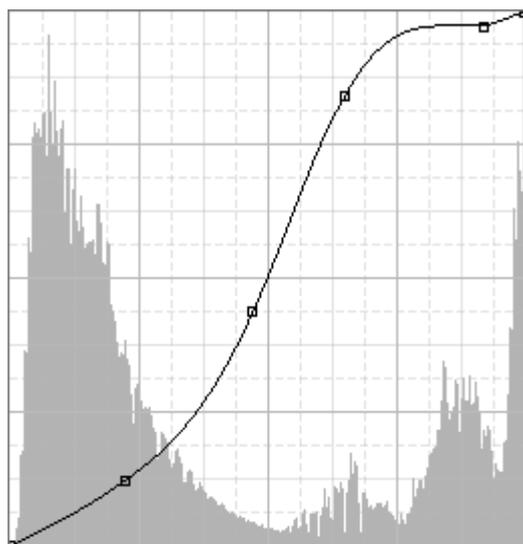
Edit Points to Modify the Curve   Draw a Line
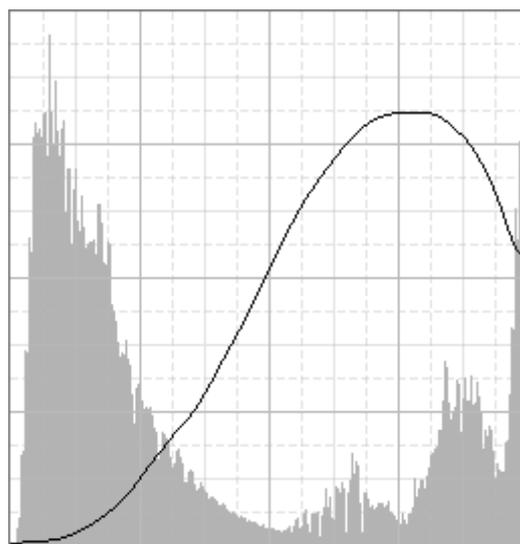
If you modify the graph using the control points, you can add extra points to the curve by clicking on it with the left mouse button.

Moving the points at the top of the curve adjusts the highlights. Moving the points in the center of the curve adjusts the midtones, and moving the points in the bottom section of the curve adjusts the shadows.

To delete a point, right-click it or drag it off the graph.

> **Note:** Do not add too much points to the curve, as it can cause image artifacts.

Specify the darkest and lightest values in the image using the sliders under the curve and these tools , . The tools can edit the curves in each component channel but not in the composite channel.

Note: When using the tools and , all previous changes will be lost! Use them at the beginning of the correction.

Modifying White Point   Modifying Black Point

Using the tool , you can modify the white balance in the image. Click with the eyedropper on a neutral gray area of the image. The curves of the color channels will be adjusted accordingly.

Note: The tool should be used after the other two, otherwise the middle gray value will be cleared.

With the tool you can apply the adjustment directly on the image. Hold down the left mouse button over the image and drag the mouse up to lighten and down to darken this image area. Press the mouse button to create a new point on the curve. Move the mouse to bend the curve at this point.

Show Clipping check-box. If the check-box is checked, the Image Window emphasizes areas with loss of detail in shadows or highlights. To see the loss in highlights, click the white point slider. To see the loss in shadows, click the black point slider.

Note: The **Show Clipping** check-box is available only in RGB mode.

Loss in Highlights

Loss in Shadows

The color loss is indicated by color pixels on black or white background. Red pixels indicate red channel clipping, green pixels indicate green channel clipping, and blue pixels indicate blue channel clipping. Other colors show clipping in multiple color channels. You can analyze clipping in the composite channel or individually in each color channel.

Press on the **Auto** button to adjust the curve range automatically. The auto correction settings affect only the curves in the individual color channels.

You can adjust the auto correction parameters by clicking on **Options**.
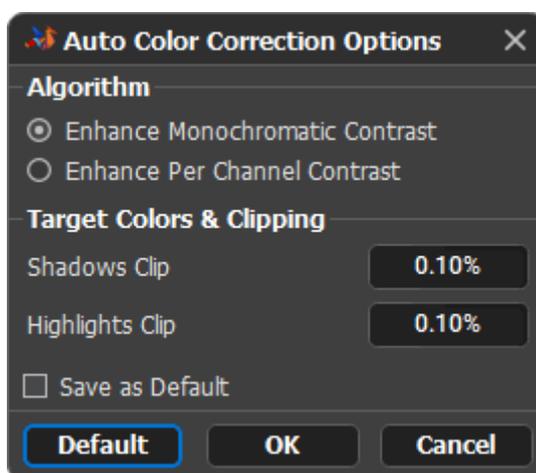
Auto Correction Settings

Choose an **Algorithm**:

> **Enhance Monochromatic Contrast** - clips all color channels using the same settings. As a result, the shadows appear darker and the highlights appear lighter. The **Auto Contrast** command uses this algorithm.

> **Enhance Per Channel Contrast** - clips the color channels individually. The values of black and white points differ for each color channel. The resulting image can be tinted. The **Auto Levels** command uses this algorithm.

The **Target Colors & Clipping** section displays the percentages of white and black pixels which will be removed from each end of the range.

Save as Default check-box. If the check-box is enabled, the specified parameter values will be used as default for the **Auto** command.

Fixed Preview Area check-box. If the check-box is enabled, the parameter changes are displayed in the small area bounded by the dotted line. If the check-box is disabled, the changes are shown in the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

BRIGHTNESS/CONTRAST

The **Brightness/Contrast** adjustment allows to make simple adjustments to the tonal range of an image. Watch our video tutorial to learn more about this adjustment.

Select **Image -> Adjustment -> Brightness/Contrast...** to display the adjustment parameters in the Settings Panel.

You can also use a **Brightness/Contrast** adjustment layer (**Layers -> New -> Adjustment Layer -> Brightness/Contrast...**) which will affect all the underlying layers without changing their content.

Parameters:

Brightness (-200..200). The parameter adjusts the brightness of an image. By increasing the value, all pixels become lighter; by decreasing the value the image appears darker.

| Brightness = -50 | Brightness = 50 |

Contrast (-200..200). The parameter increases (at values greater than 0) or decreases (at values less than 0) the difference between light and dark areas of an image.

| Contrast = -50 | Contrast = 50 |

Fixed Preview Area check-box. If the check-box is enabled, the parameter changes are displayed in the small area bounded by the dotted line. If the check-box is disabled, the changes are shown in the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

EXPOSURE

The **Exposure** adjustment allows you to change the amount of light in the image, making the overall picture brighter or darker.

Select **Image -> Adjustment -> Exposure...** to display the adjustment parameters in the Settings Panel.

You can also use a **Exposure** adjustment layer (**Layers -> New -> Adjustment Layer -> Exposure...**) which will affect all the underlying layers without changing their content.

Exposure

Parameters:

Exposure (-20..20). The parameter is designed to correct light areas with less impact on dark areas.

Offset (-0.5..0.5). The parameter allows you to darken shadows and midtones with minimal impact on the highlights in the image.

Gamma (9.99-0.01). The parameter adjusts the gamma of the image.

Using eyedroppers, you can set parameter values:

      🖊️ - changes the exposure by shifting the color of the selected pixel towards white;

      🖊️ - sets the offset, moving the pixel towards black;

      🖊️ - defines the exposure by assigning a middle gray color to the selected pixel.

Fixed Preview Area. If the check-box is enabled, all changes will be displayed in a small area indicated by the dotted line. If the check-box is disabled, the changes will be applied to the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

VIBRANCE

The **Vibrance** adjustment allows you to gently change the color saturation of an image. It's useful when you need to increase the intensity of muted colors in a photo and leave the already well-saturated colors.

Select **Image -> Adjustment -> Vibrance...** to display the adjustment parameters in the Settings Panel.

You can also use the **Vibrance** adjustment layer (**Layers -> New -> Adjustment Layer -> Vibrance...**) which will affect all the underlying layers without changing their content.

Parameters:

Vibrance (-100..100). The parameter has a stronger effect on the saturation of all less saturated colors in an image, with a weak effect on well-saturated colors.

Vibrance = -50   Vibrance = 50

Saturation (-100..100). Changes the intensity of all colors in an image. The setting value varies from -100 (black and white) to +100 (very bright colors).

Saturation = -50   Saturation = 50

Fixed Preview Area. If the check-box is enabled, all changes will be displayed in a small preview area indicated by the dotted line. If the check-box is disabled, the changes will be applied to the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

HUE/SATURATION

The **Hue/Saturation** adjustment allows to change the color properties of an image with subsequent correction of the saturation and brightness.

Select **Image -> Adjustment -> Hue/Saturation...** to display the adjustment parameters in the Settings Panel.

You can also use a **Hue/Saturation** adjustment layer (**Layers -> New -> Adjustment Layer -> Hue/Saturation...**) which will affect all the underlying layers without changing their content.

Parameters:

In the drop-down list, select a color range for correction. Enable **Master** to edit all colors simultaneously.

Hue (-180..180). The parameter modifies the hue of all colors in the image or of the selected color range.
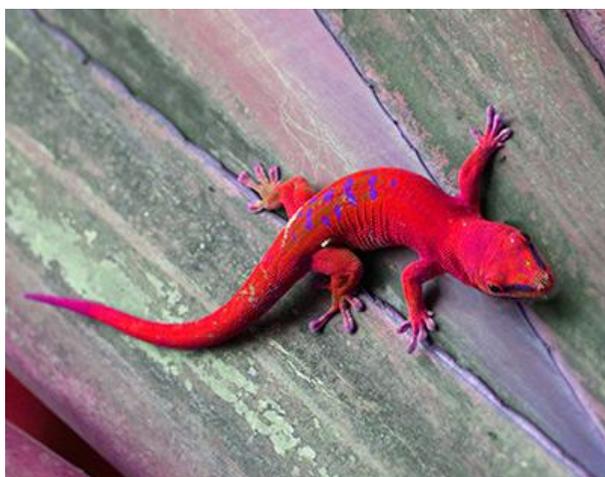
| Hue = -100 | Hue = 100 |

Saturation (-100..100). The parameter changes the saturation of the entire image or of the selected color range.

| Saturation = -50 | Saturation = 50 |

Brightness (-100..100). The parameter allows you to lighten/darken the entire image or the selected color range.

Brightness = -10   Brightness = 10

You can define the color range more precisely using two gradient lines and four adjustment sliders: two outer and two inner sliders.

The upper line shows original colors, the lower line shows the colors after correction. The colors between the inner sliders will be affected to the full extent. The colors between the inner and the outer sliders will change less (the farther from the inner slider, the weaker the effect will be). The colors outside the outer sliders will stay the same.

> **Note:** This control is not available when selecting **Master**.

Source Image   Modified Hue

Colorize. When the check-box is enabled, you can tint the entire image in a single, uniform color. You can adjust the color using the **Hue**, **Saturation**, and **Brightness** sliders.

Original Image   Colorized Image

Fixed Preview Area check-box. If the check-box is enabled, all changes will be displayed in a small area indicated by the dotted line. If the check-box is disabled, the changes will be applied to the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

PHOTO FILTER

The **Photo Filter** adjustment simulates the effect of colored glass filters on a camera lens and allows you to adjust the color tone and temperature of a photograph.

Select **Image -> Adjustment -> Photo Filter...** to display the adjustment parameters in the Settings Panel.

You can also use the **Photo Filter** adjustment layer (**Layers -> New -> Adjustment Layer -> Photo Filter...**) that will affect all the underlying layers without changing their content.

Parameters:

Filter. Select one of the built-in color filters from the drop-down list.

Color. Choose a color that will be blended into the image from the color selection dialog called by clicking the color plate.

Original Image   Cooling Filter (82)

Density (1-100). Controls the amount of color applied to the image.

Density = 25   Density = 75

Preserve Luminosity. When the check-box is active, color changes do not affect the overall brightness of the image.

Preserve Luminosity off   Preserve Luminosity on

Fixed Preview Area. If the check-box is enabled, all changes will be displayed in a small preview area indicated by the dotted line. If the check-box is disabled, the changes will be applied to the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

COLOR BALANCE

The **Color Balance** adjustment allows you to correct color tints in individual tonal ranges.

Select **Image -> Adjustment -> Color Balance...** to display the adjustment parameters in the Settings Panel.

You can also use the **Color Balance** adjustment layer (**Layers -> New -> Adjustment Layer -> Color Balance...**) that will affect all the underlying layers without changing their content.

Color Balance

Parameters:

In the **Shadows**, **Midtones**, **Highlights** tabs, select the tone range for correction.

Using the **Cyan/Red**, **Magenta/Green** and **Yellow/Blue** options, increase or decrease the amount of the desired color in the selected tonal range.

Preserve Luminosity. If the check-box is enabled, the overall brightness of the image will be preserved while changing the color.

Fixed Preview Area. If the check-box is enabled, all changes will be displayed in a small preview area indicated by the dotted line. If the check-box is disabled, the changes will be applied to the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

SELECTIVE COLOR

The **Selective Color** adjustment allows you to change the selected color in an image without affecting other colors.

Select **Image -> Adjustment -> Selective Color...** to display the adjustment parameters in the Settings Panel.

You can also use the **Selective Color** adjustment layer (**Layers -> New -> Adjustment Layer -> Selective Color...**) that will affect all the underlying layers without changing their content.

Selective Color

Parameters:

Range. In the drop-down list, select the color/tone range to be adjusted.

Color Components (-100..100). The **Cyan**, **Magenta**, **Yellow**, **Black** values allow you to change the amount of the selected color within the specified range.

Relative. When the check-box is enabled, the parameters change the amount of cyan, magenta, yellow, or black depending on its percentage in the selected color. When it's disabled, the color is modified in absolute values.

Fixed Preview Area. If the check-box is enabled, all changes will be displayed in a small preview area indicated by the dotted line. If the check-box is disabled, the changes will be applied to the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

COLOR LOOKUP (3D LUT)

The **Color Lookup (3D LUT)** adjustment allows you to change colors and tone of your image using a Look Up Table (LUT) file. This feature helps you to quickly make a particular look for your image and totally change its mood.

Select **Image -> Adjustment -> Color Lookup (3D LUT)...**

You can also apply the **Color Lookup (3D LUT)** adjustment layer (by selecting it in **Layers -> New -> Adjustment Layer**) that will affect all the underlying layers without changing their content.

Color Lookup

If necessary, you can load a Look Up Table to AliveColors by clicking ⬆ and selecting a file or multiple files in the **.3dl** or **.cube** format. The selected lookup table will be added to the list and can be applied to the image. To save the file to a disk, click ⬇. To remove a LUT from the list click 🗑.

To call the **LUT Editor**, use these buttons:

> The **Create** button opens a dialog box for creating a new lookup table;

> The **Edit** button opens a dialog box for editing the selected lookup table.

Fixed Preview Area. If the check-box is enabled, all changes will be displayed in a small preview area indicated by the dotted line. If the check-box is disabled, the changes will be applied to the area visible in the Image Window.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

LUT EDITOR: CREATING AND EDITING LOOKUP TABLES

The **LUT Editor** is designed for general or selective tonal correction and creating or editing color tables (CLUTs), which can be used in the **Color Lookup (3D LUT)** adjustment and adjustment layer.
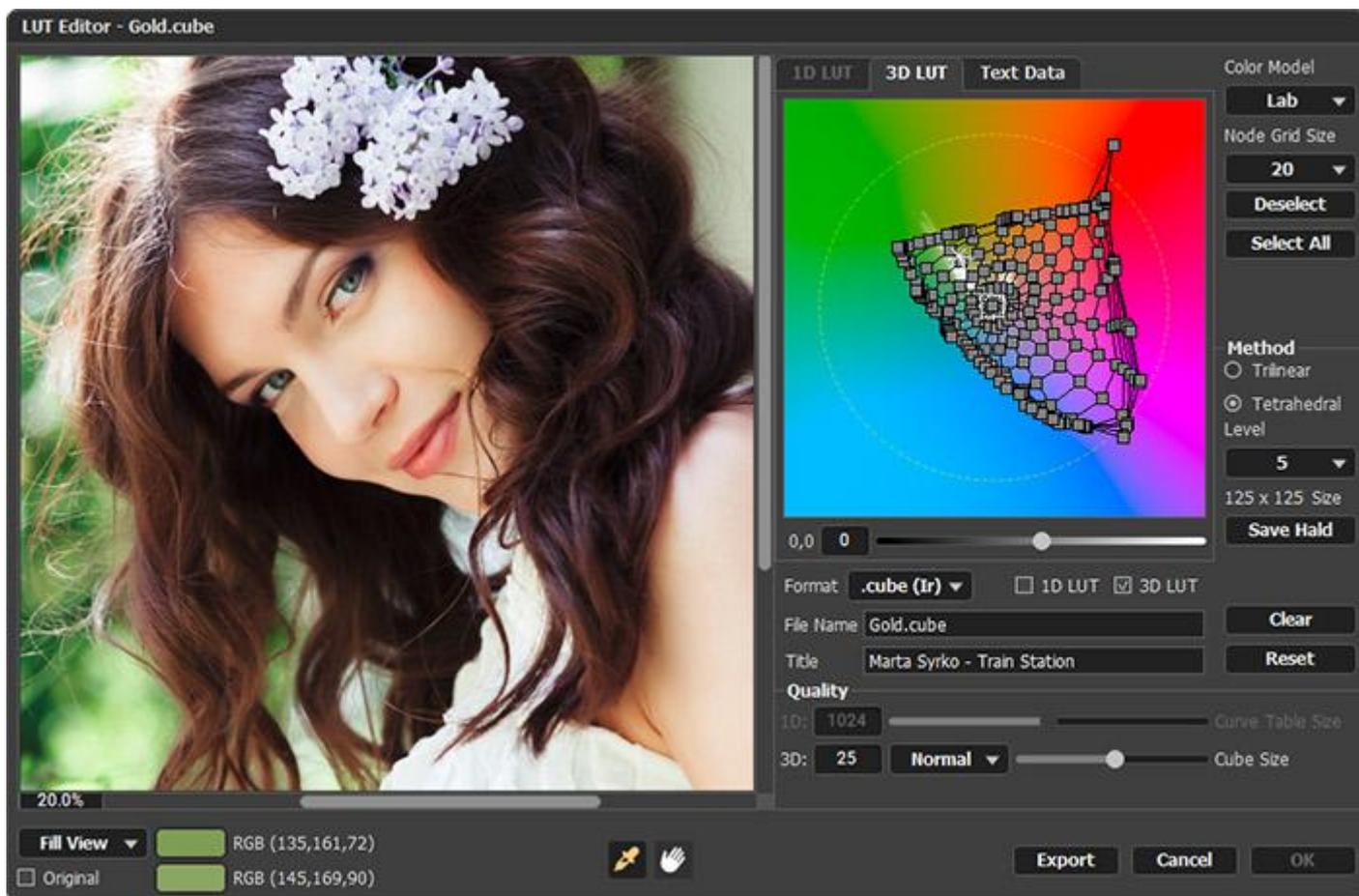
LUT Editor

In the left side of the dialog box, there is an image preview where all the changes are displayed.

In the drop-down menu, you can select the preview scale.

When you enable the **Original** check-box, the original image will be shown in the preview window.

Using the **Eyedropper** tool , you can select a color from the image for editing in the **3D LUT** tab. When you click within the preview image, a grid node closest to the specified color will be selected.

The color fields indicate the original color at a point (upper) and the modified color (lower) with coordinates in RGB space.

Using the **Hand** , you can scroll the image in the preview window.

In the right part of the dialog box, there are options for creating and editing color tables.

In the **File Name** field, enter a short file name.

In the **Title** field (optional), enter a meaningful name that describes the effect being produced.

Select file format:

> **.3dl** – can store 1D and 3D, but the 1D table is the same for all R, G, B channels;
> **.cube (Ir)** – IRIDAS/Adobe LUT, can store either 1D or 3D;
> **.cube (Re)** – DaVinci Resolve LUT, can store 1D and 3D.

There are two stages of color correction - 1D and 3D, which are applied sequentially, that is, the result of the 1D correction is fed to the 3D correction input.

Set **Quality** separately for 1D and 3D:

> 1D - the **Curve Table Size** in the range from 9 to 4096;
> 3D - the **Cube Size** (size of a cube side) in the range from 2 to 256.

The 1D data is represented by three tables of numbers (channel values) corresponding to the channels R, G, B. Editing the 1D data is carried out in the **1D LUT** tab using curves. For **1D LUT**, the linear interpolation is used.

1D LUT Tab

When the **All Channels** check-box is enabled, the curve changes simultaneously for all channels. If the check-box is disabled, the curve can be changed individually for each channel.

Clicking the **Clear** button will reset the curve to its default value.

When you click the **Reset** button, the curve will be returned to its original form (as it was when you launched the **LUT Editor**).

3D data is a table of triplets of numbers (R, G, B values) in a 3D cube. Editing 3D data is carried out in the **3D LUT** tab by shifting grid nodes from their initial position.

3D LUT Tab

The central part of the window is occupied by a color gradient field with a grid. It is a set of points that can be moved from the starting position. The grid nodes are located in a cylindrical space, corresponding in meaning to the HSL (Hue, Saturation, Lightness) space.

The number of grid nodes is determined by the **Node Grid Size** parameter.

> **Attention!** When changing the grid size, all nodes will be reset to their original state.

Grid nodes can be free (small marker) or locked (large marker). A locked node maintains its position and brightness regardless of the movement and brightness of its neighbors.

Click the node to select and lock it. Adjust the brightness of the selected node using the slider located under the grid. Select multiple nodes by holding down the `Ctrl` key.

Original Grid and Image

Shifting a grid node from the initial position, you can replace the initial hue with the one specified by the current position of the grid node.
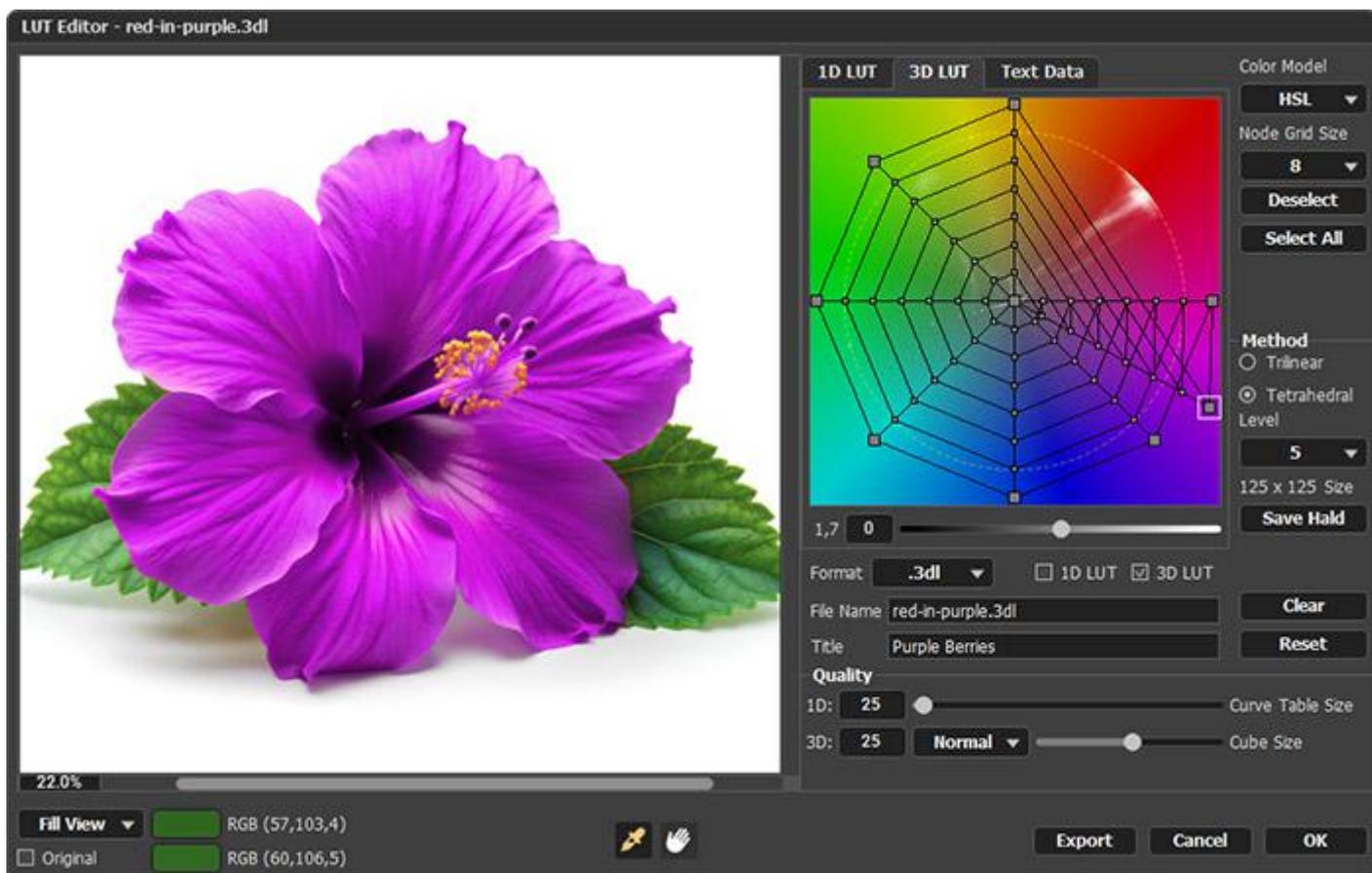
Modified Grid and Image

When you right-click the changed node, the state will return to the initial state, the brightness and locking will be reset. If several nodes are selected, they will all return to their original state.

Select All - selects all grid nodes.

Deselect - if several nodes are selected, it will be canceled for all but one.

Color Model is a mathematical model for representing color in the coordinates of the working cylindrical space.

You can choose from the models: **HSL** (Hue, Saturation, Lightness), **HCY** (Hue, Chroma, Luma), **Lab**, **YUV**.

The choice of model depends on the original image and the task at hand. Choose a model which will not create contours, halos, and other defects in the result.

HSL   Lab

Interpolation Method – calculating an intermediate value for a smooth transition from one table cell to another with a fractional argument. You can choose either **Trilinear** or **Tetrahedral** method.

Hald Image is a visual representation of a 3D LUT. It is a flat square image containing all the colors of the cube in sequence when the R component changes first, then G and then B.

> **Level** – a number from 2 to 16 that matches the sizes of the cube and square.
> **Save Hald** - when you click the button, the image will be saved to disk as a **PNG** file.

Click the **Clear** button to reset the grid to its default value.

Click the **Reset** button to return the grid to its original form (as it was when you launched the **LUT Editor**).

In the **Text Data** tab, you can add a comment and indicate copyright.

Click the **Export** button to save the configured lookup table to disk.

Click **OK** to add the configured lookup table to the LUT list in the **Color Lookup (3D LUT)** adjustment.

Click **Cancel** to close the dialog box without accepting the changes.

COLOR INVERSION

The **Invert** adjustment reverses the colors in an image. The brightness value of each pixel in each channel is converted to the inverse value. For instance, a pixel with the value of 0 (black) will be converted to the value of 255 (turns white). Watch our video tutorial to learn more about the **Invert** adjustment.

To apply the **Invert** adjustment, go to the Control Panel menu and select **Image -> Adjustment -> Invert**.

You can also use an **Invert** adjustment layer (command **Layers -> New -> Adjustment Layer -> Invert**) which will affect all the underlying layers without changing their content.

Inverted Colors

THRESHOLD

The **Threshold** adjustment converts photos into high-contrast, black-and-white images. Watch our video tutorial to learn more about the **Threshold** adjustment.

The adjustment parameters are displayed in the Settings Panel by selecting in the menu: **Image -> Adjustment -> Threshold...**

You can also use a **Threshold** adjustment layer (**Layers -> New -> Adjustment Layer -> Threshold...**) which will affect all the underlying layers without changing their content.

The dialog box contains the following elements:

Histogram. The histogram shows the distribution of brightness in the image.

Threshold (0-100). This parameter sets the threshold level of brightness. All pixels darker than this value will be converted to black; all pixels lighter than this value will be converted to white.

Threshold = 25   Threshold = 75

Fixed Preview Area check-box. If the check-box is enabled, all changes will be displayed in a small area indicated by the dotted line. If the check-box is disabled, the changes will be applied to the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

POSTERIZE

The **Posterize** adjustment is designed to simplify an image by combining similarly colored adjacent pixels into an area of the same color.

Select **Image -> Adjustment -> Posterize...** to display the adjustment parameters.

You can also use a **Posterize** adjustment layer (**Layers -> New -> Adjustment Layer -> Posterize...**) which will affect all underlying layers without changing their content.

Posterize

Parameters:

Levels (2-255). The parameter specifies the number of tonal levels for each channel of the image. The higher the value of the parameter, the more areas differ in color.

Fixed Preview Area check-box. If the check-box is enabled, all changes will be displayed in a small area indicated by the dotted line. If the check-box is disabled, the changes will be applied to the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

BLACK & WHITE

The **Black & White** adjustment lets you convert a color image to grayscale and specify the color tone. Watch our video tutorial to learn more about the **Black & White** adjustment.

Select **Image -> Adjustment -> Black & White...** to open the adjustment parameters.

You can also use a **Black & White** adjustment layer (**Layers -> New -> Adjustment Layer -> Black & White...**) which will affect all underlying layers without changing their content.

Parameters:

You can apply the tonal **Correction** using the hexagon consisting of 6 sections, each having one color and a control. Use the control to darken or lighten the gray tones that correspond to the original image colors and are close to the section color. The closer the control to the center, the darker the tone, and vice versa, the farther from the center, the lighter the tone.

The default settings can be restored with a left-click the gray hexagon in the center.
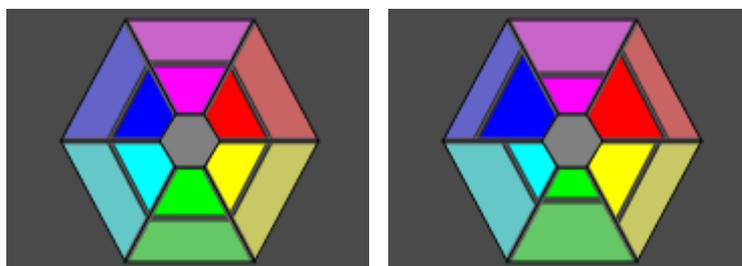
Default Result   After Correction

Toning. Choose a color on the gradient circle to add a color tint to the image. By default, the control is in the center of the gradient circle and the image has gray tones. You can set a tint with a click the gradient circle; the control will move to the defined point. The control also regulates the tint saturation - the farther from the center, the more saturated the color shade is.
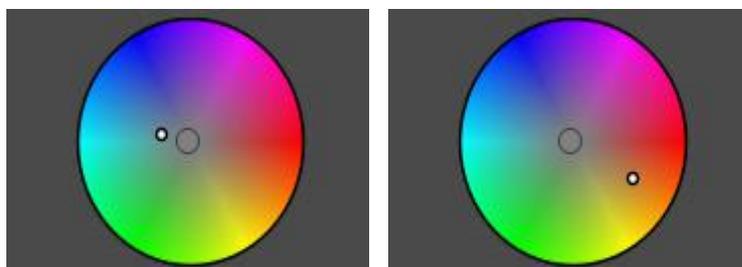
Light Blue   Saturated Sepia

Fixed Preview Area check-box. If the check-box is enabled, all changes will be displayed in a small area indicated by the dotted line. If the check-box is disabled, the changes will be applied to the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

GRADIENT MAP

The **Gradient Map** adjustment maps colors of the selected gradient to the brightness range of an image. The shadows are replaced with the colors of the starting points of the gradient, the highlights are replaced with the colors from the end of the gradient. All other colors in the image will also be replaced with the corresponding gradient colors.

Select **Image -> Adjustment -> Gradient Map -> Solid/Noise...** to display the adjustment parameters in the Settings Panel.

You can also use the corresponding adjustment layer (**Layers -> New -> Adjustment Layer -> Gradient Map: Solid/Noise...**) which will affect all the underlying layers without changing their content.

Gradient Map: Solid

The smooth gradient looks like a gradual transition from one color to another.
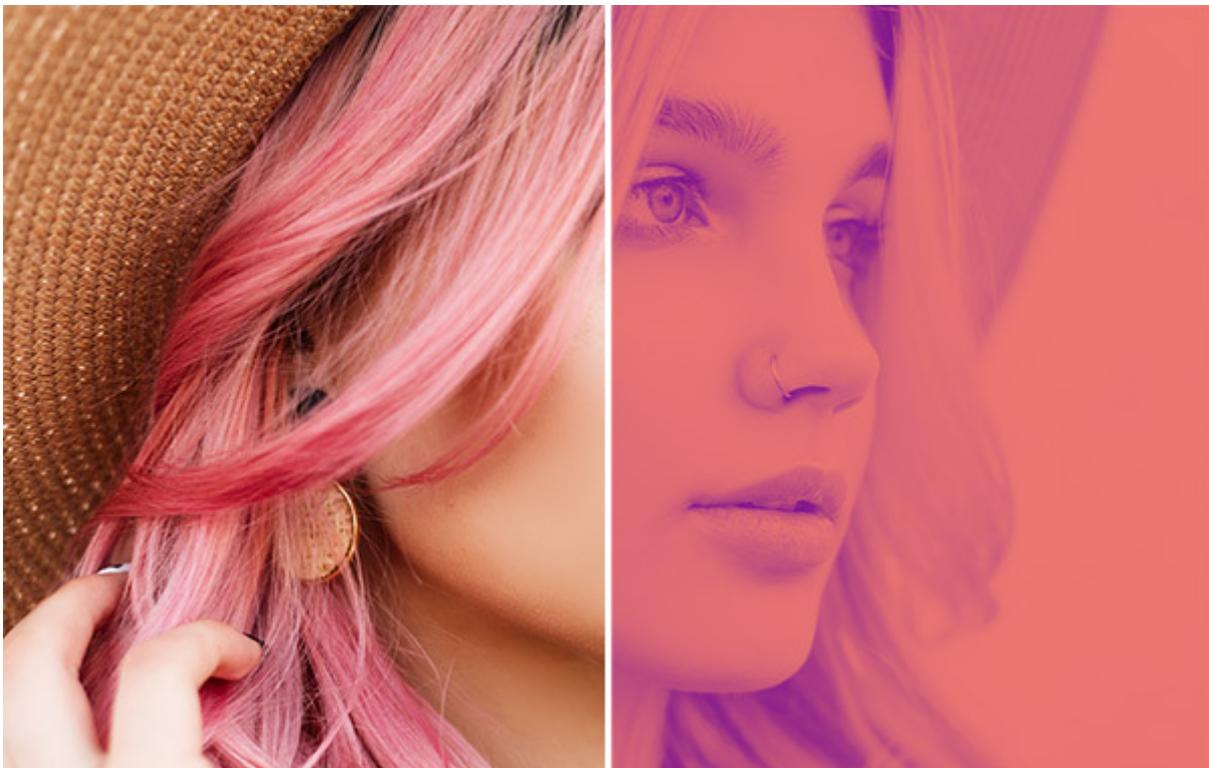
Gradient Map: Solid

Parameters:

Select a gradient fill from the library, which stores all available gradients, both built into the program and created by a user.
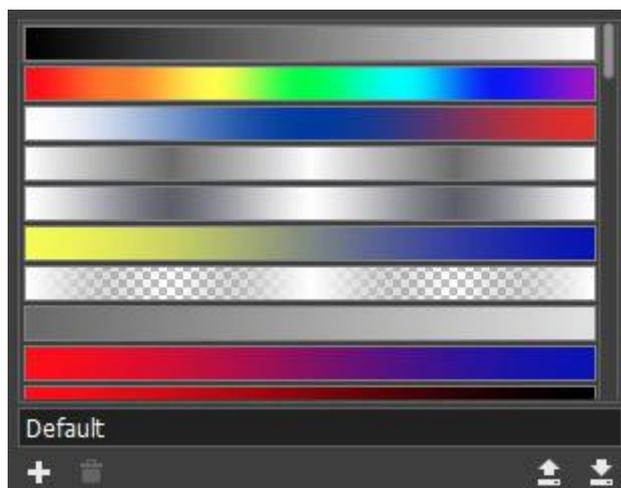
You can enter a name of a gradient into the field at the bottom of the list.

Click to add a new gradient to the library.

To remove the selected gradient press .

Click to save all gradients into a file with the **.gradlib** extension.

To load the gradient library (***.gradlib**), use the button .

Using the gradient line, you can change the number of gradient colors by adding or removing new points with a left mouse click, as well as change color and transparency of the color components of the gradient. To remove a color point from the gradient, drag it aside and release the mouse button.

Gradient Point Adjustment:

Adjust the color, transparency, and position of the points of the gradient using the pop-up menu called by right-clicking in the point.
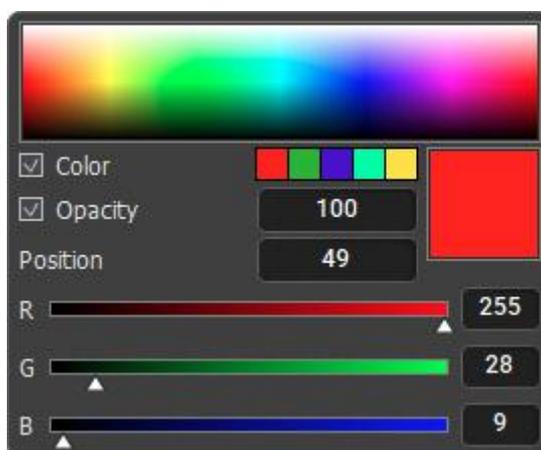
You can set the color of the point using the spectral bar in this pop-up menu. It's also possible to use the color selection dialog called by clicking on the color square or adjust the values of the color components.

The **Color** check-box enables/disables for the point the selected color shown in the large square to the right. Smaller squares represent the last colors used to create the gradient. If the check-box is disabled, the color of this point depends on adjacent pixels and cannot be changed.

The **Opacity** parameter (0-100) sets the transparency of the gradient at the point. If the value is less than the maximum, the opacity of the gradient will smoothly change from point to point. When the check-box is disabled, the transparency of the gradient at the point cannot be changed and depends on the overall opacity of the gradient and the opacity of adjacent points.

With the **Position** parameter (0-100) you can specify the exact position for each point of the gradient.

> **Note:** At the extreme points of the gradient, the **Color** and **Opacity** check-boxes are always enabled, and the **Position** parameter cannot be changed.

The **Reverse** button ▬ reverses the order of the colors of the gradient.

The **Smoothness** (0-100) parameter makes the gradient smoother by smoothing the transitions between the individual colors and shades of colors. Decreasing the value makes the transitions between colors more visible.

If the **Show Transparency** check-box is active, the transparency of the gradient will be taken into account, if it is disabled, the gradient will be completely opaque.

Gradient Map: Noise

The noise gradient looks like a set of randomly distributed colors from a given range.
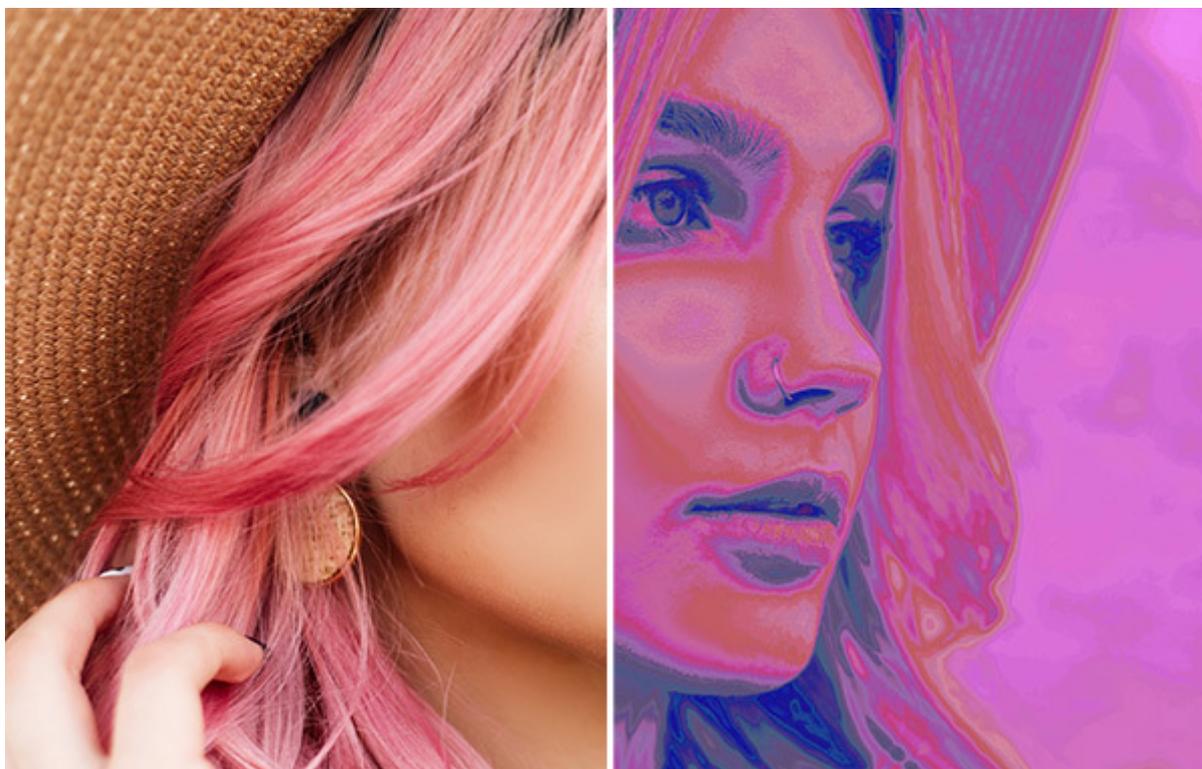
Gradient Map: Noise

Parameters:

Color Model. The drop-down list contains the available color models that change the color components accessible for customization (RGB, HSB, LAB).

Color Components (0-100). Depends on the chosen color model. Changing the ranges changes the colors in the gradient. For example, for an HSB model, you can specify the ranges of hue (H), saturation (S), and lightness (B) of the colors used in the gradient.

Roughness (0-100). The smoothness of the gradient fill. At the value = 0, a smooth gradient is created, increasing the value makes the gradient more noisy.

Add Transparency. Enable the check-box to add transparency to the random colors of the gradient.

Dithering. Enable the check-box to smooth out the transitions between the colors of the gradient.

Random Seed (0-999). Generates a new gradient with the given settings.

Fixed Preview Area. If the check-box is enabled, all changes will be displayed in a small preview area indicated by the dotted line. If the check-box is disabled, the changes will be applied to the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

DESATURATE

The **Desaturate** adjustment allows you to quickly convert a color image to black and white. It automatically reduces the saturation of each color to zero and converts each color to its grayscale equivalent.

Select in the menu **Image -> Adjustment -> Desaturate**.

Using Desaturate Adjustment

MATCH COLOR

The **Match Color** adjustment allows you to transform colors of an image according to another image.

Select **Image -> Adjustment -> Match Color...** to display the adjustment parameters in the Settings Panel.

Using Match Color Adjustment

Parameters:

Load Sample. Click the button and select an image that will be used as a sample for color selection.

Strength (0-100). Degree of application of the adjustment. To fade the effect, reduce the value.

Fixed Preview Area. If the check-box is enabled, all changes will be displayed in a small preview area indicated by the dotted line. If the check-box is disabled, the changes will be applied to the area visible in the Image Window.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

REPLACE COLOR

The **Replace Color** adjustment allows you to replace the selected color with another color.

Select **Image -> Adjustment -> Replace Color...** to display the adjustment parameters in the Settings Panel.

Replace Color

Use the eyedropper to specify the color you want to replace.

Adjust the selected area using the following options:

Invert. The check-box allows you to invert the selected area.

Tolerance (0-200). The parameter defines the width of the color range for the selected color.

Localized Area. The check-box allows you to limit the area to the specified **Radius** with the center at the point selected with the eyedropper.

Selection Modes (in the form of icons) - modes of the eyedropper which determine the result of the interaction between selected colors.

New 🖊. Selecting a new color to replace.

Add 🖊. The new color is added to the already selected one. The mode is activated by holding down the `Shift` key.

Subtract 🖊. The selected color is excluded from the processed area. The mode is activated by holding down the `Alt` key.

The preview area shows either the original image (**Image**) or the selected area (**Selection**) as a mask. In the latter case, the processed areas are shown in white, the unused areas in black, and the transition zone in shades of gray.

Adjust the color in the selected area using the options:

Hue (-180..180). The parameter allows you to adjust the color tint.

Saturation (-100..100). The parameter allows you to change the saturation of the selected color.

Lightness (-100..100). The parameter allows you to lighten or darken the selected color.

The color changes will be displayed in the color field. Left-click in the color field to call up the color selection dialog where you can select a color to replace.

Click **Default** to restore the default values.

Click **OK** to apply all changes and close the dialog box.

Click **Cancel** to close the dialog box without applying any changes.

EQUALIZE

The **Equalize** adjustment allows you to redistribute pixel brightness values to more evenly fill the image brightness range: the brightest pixels become white, the darkest pixels become black, and the rest are distributed among different shades.

To apply this adjustment, select in the menu: **Image -> Adjustment -> Equalize**.

Using Equalize Adjustment

Hint: You can duplicate the layer and then fade the equalized image to blend with the original.

EFFECTS

AliveColors is a powerful software for editing and correcting photos. The program provides a number of various effects for image enhancement and photo stylization.

Find them in the **Effects** menu:

Artistic

Comics
Halftone Pattern
Linocut
Pen & Ink
Pencil Sketch
Photocopy
Stencil
Torn Edges

Blur

Gaussian Blur
Iris Blur
Lens Blur
Motion Blur
Radial Blur
Smart Blur
Surface Blur
Tilt-Shift

Brush Strokes

Accented Edges
Dark Strokes
Glowing Edges
Splatter
Spray

Channel Mixer
Combine Images

Chameleon
Emersion

Distortion

Displace
Extrude
Pinch
Polar Coordinates
Ripple
Twirl
Wave

Drop Shadow
Glamour
Glitch Art
High Pass
Lens Correction
Noise

Add Noise
Dust & Scratches
Median

The AliveColors effects are also available in the **Effects Gallery**. The effects are divided into groups, each effect with its thumbnail. Click a thumbnail to open the effect parameters.

Effects Gallery

When you select an effect, the Settings Panel appears to the right by default. You can drag the panel to the place where you want it and the next time the panel will appear in the selected position.

You can save the effect settings as **Presets**. Find all available presets in the drop-down list. If you modify the parameters, the preset name automatically changes to **Custom**, and the **Save Custom Preset** button ➕ appears next to the list. To save the current settings, press this button.

A new preset is automatically assigned a name (for example, *Custom_1*, *Custom_2*, etc.) that can be

changed as needed by entering any combination of letters and numbers in the highlighted field. After pressing `Enter`, a new preset will appear in the drop-down list.

To remove a user preset, select it and press the **Delete Custom Preset** button ⬛.

Click ⬛ to export user presets to a *.presets* file. To load the presets into the program, press on ⬛.

Besides, in the **Effects** menu, some **AKVIS Built-in Plugins** are available. They significantly expand the already impressive editor's capabilities.

It's also possible to add third-party plugins to the image editor.

The **Layer Effects** are accessible here: **Layers -> Layer Effects**, or by clicking ⬛ in the **Layers** panel.

ARTISTIC EFFECTS

Using the **Artistic** effects, you can turn images into works of art. These filters allow you to stylize painting and drawing techniques and create polygraph prints.

Comics
Halftone Pattern
Linocut
Pen & Ink
Pencil Sketch
Photocopy
Stencil
Torn Edges

COMICS

The **Comics** effect transforms a picture into a poster or a cartoon drawing. With this filter, you can easily add creative cartoon effects to your image.

Comics Effect

The parameters of the **Image** group affect the simplification of the picture and the reproduction of colors.

Radius of Simplicity (0-20). Degree of posterization of the image. This parameter effects the size of the area which is simplified. The higher the value, the more homogeneous areas become.

Blur (0-100). Smoothness of an image by blurring similar colors in homogeneous areas.

Posterizing (0-100). Merging of similarly colored pixels. This parameter affects the number of distinguishable colors during simplification. At higher values of this parameter, fewer colors are used, and the image becomes more uniform and flat.

Smoothing (0-10). Smoothness of lines dividing posterized colors: the higher the value, the smoother the lines are between these areas. At lower values the border between colors becomes more "jagged".

Enable the **Outlines** check-box to add black boundary lines to the image. Adjust the settings for the boundaries:

Level of Detail (1-100). Level of detail and strokes that form the border.

Sensitivity (0-100). Intensity of boundary lines. The higher the value, the more lines appear in the image. Reduce the value to remove extra lines.

Thickness (1-100). Thickness of the black boundary lines. At the minimum value, contours are one pixel in width, while increasing the value makes lines thicker.

Definition (0-8). It changes size, appearance, and position of lines and method of designating contours. At higher values, more lines are used and the details of an image are more defined.

Sharpen (0-100). Sharpness of lines. At higher values, lines have more clarity and more vividly and accurately trace areas. At lower values lines become thicker and blurred.

All changes are displayed in a small preview area.

To process the entire image with the selected settings, press the **Run** button.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect parameters.

Click **Cancel** to close the dialog box without applying changes.

HALFTONE PATTERN

The **Halftone Pattern** effect converts a photo into an image rendered as a two-color print. Widely used in modern design, this technique works for creating retro-style images, comic books, and pop-art posters.
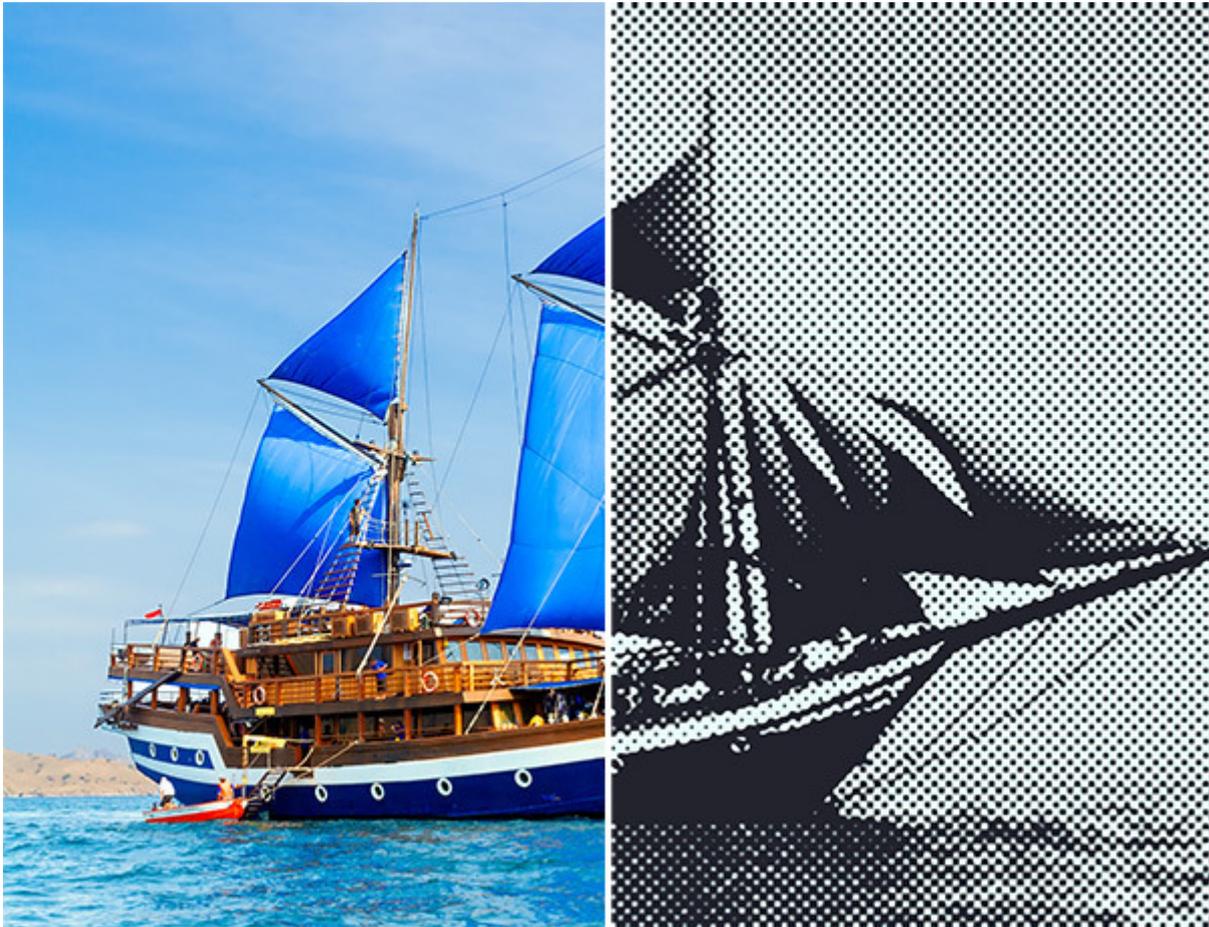
Halftone Pattern

Effect Parameters:

Pattern. Select a pattern option: dots, lines, circles.
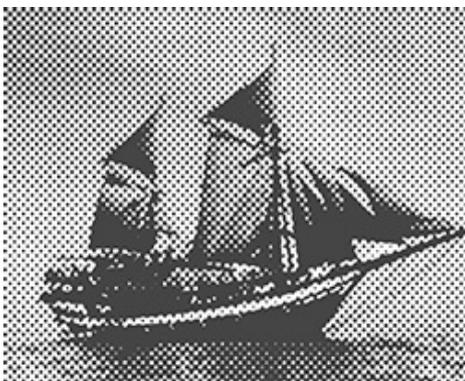
| Dots | Lines | Circles |

Color. Use the color squares to set the colors for the pattern. Double-click the square and select a color from the standard dialog.

The button ▣ resets colors to default (black and white). When you press ⬆, the colors will be swapped.
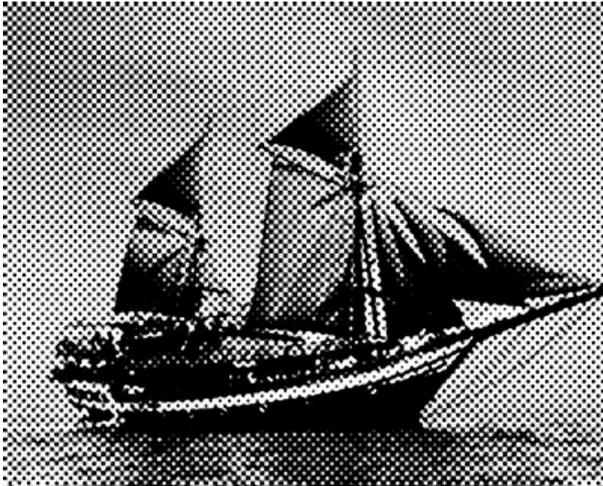
Black And White Drawing   Color Drawing

Size (1-12). The parameter sets the size of the pattern elements.
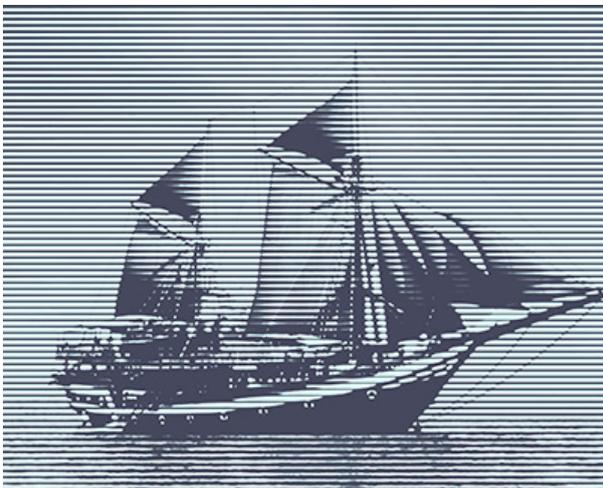
Size = 5   Size = 10

Contrast (0-50). The parameter changes the contrast of the image.
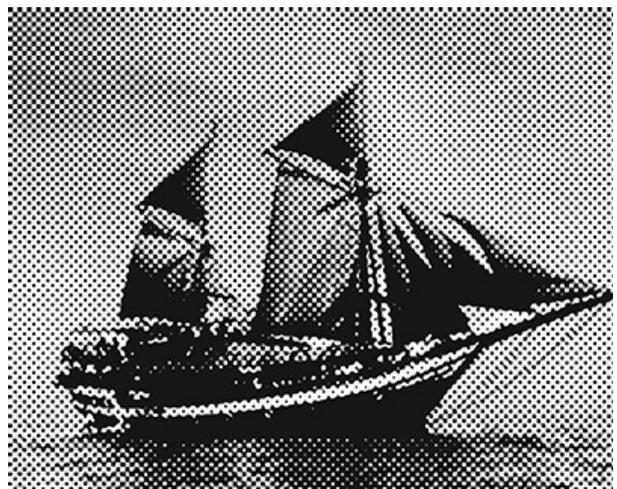
Contrast = 10   Contrast = 40

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

LINOCUT

The **Linocut** effect imitates the method of engraving on linoleum similar in technique to woodcut. This printmaking technique is also known as lino print, lino printing or linoleum art. The drawing is applied to a printing plate (a sheet of linoleum) from which you can print it on paper. In a classical engraving, the image is created by black strokes on a white background. Linocut's characteristic expressiveness, strong contrast between black and white, and its rich and exuberant strokes are made using a soft material.

Linocut

Posterizing (10-100). Preliminary simplification of an image by combining pixels with similar colors.

Level of Detail (1-100). Amount of detail and lines in an image. Increasing the value gives more detail and a darker image.

Sharpen (1-100). Distinctness of the image lines. Increasing the value makes strokes appear clearer and more precise, without affecting the overall level of detail. Blurry images will appear darker.

More White (0-50). Increases the background areas filled in white.

More Black (0-100). Increases the "printed" areas filled in black.

Paint Color and **Background Color**. Use the color plates to set the paint (ink) and background colors. The default colors are black and white. Click the plate and change a color.

All changes are displayed in a small preview area.

To process the entire image with the selected settings, press the **Run** button.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect parameters.

Click **Cancel** to close the dialog box without applying changes.

PEN & INK

The **Pen & Ink** effect converts photographs into drawings using expressive contour lines and hatching technique. The effect imitates colored ink drawings authentically reproducing the work of a pen. A feature of pen drawing is the contour manner of execution and the changeable nature of the lines.

Pen & Ink

Level of Detail (1-100). Level of detail and strokes that form the border.

Sensitivity (0-100). Intensity of boundary lines. The higher the value, the more lines appear in the image. Reduce the value to remove extra lines.

Thickness (1-100). Thickness of the boundary lines. At the minimum value, contours are one pixel in width, while increasing the value makes lines thicker.

Definition (0-8). Visualization of lines: their size, appearance, and position, as well as contour generation method. At higher values, more lines are used and the details of an image are more defined.

Sharpen (0-100). Sharpness of lines. At higher values, lines have more clarity and more vividly and accurately trace areas. At lower values lines become thicker and blurred.

Paint Color. Change the color of ink by clicking the color plate that opens the **Select Color** dialog.

Background Color. Select the color of a paper by clicking the color plate.

All changes are displayed in a small preview area.

To process the entire image with the selected settings, press the **Run** button.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect parameters.

Click **Cancel** to close the dialog box without applying changes.

PENCIL SKETCH

The **Pencil Sketch** effect transforms photos into sketches, imitating the technique of real drawing.
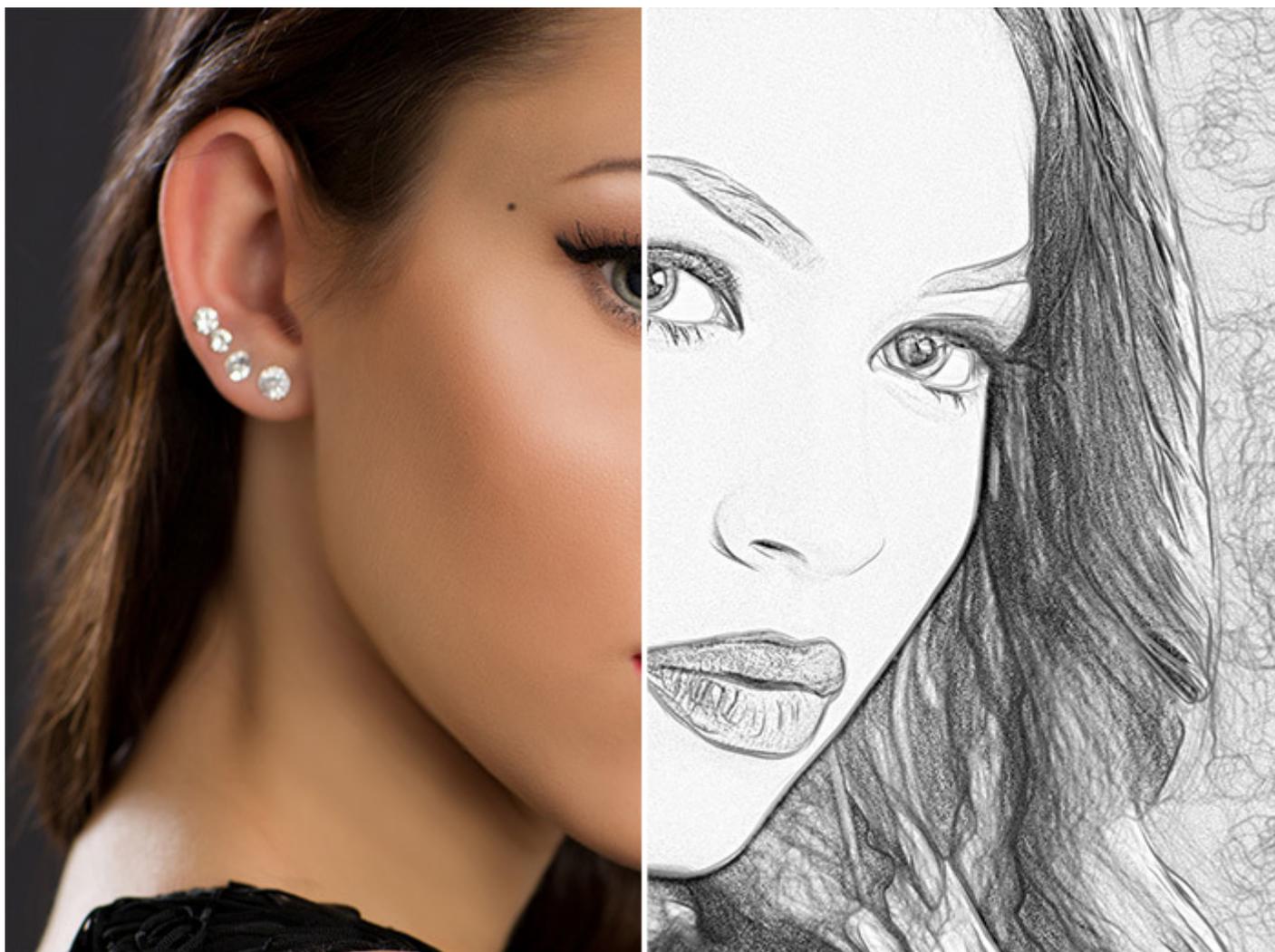
Pencil Sketch

Color Options:

Monochrome. The drawing will be created using one pencil. You can choose the color of the pencil strokes and background in the color squares.

To change the color, click the square and select a color from the color selection dialog.

Click ⬛ to reset colors to default (black and white). Click ↰ to reverse the background and pencil colors.

Bright Colors. The drawing is created with bright, saturated colors. In this mode, you can change the background color.

Natural Colors. The drawing is made using the original color range. The background is white and can't be changed.

Effect Parameters:

Refined Lines. The check-box changes the appearance of the pencil strokes. When this option is enabled, the ends of the lines become thinner, the drawing looks more refined and elegant.

Extra Contrast. The check-box adds bright and clear lines to dark areas creating the ink effect.

Brightness (10-100). The parameter changes the color intensity of the lines (from pale to saturated).

Level of Detail (10-100). The parameter adjusts the amount of details and lines.

Stroke Thickness (3-30). The parameter defines the width of the lines.

Hatching Density (0-200). The parameter changes the number of the hatching strokes that allows you to enhance the sense of volume.

Sensitivity (0-80). The parameter affects the intensity of hatching. The higher the sensitivity level, the more strokes are created on the image.

Curvature (0-12). The parameter changes the degree of curvature of the strokes under the influence of gradients. The higher the value, the more curve will be the hatching lines. At a value of 0, the strokes will be straight.

Dispersion (1-100). The parameter randomly changes hatching. Increase its value to make the strokes more weak, thin, and chaotic.

Contour Detail (0-1000). The parameter sets the number of the small dark lines which complement the contours of the drawing.

Contour Brightness (1-100). The parameter changes the intensity of the contours.

Additional Effects:

Shadows (0-50). The parameter increases shadows on the image.

Noise (0-100). The parameter adds graininess to the image.

Contrast (-100..100). The parameter increases the difference between highlights and shadows.

When the **Autorun** check-box is enabled, any change in the parameters automatically starts the processing. When it is disabled, the processing is started by pressing the **Run** button.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect parameters.

Click **Cancel** to close the dialog box without applying changes.

PHOTOCOPY

The **Photocopy** filter simulates the effect of photocopying an image as a two-color print. The areas in an image will be filled with the background color, while the edges of the areas will be highlighted with paint color.
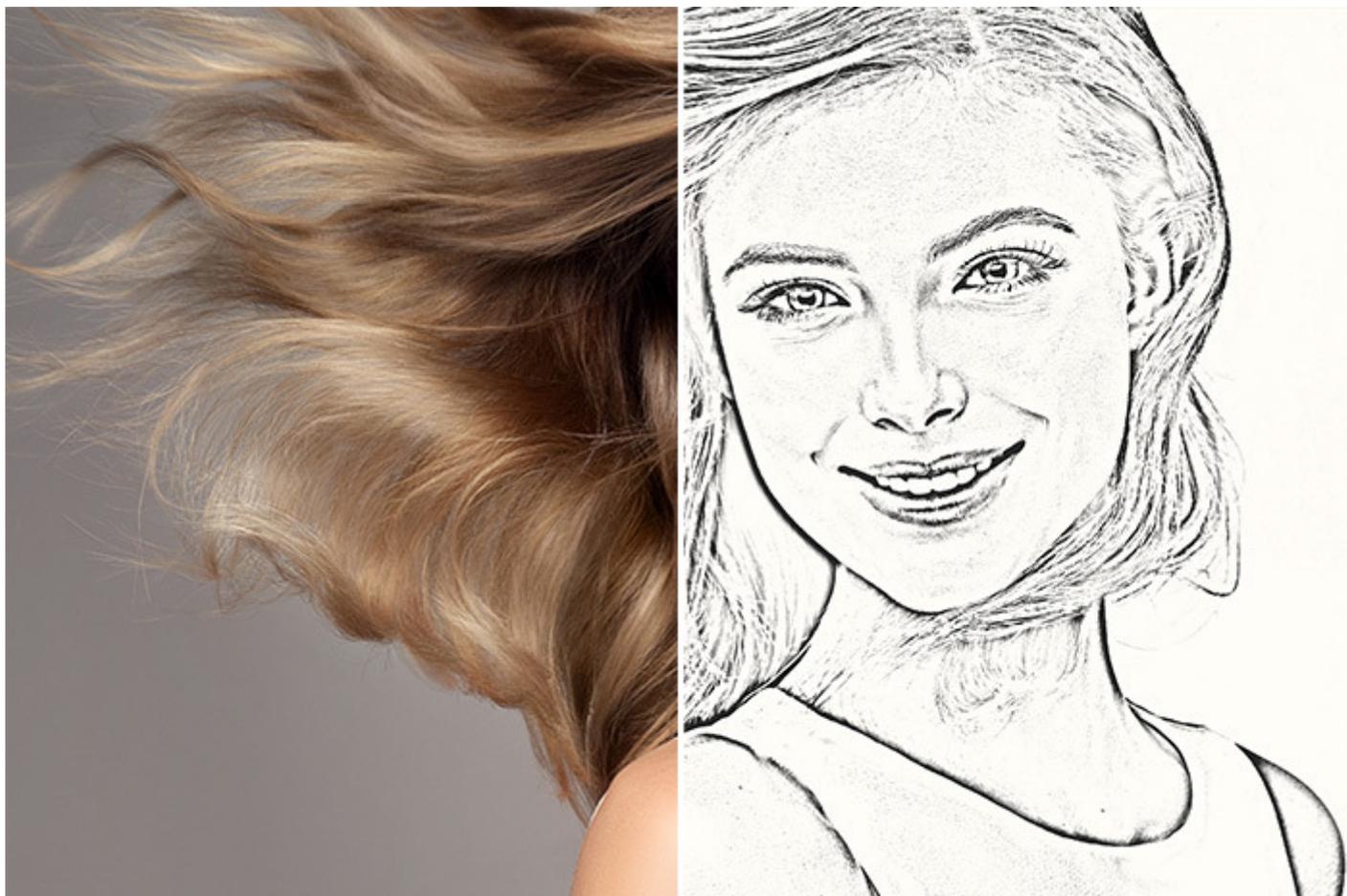
Photocopy

Effect Parameters:

Detail (1-24). Enlargement of details. Small details disappear. The filled areas become larger.

Darkness (3-50). Increasing the parameter increases the brightness of the paint.

Paint Color and **Background Color**. Use color plates to set the paint and background colors. The default colors are black and white. To change a color, call the **Select Color** dialog by clicking in the corresponding color plate.

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

STENCIL

The **Stencil** effect converts a photo into an impressive drawing with contrasting outlines.

Stenciling is a technique of creating a monochrome print (usually black and white). Using the effect in AliveColors, you can not only make an authentic monochrome print, but also create a multi-color drawing. A unique algorithm allows you to create high-contrast eye-catching images.

Stencil Drawing

Parameters:

Blur (1-25). Preliminary smoothing of the original image. It helps to simplify the image and remove odd details.

Smoothness (0-100). Smoothness of borders of areas in the image.

Shadows/Highlights (0-100). Control of fill areas. The left slider is responsible for the number of areas filled with the dark color (in the range from gray to black), the right one - for the number of areas filled with the light color (in the range from white to gray).

Paint/Background. Color management. The color of the paint is used for drawing outlines and dark areas. The background color is responsible for the light areas. To change the color, click the square and select a color from the standard dialog.

Midtones. The slider adjusts a tint of the intermediate zone (by default, it's gray).

Mixing. The check-box allows you to merge the result with the original image in the **Multiply** mode without leaving the filter to create vivid color drawings.

Contours. The effect adds outlines to the image.

Contours

Parameters of the **Contours** tab:

> **Sensitivity** (0-100). Number of the contour lines.

> **Thickness** (0-100). Intensity and width of the contour lines.

Hatching. The effect adds hatching to the midtone areas.
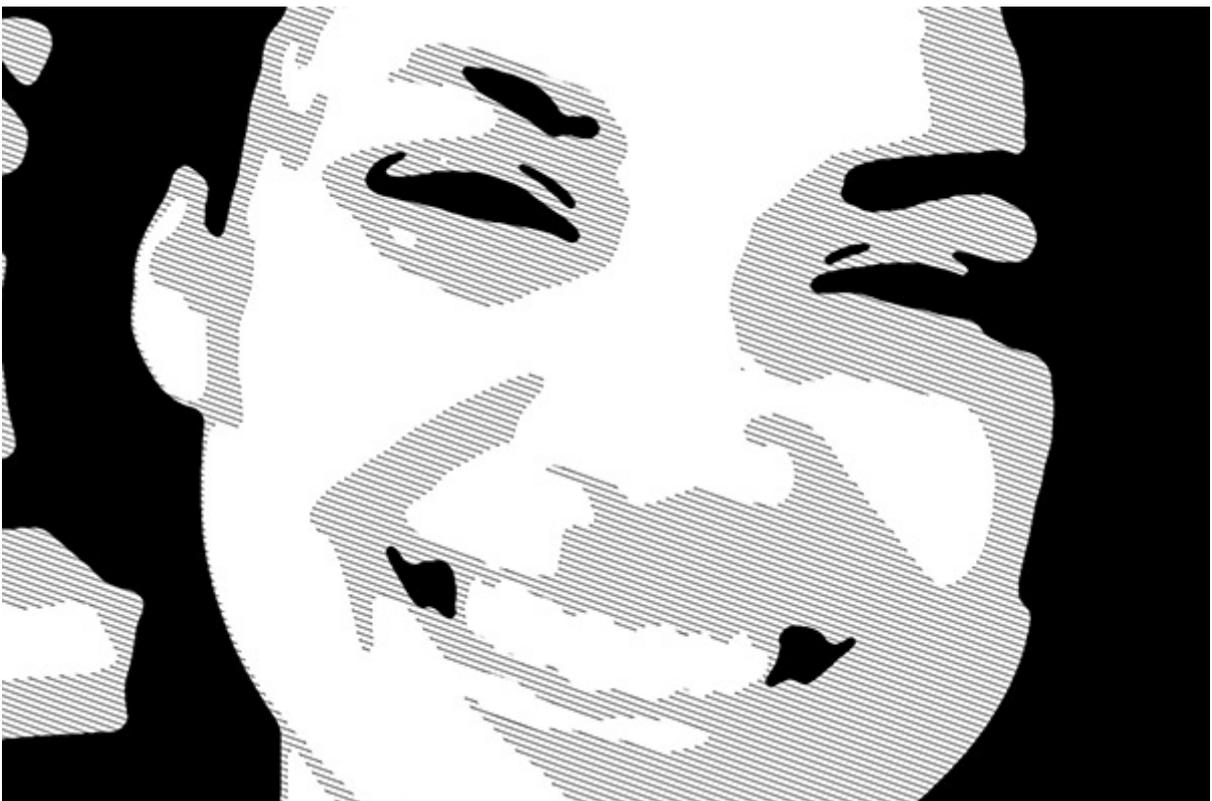
Hatching

Parameters of the **Hatching** tab:

Step (1-100). Distance between lines and their number.

Thickness (1-100). Width of lines.

Posterizing (5-100). Number of areas with different hatching. At a value of 100, the hatching is uniform.

Random Tilt (0-9999). A generator that creates a random hatching direction.

Cross-hatching. The check-box enables the cross-hatching mode. Strokes are drawn across in different directions.

Pop Art. The effect fills the midtone areas with pattern elements.

Pop Art

Parameters of the **Pop Art** tab:

Pattern. The drop-down list contains a list of elements: Circle, Square, Rhombus, Triangle, Cross, Dollar.

Offset. The elements located one below the other are shifted by half the interval.

Interval (2-100). Distance between the elements.

Size (2-20). Size of the elements. The elements can blend in to create a denser shading effect.

Note: You can use either **Hatching** or **Pop Art**, not both at the same time.

All changes are displayed in a small preview area.

To process the entire image with the selected settings, press the **Run** button.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect parameters.

Click **Cancel** to close the dialog box without applying changes.

TORN EDGES

The **Torn Edges** effect transforms photos into two-color, high-contrast drawings with rough edges and contours, creating a loose paper look.

Torn Edges

Balance (1-50). The ratio of areas of different colors. The higher the value of the parameter, the more areas are filled with the paint color.

Smoothness (1-15). Increases the blurriness of edges.

Contrast (1-25). Enhances image contrast.

Paint Color/**Background Color**. Use color plates to set colors on an image. Click the color plate to call the color selection dialog.

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

BLUR EFFECTS

Using the **Blur** menu commands, you can blur the entire image or just a selected area, reduce its sharpness, amount of noise, as well as create a variety of effects.

The program offers the following blur types:

Gaussian Blur
Motion Blur
Radial Blur
Smart Blur
Surface Blur
Lens Blur
Iris Blur
Tilt-Shift

Gaussian Blur. When this method is selected, the program recalculates the color components (red, blue, and green) for every point of the image, taking into account the corresponding values of the neighbouring points; as a result the points change their colors. The calculation is based on the Gaussian distribution and is named after it. In this way the values of the color components are averaged and the contrast between them weakens. The sharp borders are blurred without general lightening or darkening. The image gets dim, "cloudy".

The **Radius** (0.1-250.0) parameter adjusts the strength of the effect application. It defines to what extent a point influences on the neighbouring points when its color components are being recalculated. At low values only the adjacent points will be changed. Every point will undergo a slight change, but the blurring will be visible. The higher the value of the parameter, the wider is the influence area of every point. The image will get more blurred till it becomes completely indiscernible and looks like one stain (at high values of the parameter).

Radius = 10   Radius = 50

Motion Blur. This blur method imitates the straight line motion of a camera.

Parameters:

Angle (0-180). This parameter sets the inclination angle of the line, along which the effect will expand to the image. The values of the parameter vary between 0 and 180 degrees. At exactly these values the blurring will be horizontal. At value = 90 the blurring will be vertical.

Distance (1-500). This parameter defines the effect application area in pixels (relative to every point of the image).

Motion Blur

Radial Blur. This method imitates motion, too. There are two kinds of motion:

Zoom. This mode creates blurring directed away from the center.

Radial Zoom Blur

Spin. This mode imitates the effect of a camera rotating around the central point of the image, which results in circular blurring.

Radial Spin Blur

The rotation angle in the **Spin** mode and the effect application area in the **Zoom** mode can be adjusted using the following parameters:

Highlights (1-100). The parameter specifies the amount of blur in light areas. The higher the value, the deeper light blurred pixels penetrate the dark areas.

Shadows (1-100). The parameter specifies the amount of blur in dark areas. The higher the value, the deeper dark blurred pixels penetrate the light areas.

Spin Blur in Light Areas

Zoom Blur in Dark Areas

In the **Blur Center** section, you can determine the position of the central blur point. To set the position, click the image with the tool ⊕ or enter the center coordinates in the fields **X** and **Y**.

Smart Blur. The effect allows you to precisely control the blur.

Radius (1-20). The parameter defines how far the filter searches for dissimilar pixels to blur.

Threshold (0.1-50.0). The parameter allows you to specify how much pixels should differ in order not to get blurred.

Smart Blur

Surface Blur. The effect blurs monochrome image areas while preserving edges.

Radius (0.1-20.0). The parameter specifies the size of the area sampled for the comparison of pixels.

Threshold (0.0-100.0). The parameter determines how much the neighboring pixels should diverge from the center pixel in order to get blurred. Pixels with a difference of less than the threshold value are excluded from the blur.

Surface Blur

Lens Blur. The effect blurs the image by simulating the narrower depth of field. In the blurred area you can observe the bokeh effect.

Lens Blur

The **Iris Blur** effect allows you to accentuate a specific object in an image and blur the rest. The light spots in the out-of-focus area can turn into bokeh.

Iris Blur

Tilt-Shift adds the effect of a miniature, toy-like scene to your image. The light spots in the out-of-focus area can turn into bokeh.

Tilt-Shift

Effect Parameters (equal for the last three effects):

Select a mode of displaying the parameter changes:

Fast Preview - this option lets you try the settings on a smaller copy of the original image.

Full Processing - the image in its original size will be processed with the chosen parameters.

The **Blur** (1-100) parameter lets you adjust the strength of the blur effect. The higher the value, the greater the blur is.
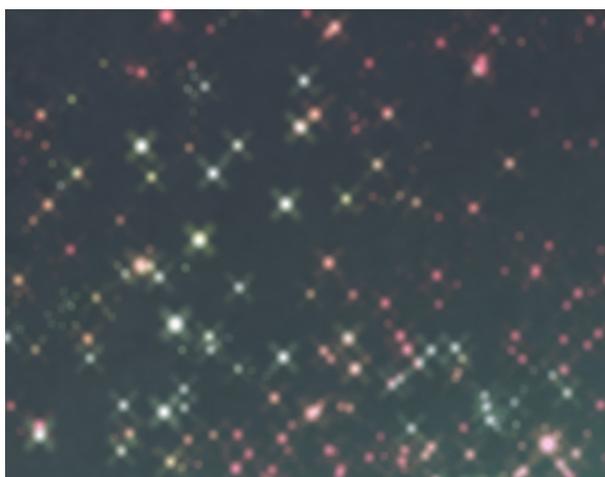
Blur = 5   Blur = 15

All light spots in the out-of-focus region take the form of bright glare. Use these parameters to adjust the look of the spots of light in the blurred area:

Bokeh Shape Parameter Group.

Shape. Click the square button in the **Settings Panel** and select a shape from a list. All light spots in the out-of-focus area will change in the selected shape.
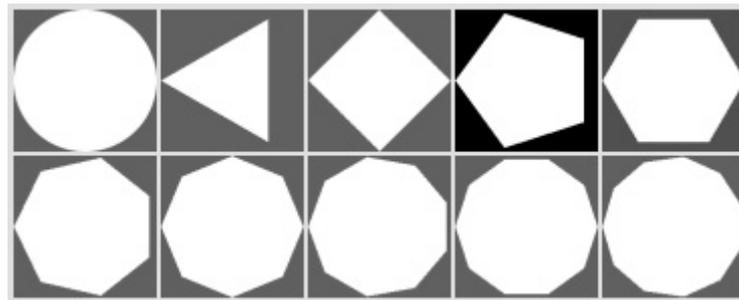
Bokeh Shapes

Smoothness (-100..100). At the value = 0, the spots of light have the selected form. The higher the value, the more the edges of the light spots are blurry and out of focus. When decreasing the value, the center of the light spot is blurred and becomes more transparent. At the lowest value, the only contours of the shape remain visible.
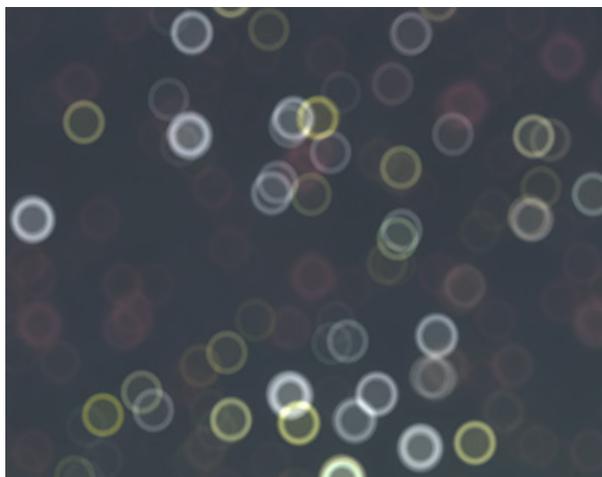
Smoothness = -75
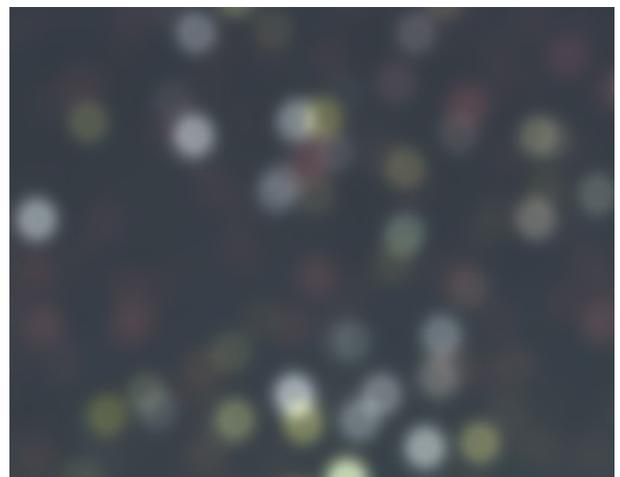
Smoothness = 75

Deformation (-100..100). When the parameter is set to 0, the light spots have a polygonal shape. The higher the value, the more the edges of the polygon are curved outside, making it gradually look like a circle. The less the value, the more the edges are retracted inside the shape, turning the polygon into a star.
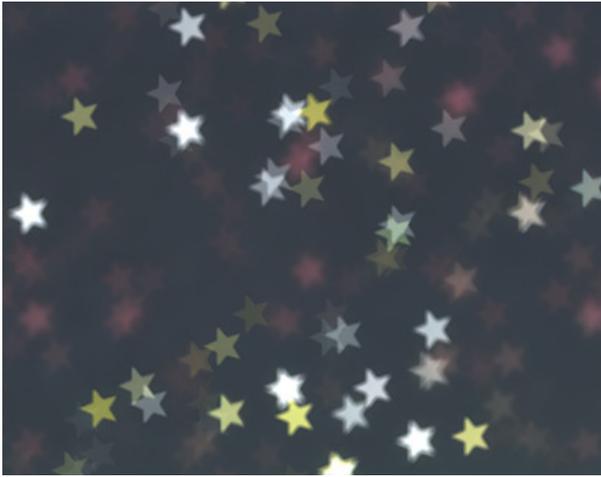
Deformation = -50

Deformation = 50

Rotation (0-360). The parameter defines the rotation angle of the polygon around its center.
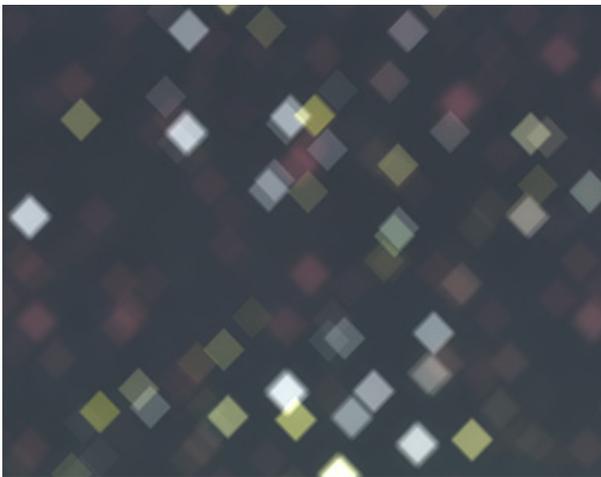
Rotation = 0

Rotation = 45

Note: Deformation and **Rotation** parameters are disabled for the circle shape.

Glow Parameter Group.

Brightness (0-100). As the parameter increases, the brightness of the light spots increases.

Brightness = 25

Brightness = 75

Saturation (0-100). The parameter increases the color saturation of light spots. The parameter is associated with the Brightness parameter. The higher the Brightness, the more saturated colors you can get.
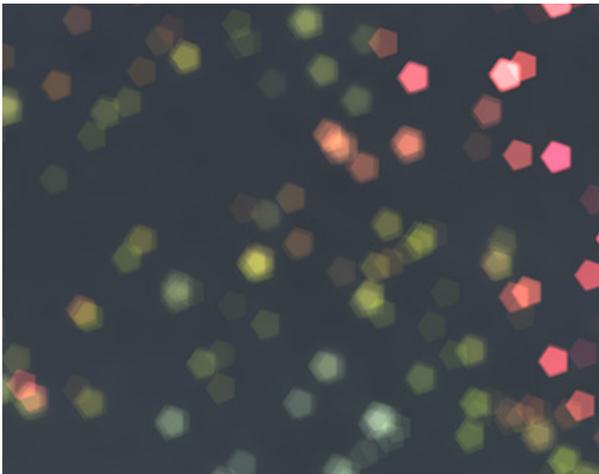
Saturation = 25
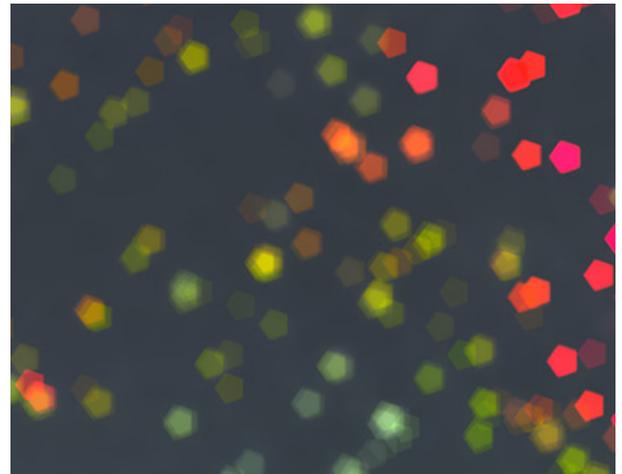
Saturation = 75

Range (0-255). The parameter specifies the brightness range of light spots to which the first 2 parameters will be applied.

Range = 165/185

Range = 235/250

If the **Fixed Preview Area** check-box (not available for the last three blur effects) is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

BRUSH STROKES

Using the commands of the **Brush Strokes** menu, you can create simple artistic effects, add strokes, grain, and texture to an image.

You can apply these **Brush Strokes** effects:

Accented Edges
Dark Strokes
Glowing Edges
Splatter
Spray

Accented Edges. The effect emphasizes edges in an image with darker or lighter strokes. Depending on the settings, it simulates a line drawing or simply highlights the edges of a photo.

Edge Width (1-14). Sets the thickness of the lines.

Edge Brightness (0-50). Changes the color of the lines. The lower the value of the parameter, the darker the strokes are; increasing the values makes them lighter. With a value = 25, the edges are not outlined.

Smoothness (1-15). Increasing the parameter reduces the amount of detail in the image and smooths out uneven edges.

Accented Edges

Dark Strokes. Dark areas will be filled with dense, dark strokes, and light areas will be filled with light strokes.

Balance (0-10). The ratio of dark and light strokes. The higher the value of the parameter, the more dark strokes will be in the image.

Black Intensity (0-10). Darkening of dark areas.

White Intensity (0-10). Lightening of light areas.

Dark Strokes

Glowing Edges. The effect defines edges in an image and adds a neon glow to them, filling the rest of the areas with black.

Edge Width (1-14). The thickness of the glowing lines. The minimal value corresponds to one pixel lines; increasing the parameter thickens the lines.

Edge Brightness (1-20). The clarity of the glowing lines. The higher the value, the brighter the color of the edges is.

Smoothness (1-15). Reduces the number of small details.

Glowing Edges

Splatter. The effect simulates splatters creating splashes and blots of paint.

Radius (0.0-50.0). Scattering range of spots.

Smoothing (1-15). Reduces splashing by combining individual spots.

Random Seed (0-100). Sets a different distribution of spots.

Splatter

Spray. The effect simulates paint spraying along the specified direction.

>   **Direction**. Specifies the direction of strokes: horizontal or vertical.

>   **Radius** (0.0-70.0). Scattering range of strokes.

>   **Stroke Length** (0-20). Stretching strokes along the selected direction.

>   **Random Seed** (0-100). Sets a different distribution of strokes.

Spray

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

CHANNEL MIXER

This effect processes the image (changing its color tones, saturation, contrast, lightness, etc.) using three channels: **Red**, **Green** and **Blue**.
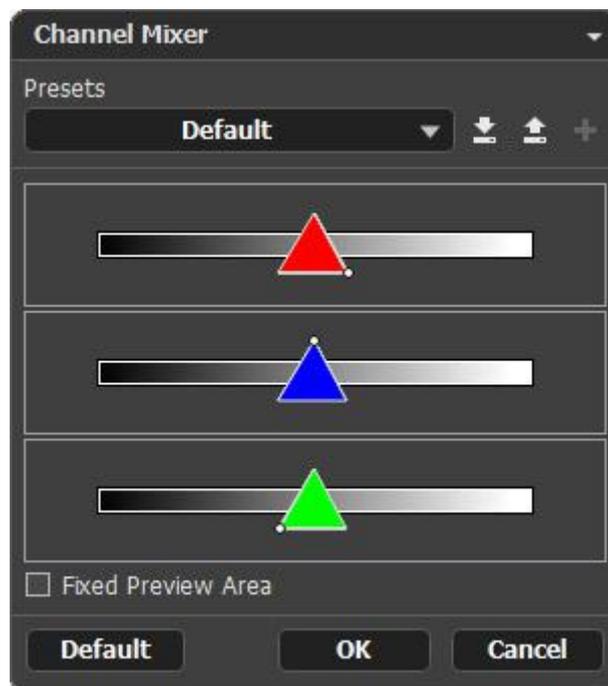
Every channel is represented by a scale with a triangle control.

The parameter can be adjusted in the following way:

Shifting the triangle to the right/left leads to increase/reduction of the corresponding color component **in every image point**.

Increasing Red Color Component in Every Image Point   Reducing Red Color Component in Every Image Point
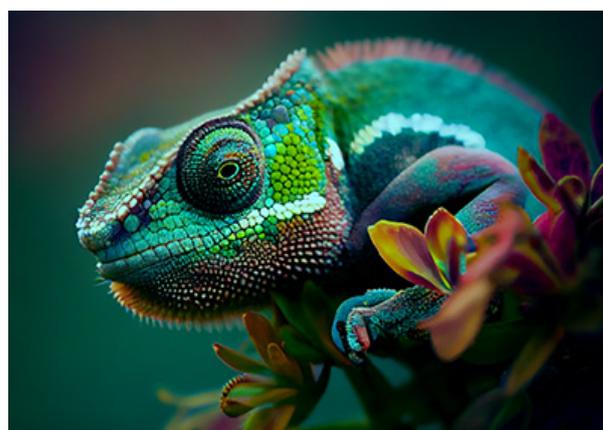
Enlarge/reduce. Left-click a triangle's corner and move the cursor to or from the center of the triangle. By increasing or reducing the triangle size, you strengthen or weaken this color component. The color is strengthened or weakened **only in the points where it was**, other points of the image stay unchanged.

Increasing Blue Color in the Blue Channel

Reducing Blue Color in the Blue Channel

Change the color of the triangle. For this purpose, left-click the white circle at the apex of the triangle, and drag it to another apex. For example, if we change the triangle's color in the red channel to blue, the red color components in every point of the channel will become blue.

Source Image
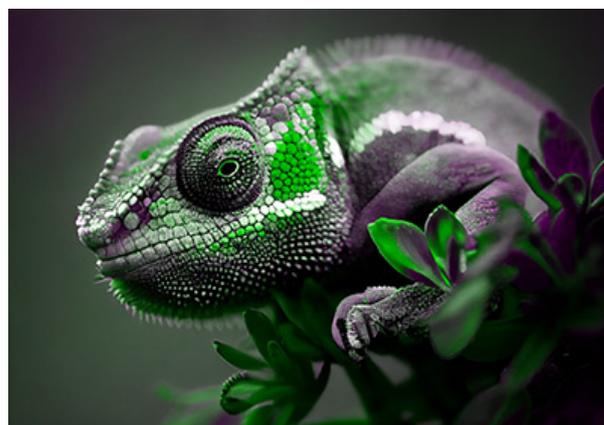
Replacing a Color in a Channel

Change the color of the triangle **to two color sectors**. For this purpose, left-click the white circle at the apex of the triangle, and drag it to one of the triangle' sides. For example, if the triangle in the green channel consists of blue and red sectors, the new value of the green color component will be calculated as a sum of blue and red components. Other color components will not change.

Source Image

Replacing a Color in a Channel

Change the color of the triangle **to three color sectors**. For this purpose, left-click the white circle at the apex of the triangle, and drag it towards the middle of the triangle. For example, if the triangle in the blue channel consists of three color sections, the new value of the blue component for every point of the image will be calculated as a sum of these three color sections. Other color components on the image (in this case, red and green) will not change.

Source Image

Replacing a Color in a Channel

Attention! The triangle control does not show the result. It only shows the way the points in this channel will be calculated.

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

COMBINE IMAGES

The **Combine Images** menu contains the **Chameleon** and **Emersion** effects that allow you to merge images into a composition.

You need a top active layer with a fragment you want to embed and underlying layers with a background.

The **Chameleon** effect completely adapts the fragment to the background image: the edges are smoothed and the color of the entire fragment changes, adjusting to the colors of the background image surrounding it.

Chameleon Effect

The Chameleon effect does not have options and applies automatically immediately after the filter call.

The **Emersion** effect merges two images so that the object is "embedded" in the background in separate areas, thanks to which in some cases it is possible to achieve a combination of objects with complex shape.

Emersion Effect

Emersion Effect Controls:

Colors. A set of colors used for image conversion. During processing, a mask will be created from pixels of the background image that have colors that match the colors from the set and are close to them and will be applied to the layer with the embedded fragment.

By default, all color fields are empty and contain no colors.

Click one of the fields, the cursor takes the form of an eyedropper, and take a color from the image.

Change the color by clicking the field again and selecting another color from the image.

You can remove a color from the set and clear the color field by right-clicking on it.

Threshold (0-100). This option expands the range of colors added to the set. As you increase the parameter, the mask will include not only points with equal colors from the set, but also points with similar colors.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect parameters.

Click **Cancel** to close the dialog box without applying changes.

DISTORTION

The **Distortion** effects are used to distort, transform or convolute an active layer or selection. The filters allow warping, twisting, and pulling layers in different directions.

You can apply these **Distortion** effects:

> **Displace**
> **Extrude**
> **Pinch**
> **Polar Coordinates**
> **Ripple**
> **Twirl**
> **Wave**

Displace. The effect shifts the current layer based on the image selected as a displacement map. The resulting image is covered with a pattern which depends on the form of the map.

> **Map**. Double-click the square to select an image to be used as a displacement map.
>
> The **Original Size**, **Fit**, and **Tile** check-boxes determine the size of the displacement map.
>
> If the **Original Size** check-box is enabled, the original size map will be used. If the map is smaller than the size of the processed image, it will be repeated to fill the entire image. If the map is bigger, only a part of it appears.
>
> If the **Fit** check-box is enabled, the image used as a displacement map will be stretched to the size of the processed image. As a result, the displacement map ratio can be changed.
>
> If the **Tile** check-box is enabled, the image is filled with a map repeated in a grid. In the **X** and **Y** fields, specify how many times the map repeats itself horizontally and vertically.
>
> You can shift the color channels by moving color markers and adjusting auxiliary parameters. The **Strength** parameter (0-500) defines the amount of displacement. The **Direction** parameter (0-360) specifies the direction in which the image should move.

| Source Image | Displacement Map |

Result

Extrude. The effect gives the picture a three-dimensional structure. The image is composed of the square blocks protruding from its center.

Size (1-100). The parameter specifies size of the foundation of each block.

Height (0-500). The parameter determines the height of the blocks.

Dispersion (0-500). The parameter influences the variation in the height of the blocks. At the value = 0, all the blocks have the same height. When increasing the parameter, the difference between the heights of individual blocks becomes more evident.

Density (0-100). The parameter increases the number of blocks in the image.

Anti-Aliasing check-box. The parameter reduces the irregularities at the blocks boundaries.

Extrude Effect

Pinch. The effect stretches or shrinks the image. There are two types of compression:

Spherical. At negative values of the **Strength** parameter, the image is shrinked toward its center. At positive values, it stretches from the center.

Spherical Shrinking   Spherical Stretching

Linear. The image is stretched or shrinked separately in horizontal and vertical direction. At negative values, the image is shrinked. At positive values, the image is stretched.

Horizontal Shrinking
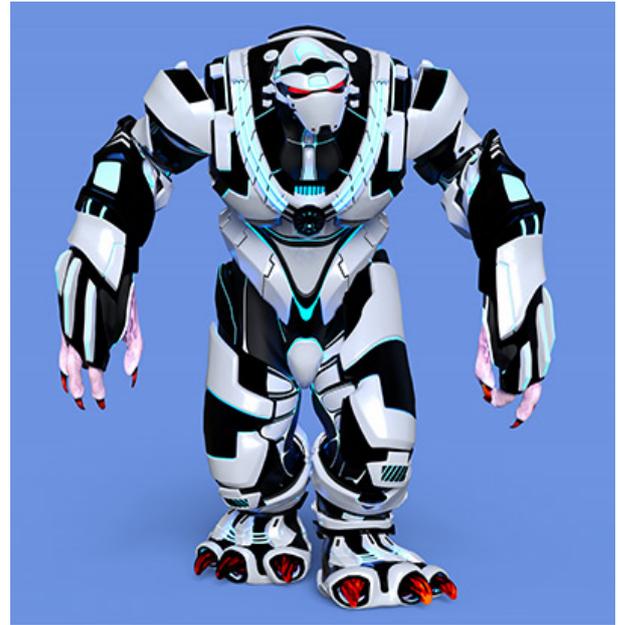
Vertical Stretching

Polar Coordinates. The effect distorts the image by converting the rectangular coordinates of each point to polar ones (and vice versa).

Shift X (1.0-100.0). It allows you to shift the center of the effect horizontally.

Shift Y (1.0-100.0). It allows you to shift the center of the effect vertically.

Scale (1.0-100.0). It controls the effect scaling.

Transform. Select the conversion option: from polar coordinates to rectangular or from rectangular to polar ones.

Overlap (0.0-100.0). It hides the seam line.

Flip. It swaps top and bottom.

Polar Coordinates Effect

Ripple. The effect distorts the image by adding the perturbations in the form of small waves.

Wave Height (1-50). The parameter determines the height of the waves.

Wave Length (1-100). The parameter specifies the distance between the crests of waves. The higher the value, the larger the distance.

Reflection (0-50). When increasing the parameter, the wave is reflected about a certain axis. The higher the value, the more reflected waves appear in the image.

Small Waves (0-100). The parameter breaks large waves into smaller ones. The higher the value, the more often they are repeated. The parameter works only if the **Reflection** parameter is non-zero.

Large Waves

Small Waves

Twirl. The effect twists the edges of the image around its center.

The effect is influenced by the **Rotation** parameter (-1000..1000) determining the direction and intensity of the twist. Positive values indicate clockwise rotation; negative values indicate anticlockwise rotation.

Weak Rotation

Intensive Rotation

Wave. The effect adds distortions in the form of waves, creating undulating pattern.
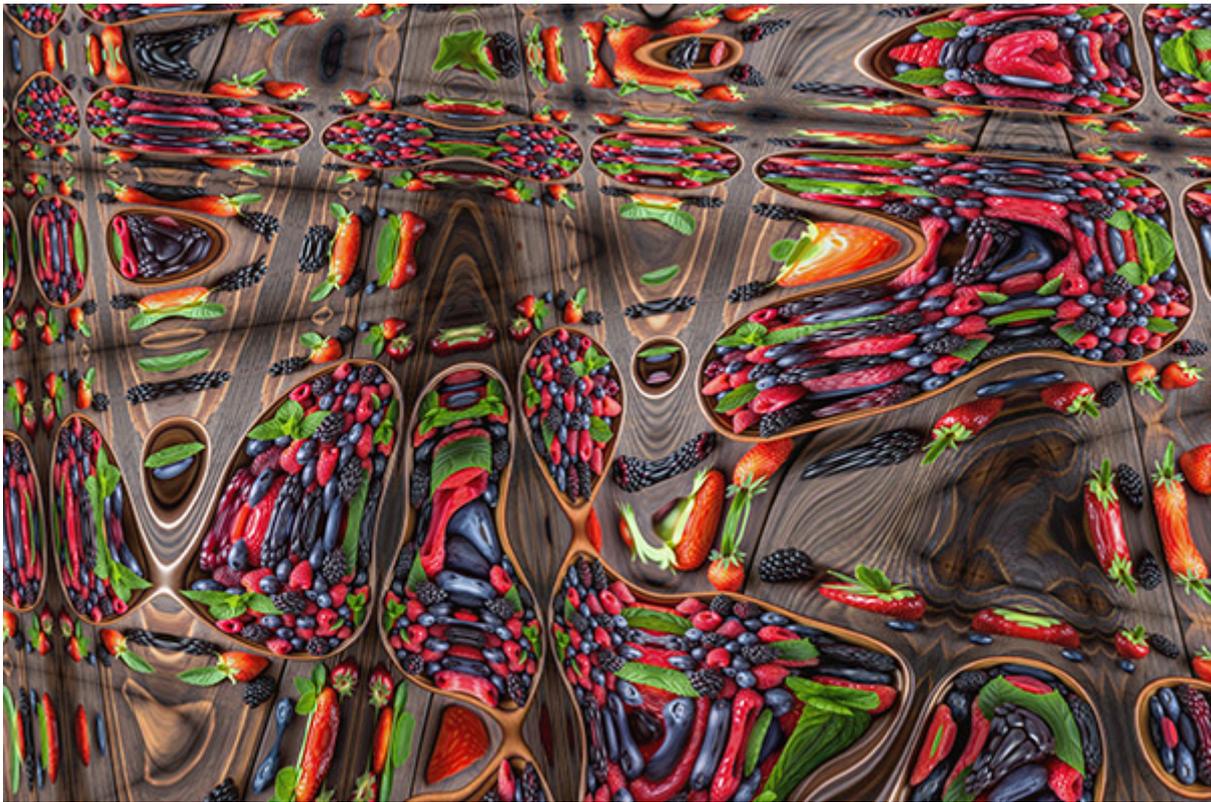
Wave Effect

Number of Generators (1-999). Number of wave formation centers.

Min/Max Wave Height (1-999). The range within which the distance between the top and bottom points of the wave varies.

Min/Max Wave Length (1-999). The range over which the distance between wave crests varies.

Horizontal Scale (1-100). Changing the scale of waves horizontally.

Vertical Scale (1-100). Changing the scale of waves vertically.

Wave Type. In the drop-down list, select the wave form: Square, Triangle or Sine.

Edge Type. In the drop-down list, select the method for filling areas around the effect on the image edges:

> **Repeat** - filling with repeating edge pixels,
> **Wrap Around** - filling with fragments that are outside the image,
> **Mirror** - filling with mirrored fragments.

Random Seed (0-100). The parameter randomly changes the position of the waves.

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

DROP SHADOW

The **Drop Shadow** effect adds a perspective shadow to the selected area.
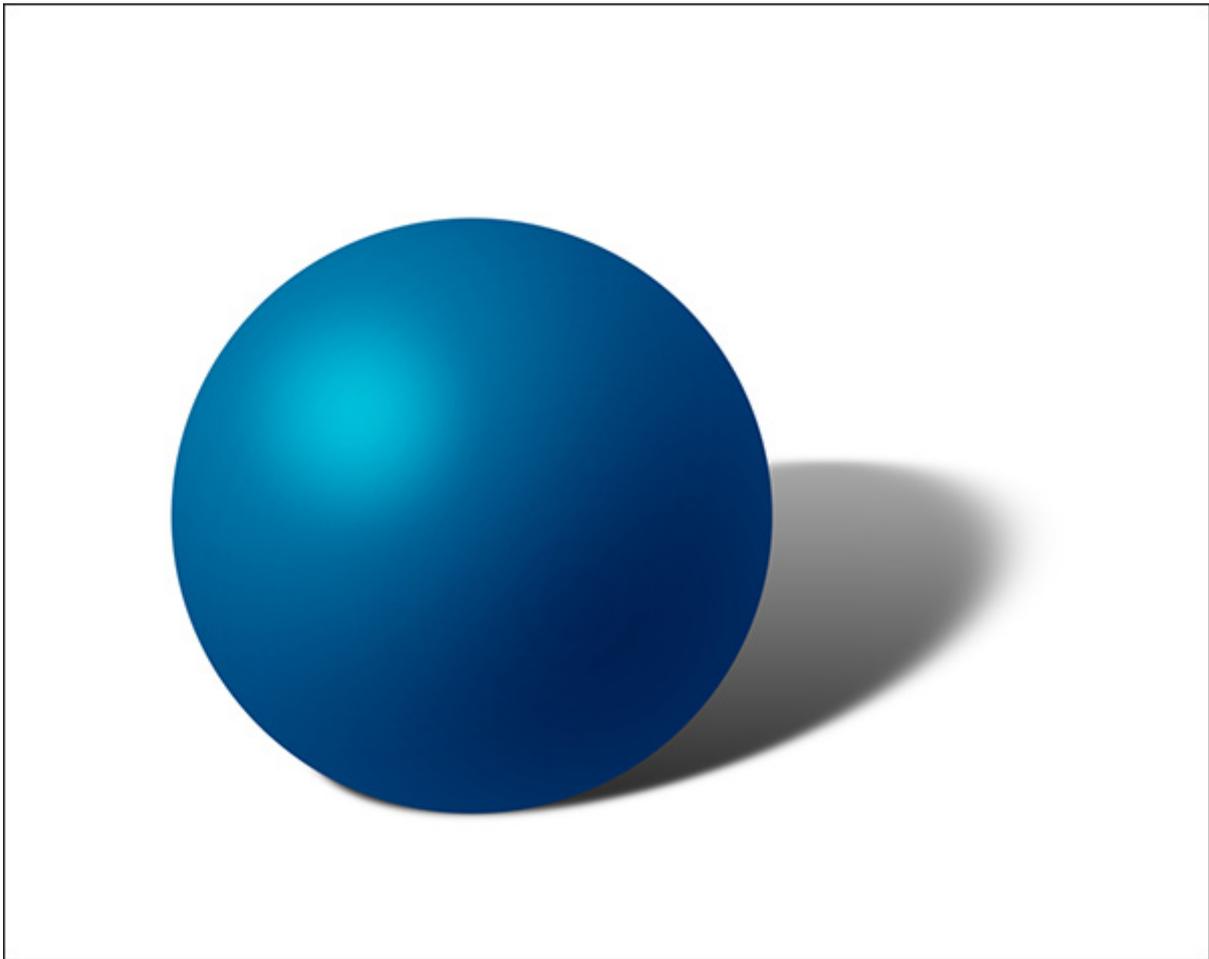
Drop Shadow

Effect Parameters:

Opacity (0-100). The parameter determines the transparency of the effect.
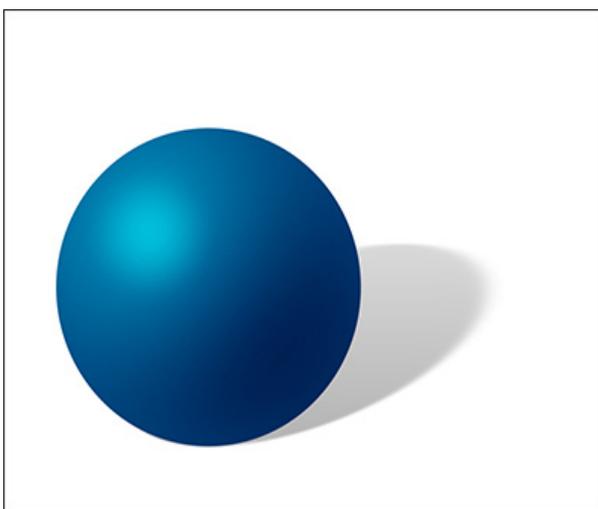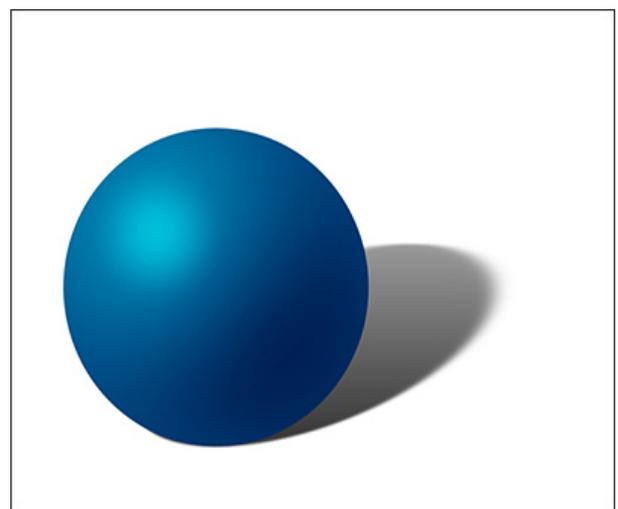
Opacity = 30   Opacity = 80

Color. Call the Select Color dialog by clicking on the color plate.
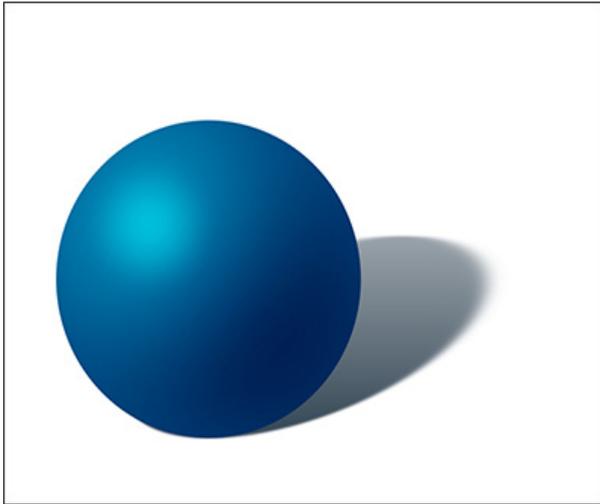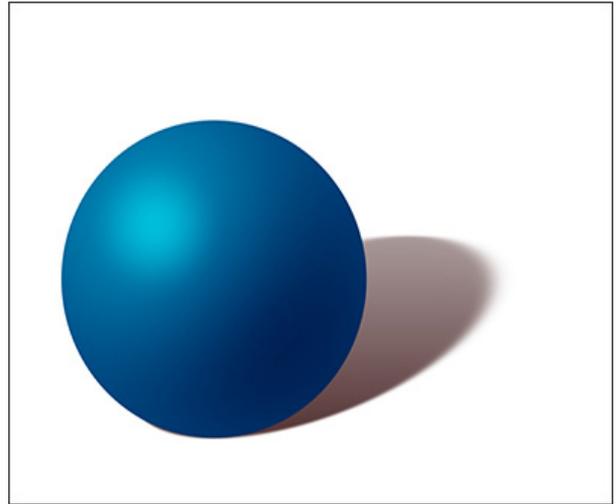
Navy-Blue Shadow   Dark Red Shadow

Fading (0-100). The parameter determines at what distance from the object the shadow become transparent.
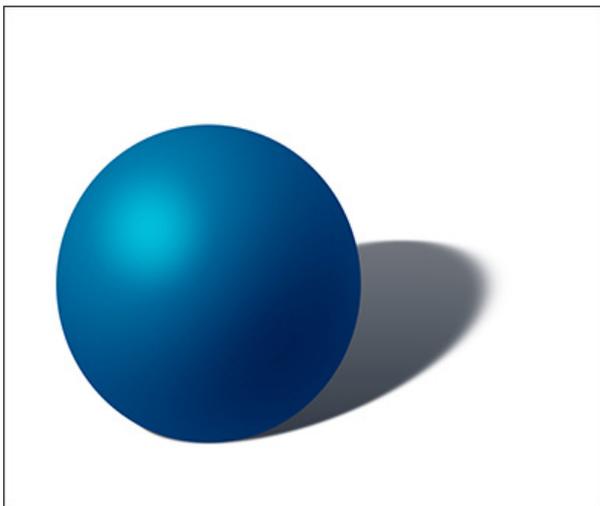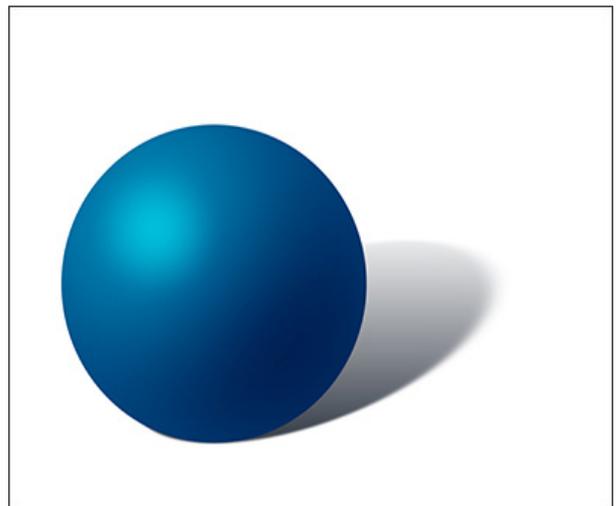
Fading = 30   Fading = 90

Angle (0-360). The parameter specifies the position of the light source. Depending on the parameter value, the position of the shadow changes.
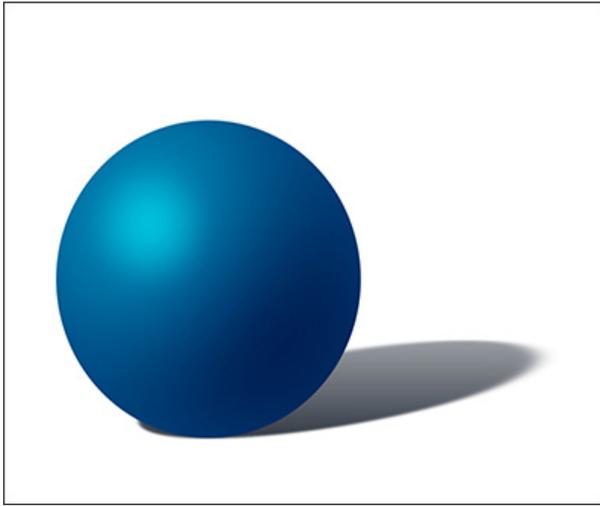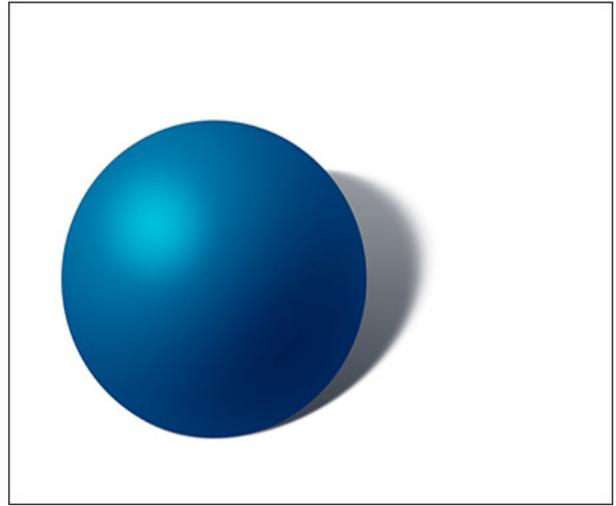
Angle = 110	Angle = 160

Altitude (0-90). The parameter regulates the height of the light source. The higher the value, the longer the shadow.
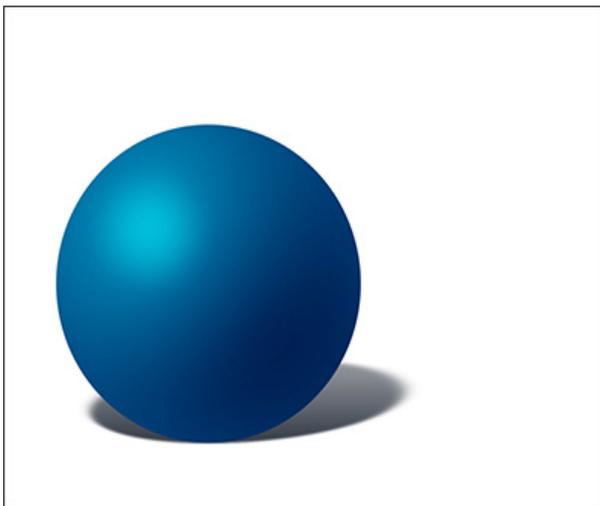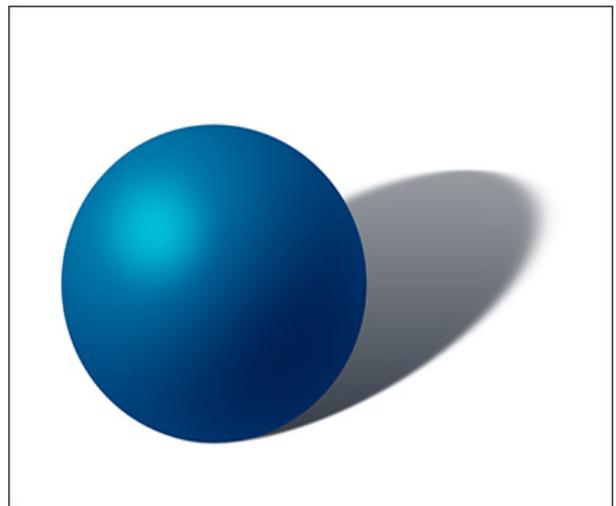
Altitude = 20	Altitude = 50

Blur (0-100). The parameter determines the blurriness of the effect. The higher the value, the more blurred the boundary of the shadow.
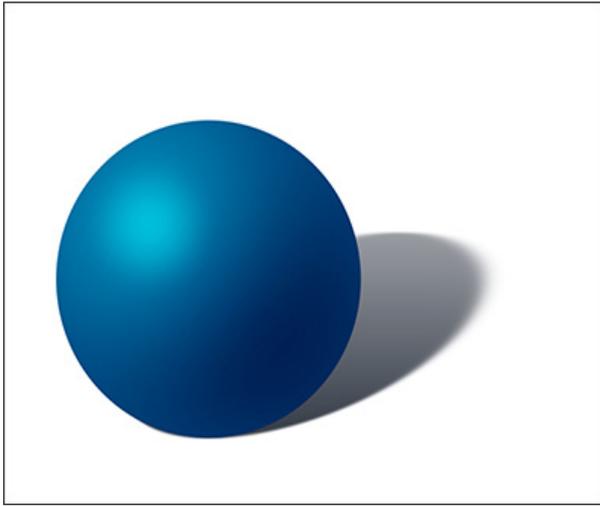
Blur = 10
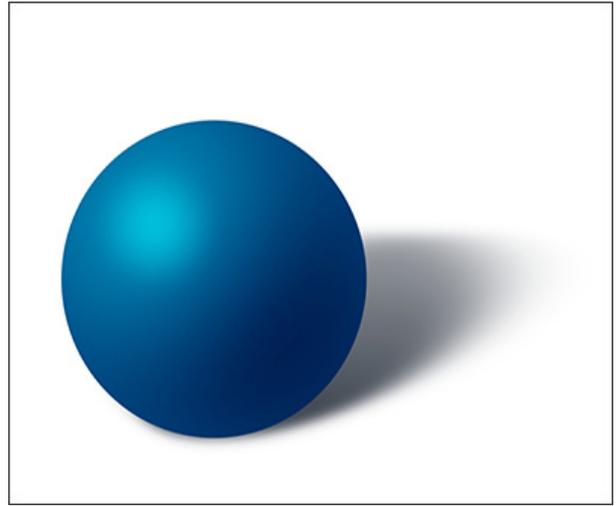
Blur = 50

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

GLAMOUR EFFECT

The **Glamour** effect is designed for processing portrait photos. It allows you to brighten and even the skin tone, get rid of wrinkles, conceal minor flaws, etc.

Glamour Effect

The effect has the following controls:

Colors. This field includes a set of colors that will be used for processing an image.
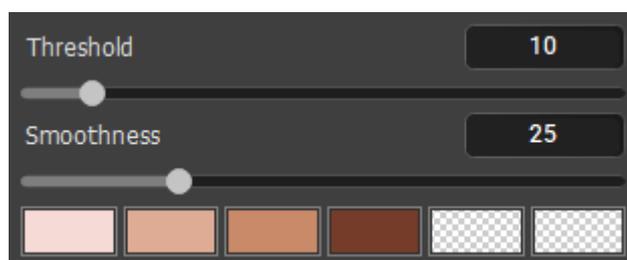
Color Set

This set has 6 color squares. By default these color squares are empty. If you start image processing with default settings, there will be no changes.

Click within an empty square, the pointer will be transformed into an eyedropper, and pick a color from the image with a left-click. This square will display the chosen color.

To change the color of the square, left-click it and choose a color from your image.

To delete a color and clear the square, right-click the square. The square will return to the default state.

The **Threshold** parameter defines colors that will be used for processing. At minimum value of the parameter only the colors from the color set are involved into the process. If you increase the value of the parameter the colors similar to the colors of the set will change, too. The higher the value of the parameter, the more colors will be changed.

The **Smoothness** parameter softens and blurs the image by reducing the color contrast between the neighbouring pixels.

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

GLITCH ART

The **Glitch Art** effect brings digital noise and distortions giving the impression of an allegedly spoiled image. In reality, such interferences appear due to errors in the reproduction of digital recordings, technical failures, or physical damage of a device. Now this effect is achieved intentionally. This visual technique is used to increase the aesthetic value of the pictures and provides an added impact on a viewer.

Glitch Art

The effect parameters are presented in two tabs: **Interferences** and **Stripes and Shifts**.

Interferences tab

Channel Shift. The parameters of this group separate and shift the color components of the image, forming additional color outlines (the so-called 3D anaglyph effect).

Red. Shift of the red channel.

Green. Shift of the green channel.

Blue. Shift of the blue channel.

| Red Channel | Green Channel | Blue Channel |

Scan Lines. Raster lines that simulate an old TV noise effect.

Blend Mode: **Overlay** or **Soft Light**. The mode affects the degree of contrast between the lines and the image.

Overlay   Soft Light

Thickness. Thickness of the scan lines.

Thickness = 5

Thickness = 20

Sharpness. Sharpness of the edges of the lines.

Sharpness = 0

Sharpness = 50

Intensity. The degree of visibility of the lines. At 0, there is no scan line effect.

Intensity = 25

Intensity = 75

Noise. Adding digital noise and film grain to the image.

Strength. The degree of visibility of noise.

| Strength = 0 | Strength = 100 |

Stripes and Shifts Tab

Size and Position. A group of the parameters responsible for the geometry of the stripes.

Min/Max Height. Range of change of the height of the stripes.

| Min/Max Height = 1/10 | Min/Max Height = 50/100 |

Min/Max Length. Range of change of the length of the stripes.

Min/Max Length = 20/30   Min/Max Length = 190/200

Displacement. Shift amount (for simple and inverted stripes).

Displacement = 0   Displacement = 15

Simple Shifts. The number of stripes created by displaced rectangles.

Simple Shifts = 60   Simple Shifts = 90

Simple Stretches. The number of stripes formed by stretching of rectangles.

Simple Stretches = 60   Simple Stretches = 90

Min/Max Stretch. Range of change of the length of the stretches.
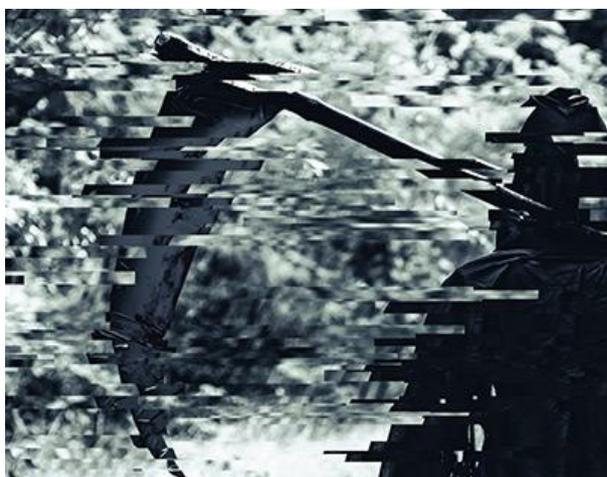
Min/Max Stretch = 12/12   Min/Max Stretch = 14/15

Inverted Shifts. The number of stripes with color inversion.

Inverted Shifts = 40   Inverted Shifts = 60

The **Vertical** check-box enables vertical effects instead of horizontal ones.

Vertical Check-Box Is Disabled   Vertical Check-Box Is Disabled

The **Random Seed** button generates a different distribution of stripes in the image.

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

HIGH PASS

The **High Pass** effect reveals details along the edges, improving the contrast and making the image sharper. The other parts of the image become flat gray (areas without the edge contrast effect).

One of the widespread techniques is applying various blending modes to the layer processed with **High Pass**. The most commonly used are the contrast improvement modes: **Overlay, Soft Light, Hard Light, Vivid Light, Linear Light**. This method is useful for photo enhancement.

High Pass Effect

Radius (0.1-250.0). The parameter defines the area along the edges where the original details will be kept.
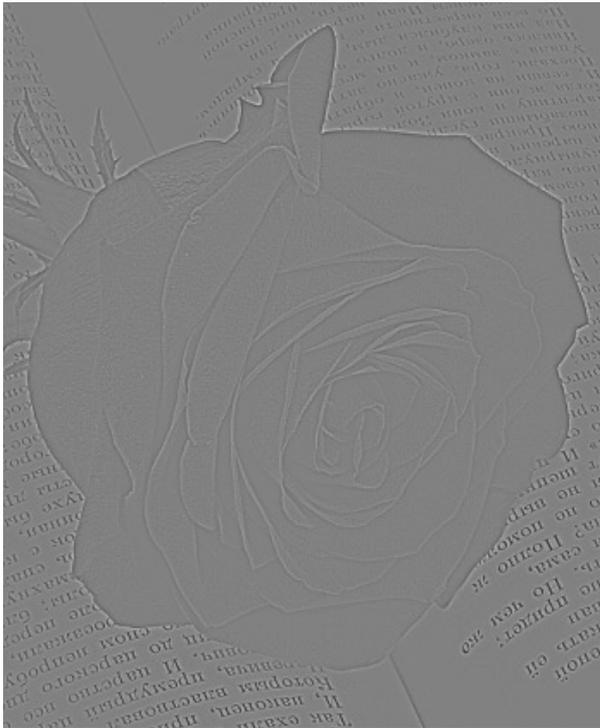
| Radius = 1 | Radius = 10 |

Grayscale. If the check-box is enabled, the layer will be desaturated. It helps to reduce color noise and halo along the edges.
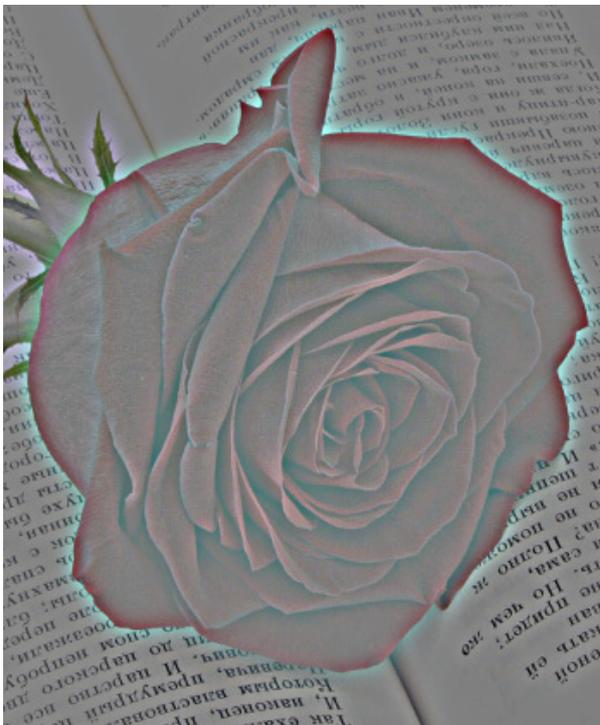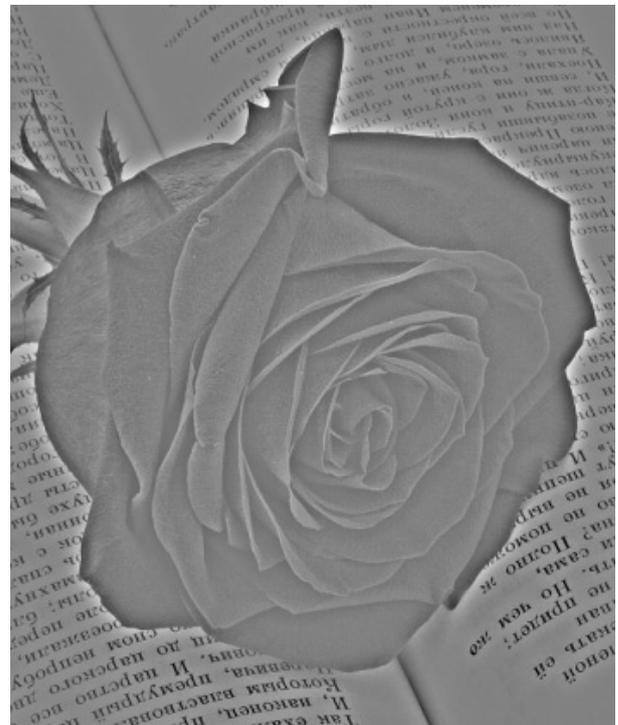
| Check-Box Disabled | Check-Box Enabled |

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

LENS CORRECTION

The **Lens Correction** filter allows you to correct optical distortions and adjust the perspective of an image.

Distortion (-100..100). The parameter straightens lines that are concave or convex relative to the center of the image.

Lens Correction

Vertical Perspective (-100..100). It's a perspective correction that makes slanted vertical lines appear parallel.

Horizontal Perspective (-100..100). It's a perspective correction that makes slanted horizontal lines appear parallel.
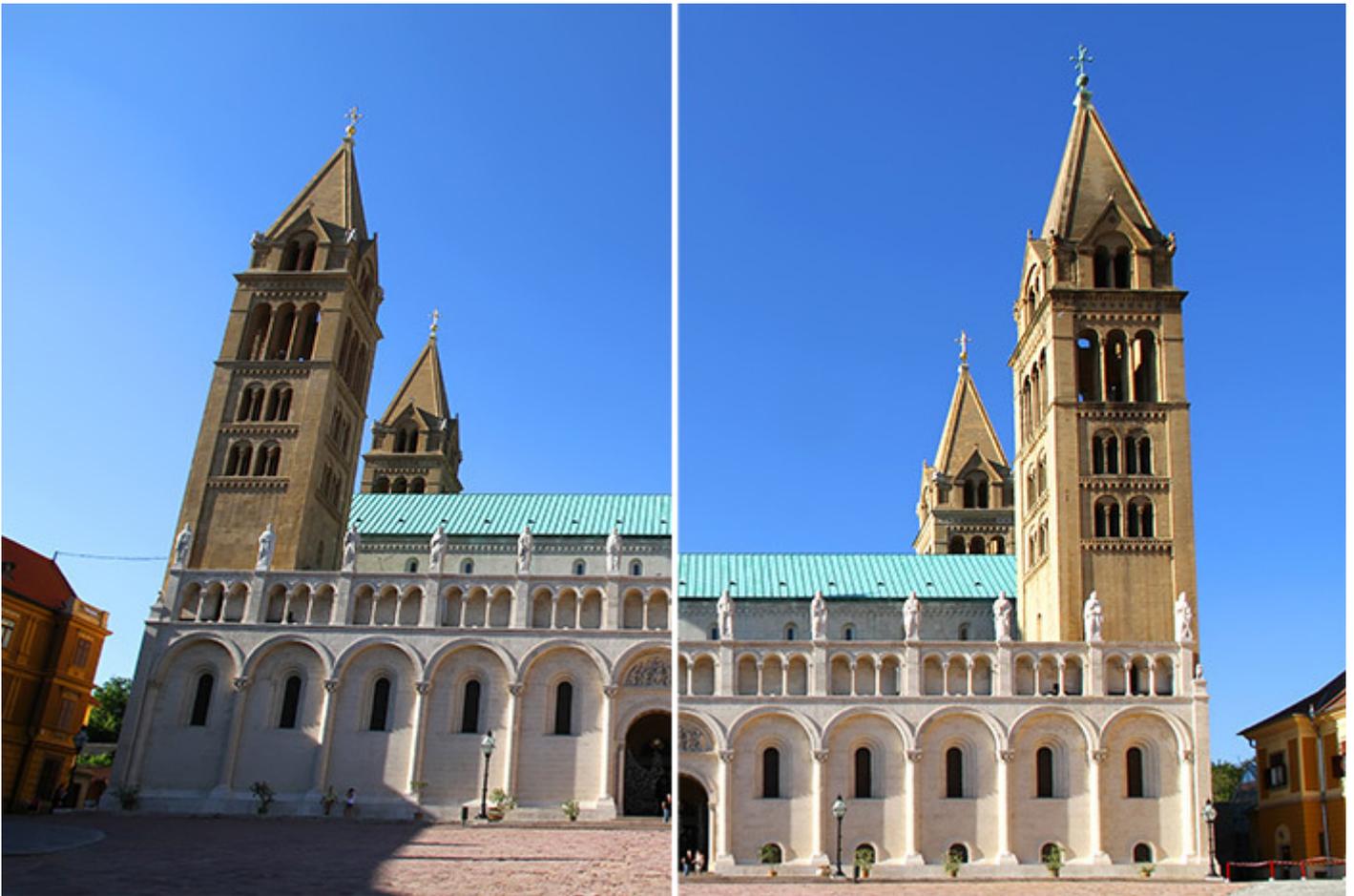
Perspective Correction

Vertical Shift (-100..100). The parameter allows you to move the image up or down.

Horizontal Shift (-100..100). The parameter allows you to move the image left or right.

Scale (50-150). The parameter changes the image scale; it's used to hide transparent areas at the edges of the adjusted image.

Angle (-180..180). Sets the image rotation angle and can be used to correct a tilted horizon.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

NOISE EFFECTS

The **Noise** menu allows to add or remove graininess in your image.

It contains the effects:

> **Add Noise**
> **Dust & Scratches**
> **Median**

To remove digital noise, you can also use the AI-powered **Noise Removal** filter and the **Noise Buster** built-in plugin.

Add Noise. The filter adds noise to an image.

In the **Distribution** section, choose a type of noise distribution: Uniform, Impulse, or Gaussian.

| Uniform Noise Distribution | Gaussian Noise Distribution | Impulse Noise Distribution |

Color Noise check-box. If the check-box is enabled, the color noise will be added to an image. If the check-box is disabled, only the b&w noise will be added.

| Monochromatic Noise | Color Noise |

Amount (0-100). The parameter adjusts the overall amount of noise in an image.

Amount = 10   Amount = 50

Dust & Scratches. The filter reduces noise by blurring dissimilar pixels within the specified radius.

Radius (1-100). The parameter determines the size of the area, within which the dissimilar pixels will be blurred.

Threshold (0-100). The parameter determines how much the pixels must differ in order to get blurred.

Effect Applied

Note: Apply this filter to a small selected area containing defects, as it can reduce not only noise but also image detail.

Median. The filter reduces noise in an image by averaging the color values of similar pixels within a predetermined radius.

Radius (1-100). The parameter sets the radius of the area within which the colors of individual pixels will be compared and averaged.

Original Image

Effect Applied

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

PAGE CURL

The **Page Curl** effect creates a page curl on an image. The color of the curl, its form and the torsion level are adjusted in the **Settings Panel**.
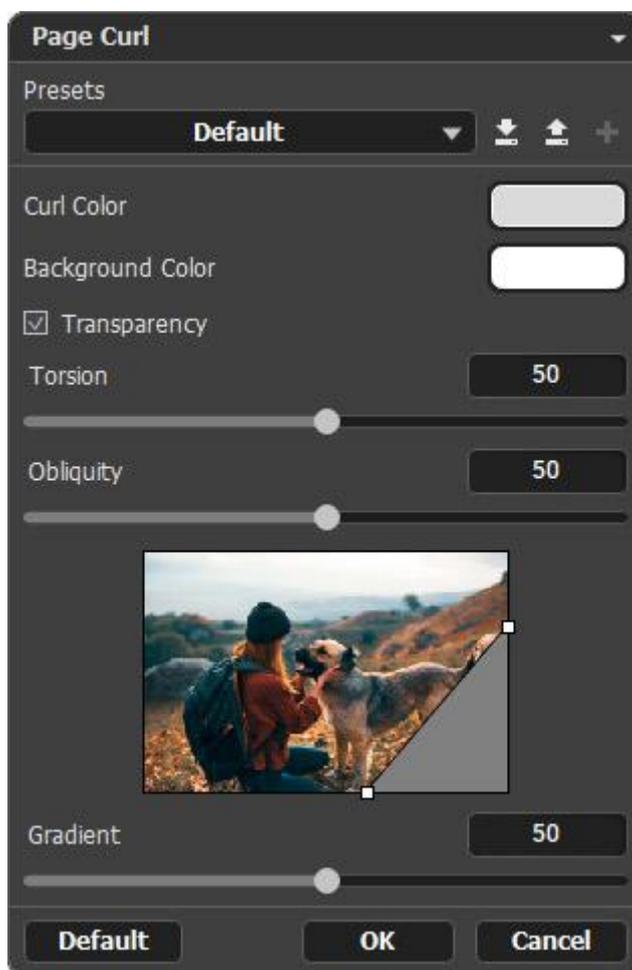
The **Settings Panel** offers the following parameters for this effect.

> **Curl Color**. The color plate allows you to set the color of the curl's underside. Double-click the color plate to choose a color from the **Select Color** dialog box.
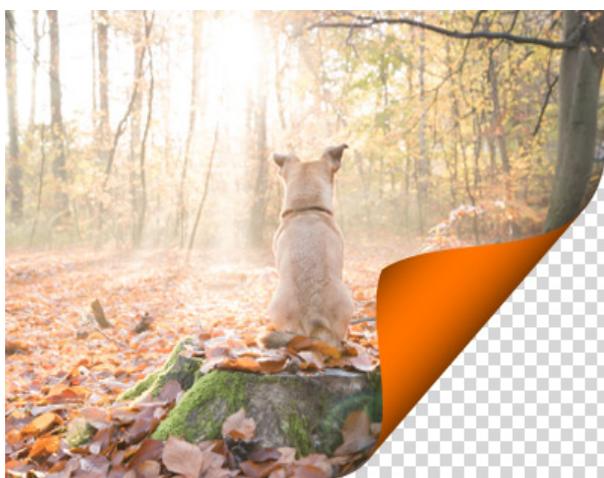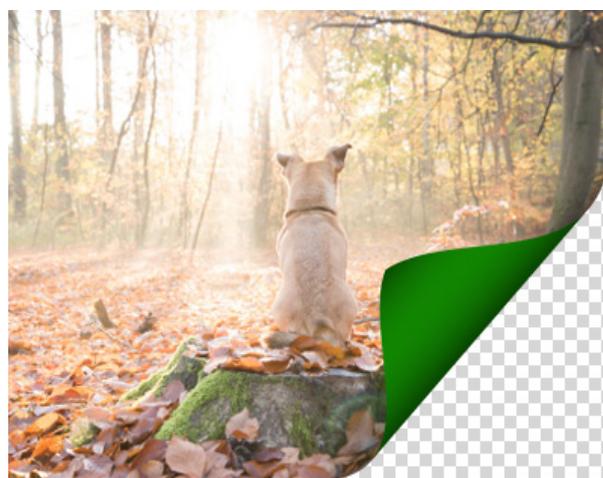
Orange Curl   Green Curl

Background Color. You can change the color of the area under the curl. Double-click the color plate to choose a color from the **Select Color** dialog box.
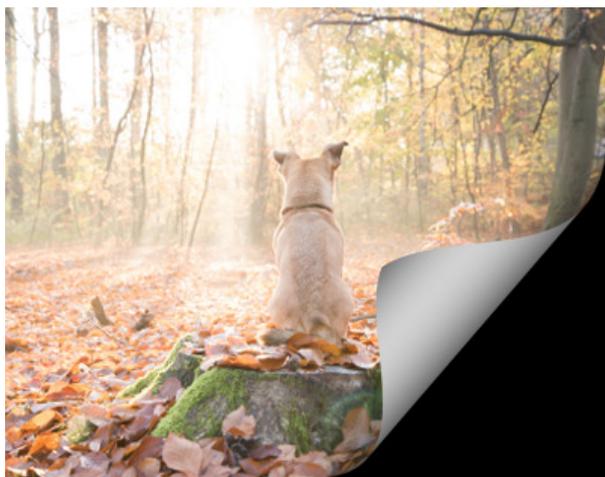
Black Background   White Background

Transparency. When the check-box **Transparency** is enabled, the area under the curl becomes transparent. One may need it on an image with several layers; in this way, for example, another photo can be visible under the page curl.
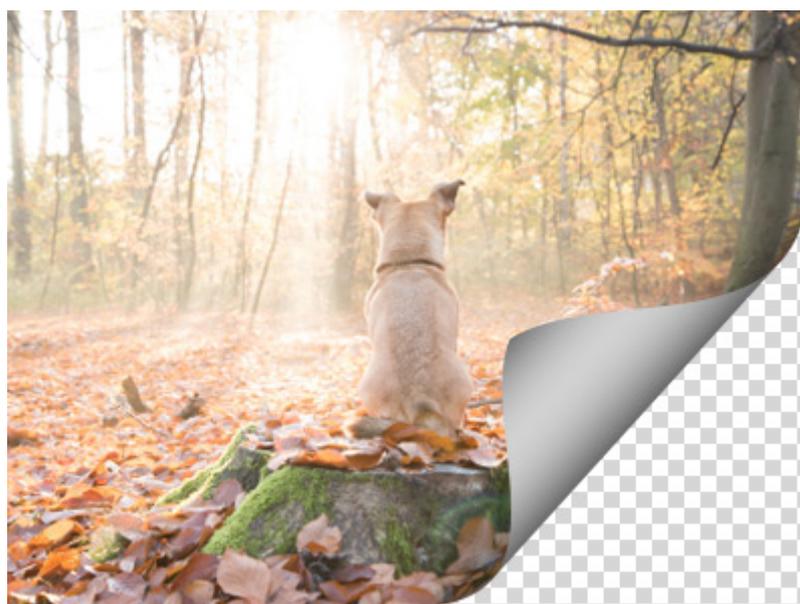
Transparency Check-Box Is Enabled

Torsion (0-100). This parameter sets the level of torsion of the curl. The higher the value, the more twisted the curl is.
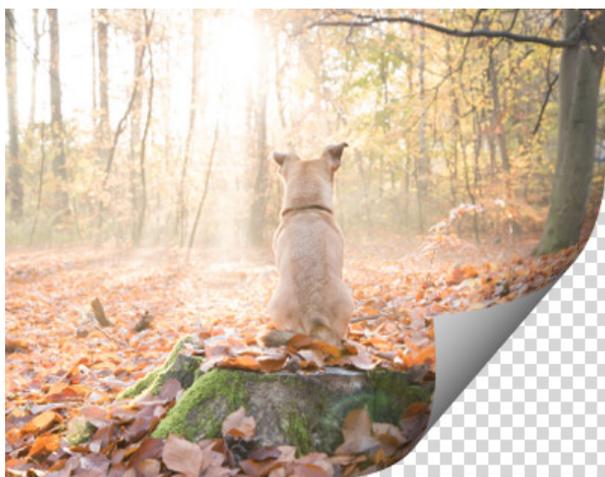
Torsion = 25
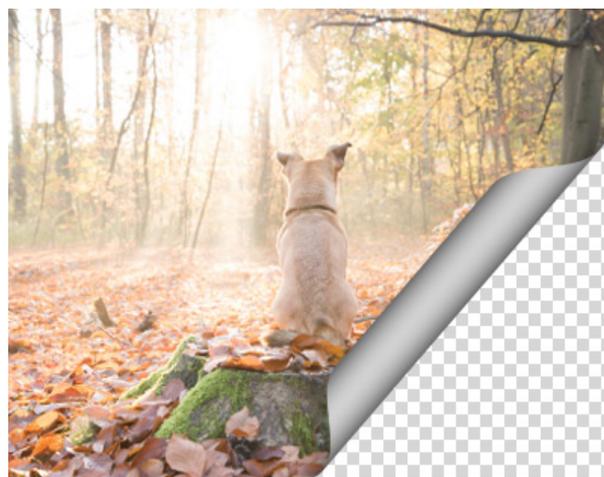
Torsion = 75

Obliquity (0-100). This parameter sets the form of the curl. At values from 1 to 49 the corner of the image curls to form a cone (the vertex is on one end); at 50 the corner curls to form a cylinder; and at values from 51 to 100 it forms a cone again, but the vertex is on the opposite end.
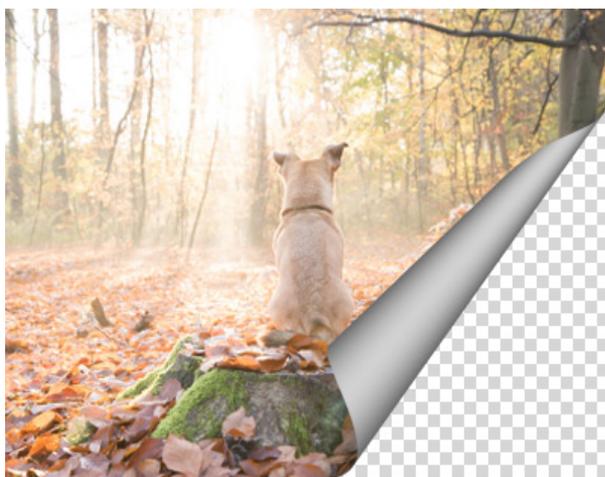
Obliquity = 10
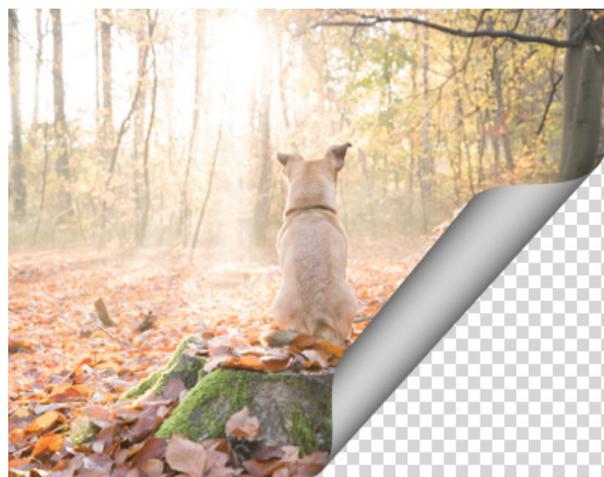
Obliquity = 60

Line with markers on both ends defines the corner to be curled, the position of the curl line and the curling direction. Use the markers to set the position of the line. To move a marker, bring the cursor on it, press the left mouse button and drag the marker to a new position. It is impossible to curl more than half of the image.
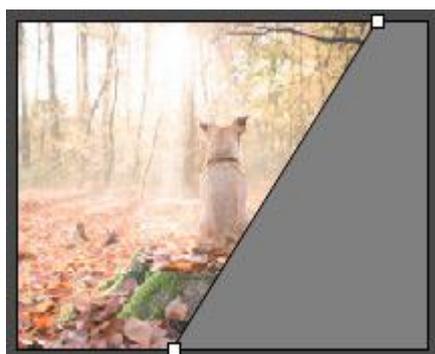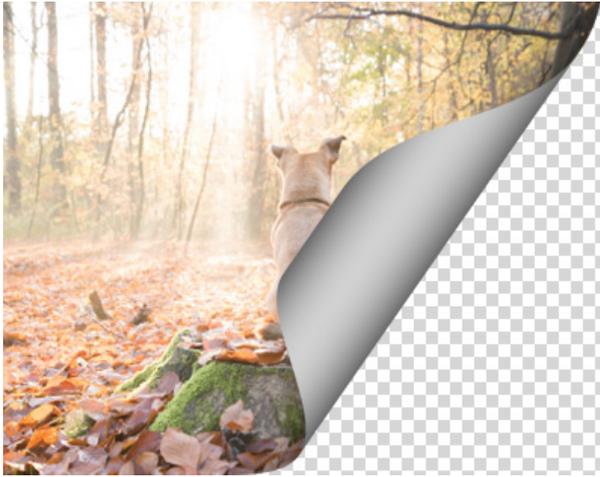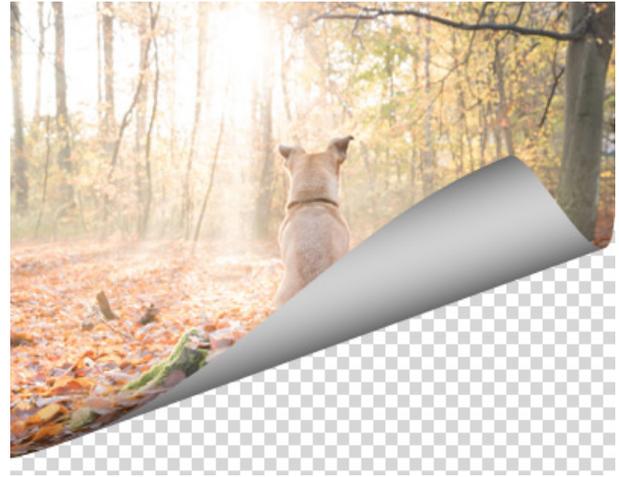
| Vertical | Horizontal |

Gradient (0-100). This parameter adds volume to the curl by adjusting the contrast of mid-tones.
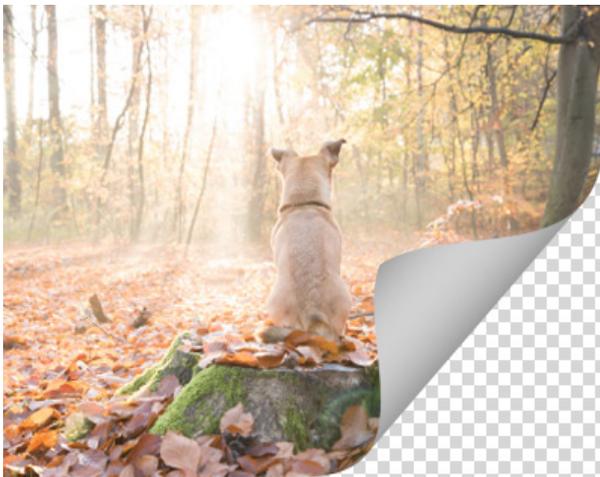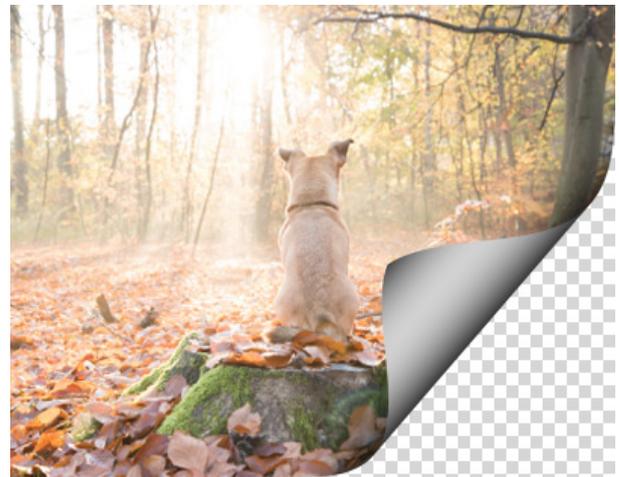
| Gradient = 25 | Gradient = 75 |

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

PIXELATE

The **Pixelate** effects (**Color Halftone**, **Crystalize**, **Mosaic**) merge neighboring pixels of the image into monochrome cells. Let us consider each of them in detail:

Color Halftone. This effect makes an image from dots of cyan, magenta, yellow, and black. By mixing the dots of these four colors, you can get new colors in the image.
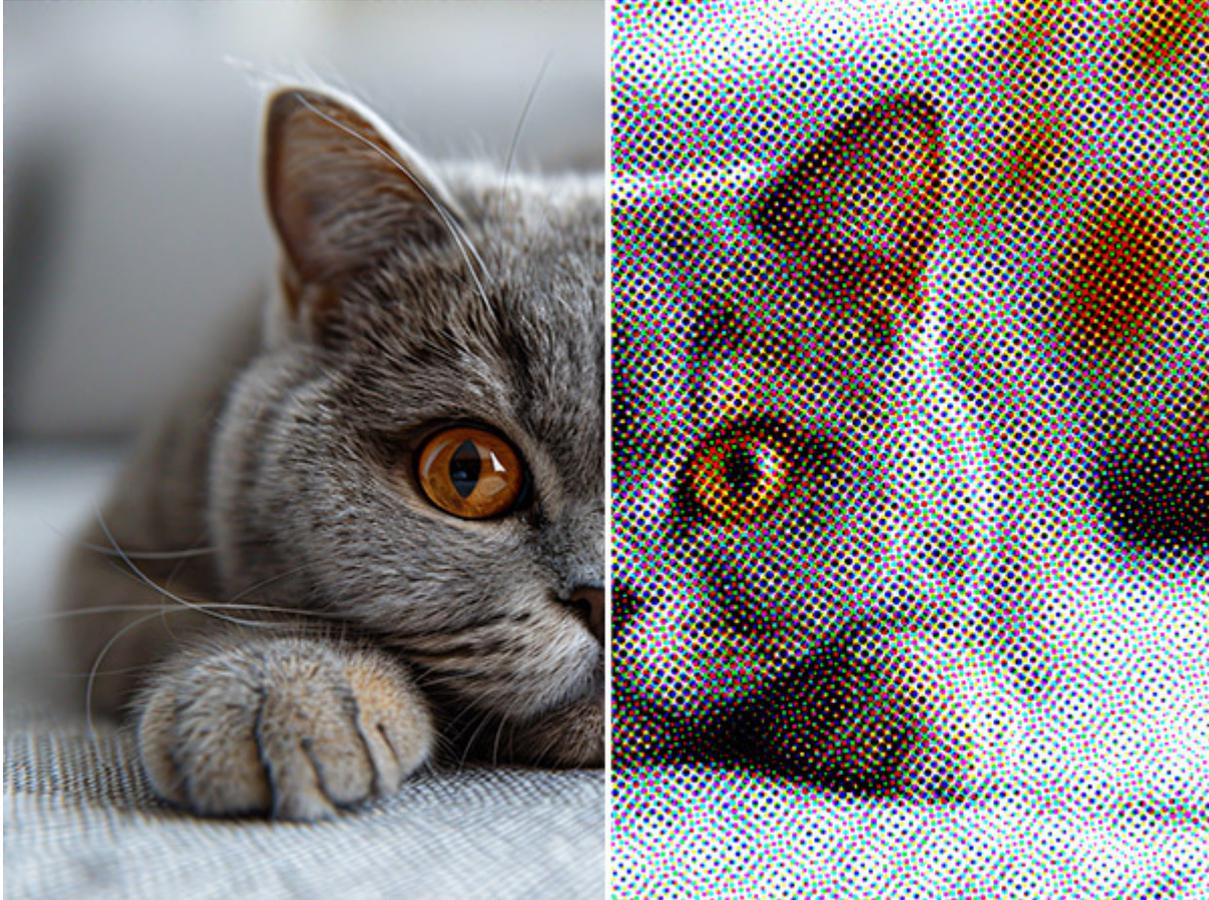
Color Halftone

Radius (4-127). The parameter sets the size of the dots and the distance between them.

Channel (-360..360). The parameters define the angle of inclination of the dots of each color.

Crystalize. The effect groups neighboring pixels into various polygons. The color of each polygon is obtained by averaging the colors of grouped pixels.

Size (5-300). This parameter determines the size of polygons. The higher the value, the larger the polygons.

Small Polygons
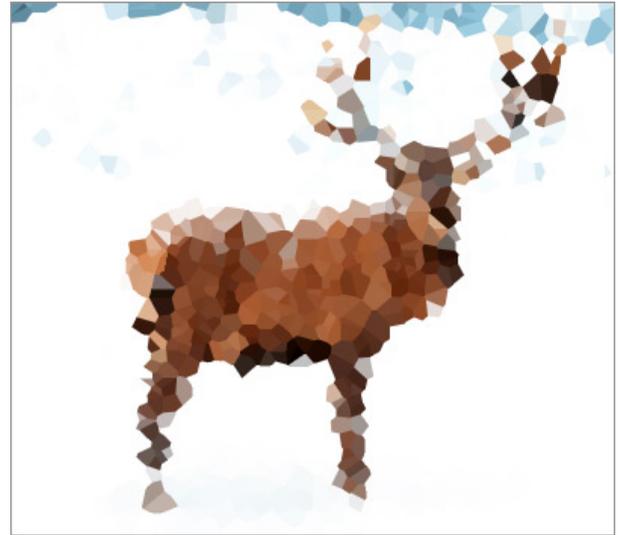
Large Polygons

Mosaic. The effect groups neighboring pixels into square blocks. The color of each block is obtained by averaging the colors of grouped pixels.

Size (2-300). The parameter sets the lateral length of the square blocks in the original pixels.
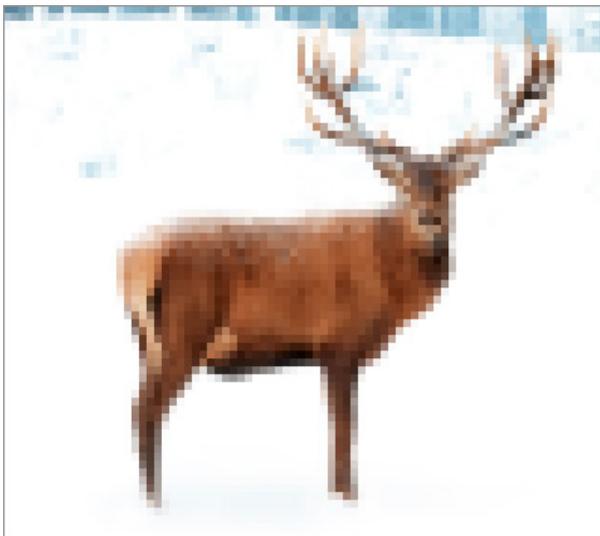
Small Blocks
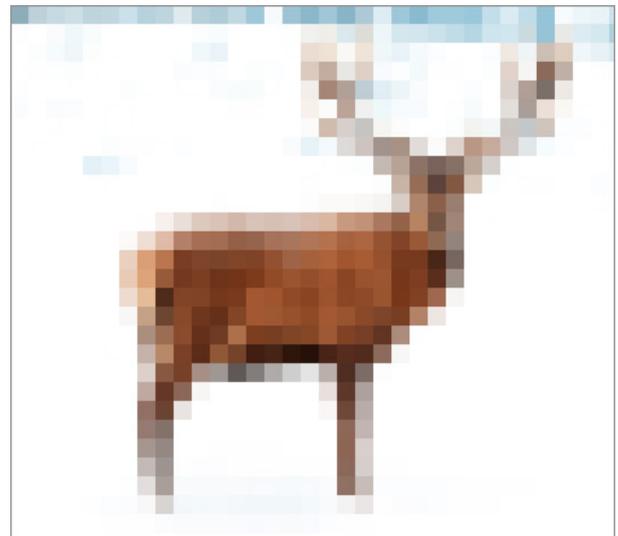
Large Blocks

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

SHADOW & HIGHLIGHT

The **Shadow & Highlight** effect allows to reveal details in bright and dark areas of an image and reduce contrast.

Shadow & Highlight Effect

The effect panel contains two parameters sections.

The **Shadows** section lightens the dark areas of the image.

    Amount (0-100). The parameter determines the intensity of lightening of dark areas.
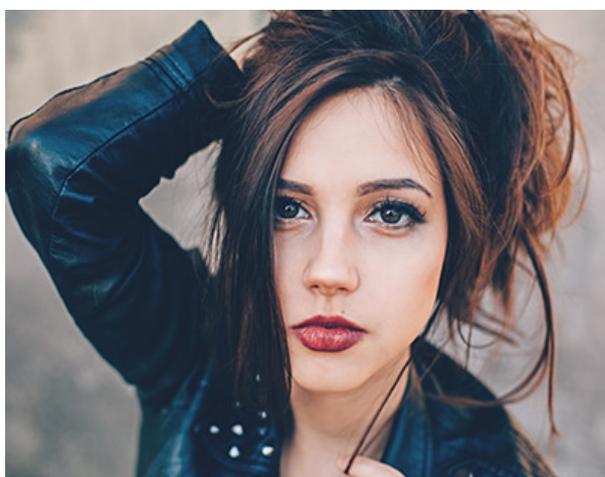
Amount = 25
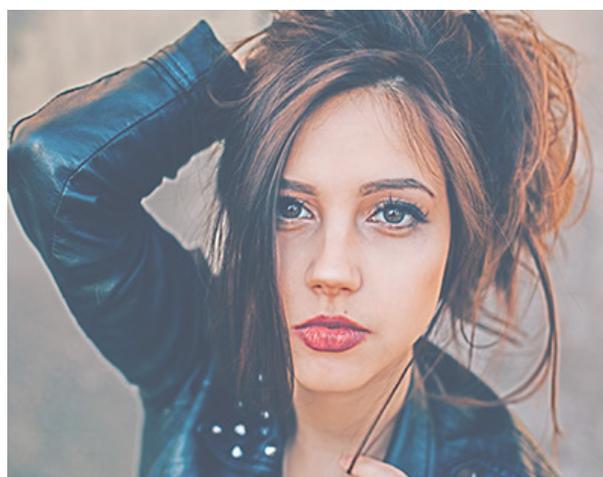
Amount = 75

Range (0-100). The parameter determines the range of tones that are modified. Smaller values restrict the adjustments to the darker areas. Larger values increase the range of tones to be adjusted.

Range = 10   Range = 100

Radius (0-100). The parameter sets the width of the area around the pixel used to determine whether it is in the shadow or highlight.

Radius = 10   Radius = 50

The **Highlights** sections allows to darken light areas.

Amount (0-100). The parameter controls the amount of darkening of light areas.

Amount = 25   Amount = 75

Range (0-100). The parameter determines the range of tones that are modified. Smaller values restrict the adjustments to the highlights. Larger values increase the range of tones that are adjusted.

Range = 10   Range = 100

Radius (0-100). The parameter sets the width of the area around the pixel used to determine whether it is in the shadow or highlight.

Radius = 10

Radius = 50

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

SHARPEN EFFECTS

Using the **Sharpen** menu, you can increase the sharpness and enhance the image detail. It includes the effects: **Sharpen** and **Unsharp Mask**.

The **Sharpen** improves the sharpness of the image by increasing the contrast of individual pixels.

> **Amount** (0.0-30.0). The parameter determines the amount of contrast enhancement. When increasing the parameter, light pixels become lighter, while the dark ones become darker.

Sharpen Effect

The **Unsharp Mask** effect increases the contrast of the edges in the image while leaving other areas untouched. The program compares the resulting image with its blurred copy and if the pixel of the image contrasts with the corresponding pixel of the blurred copy, the contrast is increased; otherwise, the pixel stays unchanged. The program processes all image pixels in this way.

> **Radius** (0.1-250.0). The parameter indicates the number of pixels around the pixel to be corrected (that is the sharpen contour size).

> **Contrast** (1-500). The parameter controls the amount of sharpening.

> **Threshold** (0-255). This parameter determines the size of the areas to be sharpened. At smaller values, the **Contrast** parameter affects even the individual pixels. At higher values, the parameter affects only the sharpness of distinguished boundaries.

Unsharp Mask Effect

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

STYLIZE

The effects in the **Stylize** menu allow you to imitate different styles on your images. These filters have no parameters, they are automatically applied to an image.

> **Find Edges**
> **Solarize**

Find Edges. The effect transforms the image by highlighting the edges with darker lines on a white background.

Find Edges

Solarize. The effect combines a negative and a positive image, simulating photographic solarization. Light areas will be inverted (become negative), dark areas will remain unchanged.

Solarize Effect

TEXTURE FILL

The **Texture Fill** effect allows you to fill a layer or selection with a selected pattern.

Texture Fill

Fill Parameters:

Method. Select the texture overlay method from the drop-down list:

Repetition
Reflection
Random
Alignment

Blend Mode. Choose the method of blending texture with the processed layer. The program provides 27 blending modes. You can learn more about them here.

Opacity (1-100). Texture transparency in relation to background colors. The lower the value, the paler the fill colors and the stronger the interaction with the background colors.

Scale (10-400). Texture pattern size.

Horizontal Shift (0-100). Horizontal fill offset.

Vertical Shift (0-100). Vertical fill offset.

Angle (-180..180). Texture rotation angle.

Texture Library contains all available textures.
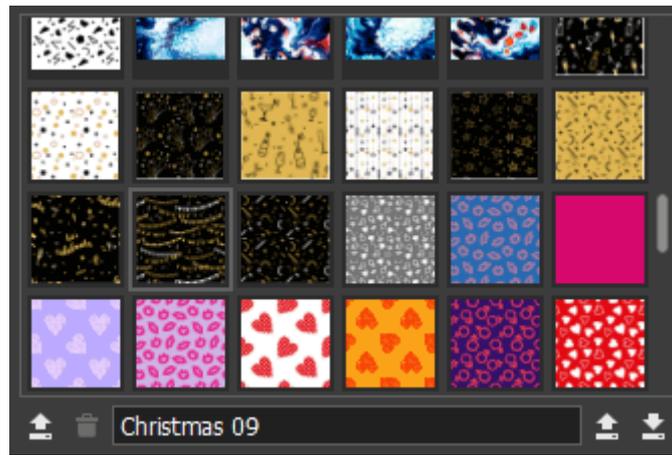
Texture Library

Below the texture list, there are the following elements (for custom textures):

Add Texture ⬆. Load a image to be used as a texture.

Delete Texture 🗑. Remove the selected user texture from the library.

Texture Name. Click the field to make it editable, enter a new texture name, and press `Enter` to apply it.

Import Library ⬆. Load a texture library from the disk (a *.brush_textures* file).

Export Library ⬇. Save a texture library into a *.brush_textures* file.

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

TWO KEYS

The **Two Keys** effect allows you to transform an image (change color tints, replace colors, adjust contrast and brightness etc.) using two key colors.

Two Keys Effect

The effect has the following controls that are represented by two color boxes:

Original Key Colors

In the **Black Point** color plate choose a color that will be used as a black key. In the **White Point** color plate choose a color that will be used as a white key. By default the corresponding colors are chosen, and your image is in its original state.

How to define the other key colors:

- Click the color plate (the pointer will transform into an eyedropper), choose the necessary color on the image and left-click it. The color box will change its color to the selected one.

- Double-click the color plate to open the **Select Color** dialog.

New Key Colors

Note: The color of the black point cannot be lighter than the color of the white point and vice versa.

As a result, all colors that are darker than the black key will shift to the black color; all colors that are lighter than the white key will shift to the white color.

You can also set only one key color (black key or white key). If you define only the black key, the dark colors will shift to the black color, while the light colors will not change.

Please note, that the lighter the black key color is, the darker the image will be; the darker the white key color is, the lighter your image will be.

Note: If you don't want to change the color shades on your image, use the color grey as the key color (in this case the color components (green, red and blue) are equal).

Two Keys Effect

If the **Fixed Preview Area** check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the area visible in the **Image Window**.

Click **Default** to restore the original settings.

Click **OK** to apply the changes to the image and close the effect dialog box.

Click **Cancel** to close the dialog box without applying changes.

BUILT-IN PLUGINS

Some popular AKVIS plugins are available in AliveColors image editor (**Effects -> Built-in Plugins**). These filters expand the already impressive capabilities of AliveColors even further.

You can also add the AKVIS plugins or third-party tools as external plugins to the image editor.

EXTERNAL PLUGINS

AliveColors is a powerful tool for editing and correcting photos.

You can extend the editor's functionality by adding external third-party plugins (except the Linux version).

Proceed as follows to add the plugins to **AliveColors** on Windows and Mac:

- Open the **Preferences** dialog box by clicking ⚙ in the upper right corner of the AliveColors window or using the **File -> Preferences...** command.
- Go to the **Filters & Plugins** tab. In the **Plugins Directory** field, browse the folder with the plugins (the **.8bf** file on Windows, the plugin file on Mac). To add a new folder, click ➕ and select the desired directory.

  Actually, you can use any folder which contains the plugin files:

  - A folder created specifically for this purpose: for example, "My Plugins". Copy all the plugin files into this folder to make them appear in the effects list.
  - A native plugin folder. For example, on Windows, AKVIS plugins are installed into C:\Program Files\AKVIS.
  - A plugins folder of another graphics editor. You may need this option if you're using several graphic editors on the same machine.
    For example, to add the Photoshop CC plug-ins to AliveColors choose the folder:

    Windows: C:\Program Files\Common Files\Adobe\Plug-Ins\CC;
    Mac: Macintosh HD/Library/Application Support/Adobe/Plug-Ins/CC.

  You can choose several folders, all of them will be active. All selected paths are visible in the drop-down list. To remove the folder, select it in the list and click 🗑.

  Click **OK** to apply changes.

- Restart AliveColors and call the plug-in from the menu **Effects**.

List of compatible **AKVIS** plugins for Windows and Mac (some features are available in AliveColors):

AKVIS AirBrush — Airbrushing Techniques on Your Photos (the built-in AirBrush plugin is available).

AKVIS Artifact Remover AI — JPEG-Compressed Image Restoration (also available as the AI-powered filter in AliveColors: **AI -> JPEG Artifact Remover**).

AKVIS ArtSuite — Frames and Effects for Your Photos.

AKVIS ArtWork — Collection of Painting & Drawing Techniques.

AKVIS Chameleon — Photo Collage Creation.

AKVIS Charcoal — Charcoal & Chalk Drawings.

AKVIS Coloriage AI — Add Color to Black and White Photos.

AKVIS Decorator — Resurface and Recolor.

AKVIS Draw — Hand-made Pencil Drawing Effect.

AKVIS Enhancer — Bring Detail To Your Pictures (the built-in Enhancer plugin is available).

AKVIS Explosion — Fabulous Particle Explosion Effects.

AKVIS HDRFactory — High Dynamic Range Images: Brighter than Reality! (the built-in HDRFactory plugin is available).

AKVIS Inspire AI — Artistic Stylization of Images

AKVIS LightShop — Light and Star Effects (the built-in LightShop plugin is available).

AKVIS MakeUp — Retouch Your Portrait Photos! (the built-in MakeUp plugin is available).

AKVIS NatureArt — Bring Nature to Your Photos (the built-in NatureArt plugin is available).

AKVIS Neon — Glowing Drawings from Photos (the built-in Neon plugin is available).

AKVIS Noise Buster AI — Digital Noise Reduction (the traditional algorithm is accessible in the built-in Noise Buster plugin; the AI-based filter is available in **AI -> Noise Removal**).

AKVIS OilPaint — Oil Painting Effect.

AKVIS Pastel — Turn Photos into Pastel Paintings.

AKVIS Points — Apply Pointillism Effect to Your Photos (the built-in Points plugin is available).

AKVIS Refocus AI — Focus Improvement & Blur Effects (one of the options is available in **AI -> Motion Deblur**).

AKVIS Retoucher — Image Restoration Software.

AKVIS Sketch — Turn Your Photos into Pencil Sketches.

AKVIS SmartMask AI — Save Time on Complex Selections! (the built-in SmartMask plugin is available).

AKVIS Watercolor — Aquarelle Art from Photos.

List of other compatible third-party plugins:

Corel ParticleShop plugins (for *Windows* and *Mac*)

Auto FX Software plugins (for *Windows* and *Mac*)

Topaz Labs plugins (for *Windows* only)

Nik Collection plugins (for *Windows* only)

Exposure Software (ex **Alien Skin Software**) plugins: Exposure, Snap Art, Eye Candy (for *Windows* only)

Imagenomic plugins (for *Windows* only)

To get the information about the version and license status of any plugin, select in the menu: **Help -> About Plugins**.

BUILT-IN PLUGINS

In the **Effects -> Built-in Plugins** menu, some popular AKVIS plugins are available, which significantly expand the capabilities of the **AliveColors** image editor:

AirBrush (airbrush painting effect in Monochrome and Original Colors modes)

Enhancer (Improve Detail, Tone Correction, and Prepress Processing modes)

HDRFactory (Creating HDR Images, Ghost Removal, Local Correction)

LightShop (light effects, Sparkle Brush)

MakeUp (skin retouching with a tone mask, portrait retouching tools)

NatureArt (Rain, Water, Clouds, Rainbow, Lightning, Frost, and Aurora effects)

Neon (glow lines drawing effects)

Noise Buster (traditional noise reduction algorithm)
The AI-based filter is available in the menu: **AI -> Noise Removal**.

Points (pointillism painting effect)

SmartMask (Magic Brush, Chroma Key, Refine Edges)

You can also install AKVIS plugins and third-party plugins as external modules.

AIRBRUSH BUILT-IN PLUGIN: AIRBRUSH DRAWING EFFECT

The built-in **AirBrush** plug-in allows you to imitate the technique of spray paint and transform a photo into an airbrush painting.

Airbrushing is a painting technique that involves spraying a mist of dye, ink or paint through an air-operated tool. They are typically associated with automotive and graffiti art; however, airbrushes are often used in fine art. Spray paintings are characterized by exceptional smoothness and high detail.

The airbrush effect is fully adjustable with the parameters.

In the built-in **AirBrush** plugin, two color modes are available:

> **Original Colors**. Creating a photorealistic image using the original colors.

Original Colors

> **Monochrome**. Creating a monochrome drawing composed of one color and its shades.

Monochrome

The plugin is equipped with a set of **Presets** that allow you to make instant changes to your image with one click of a button. Presets can be used as-is or modified as needed.

Try the AKVIS AirBrush software (available as a plugin and as a standalone program) to get more options for converting a photo into an airbrush drawing. The original software offers 3 modes: **Original Colors**, **Monochrome**, and **Multicolor**.

ENHANCER: IMPROVE DETAIL, TONE CORRECTION, PREPRESS PROCESSING

The built-in **Enhancer** plugin is designed to improve the detail of a photograph, correct the dark areas, increase the sharpness of the borders and contrast of images, etc. In AliveColors, the plugin is available as three effects in the **Enhancer** group (three image enhancement modes): **Improve Detail**, **Tone Correction**, and **Prepress Processing**.

The following effects are available in the **Enhancer** menu:

Improve Detail. It allows you to enhance details in light and dark areas of an image. Learn more about the effects settings here.

Improve Detail

Tone Correction. It improves an image through correction of certain color areas. Learn more about the effects settings here.

Tone Correction

Prepress Processing. It allows you to increase the sharpness of borders and the contrast of the entire image before printing or publishing. Learn more about the effects settings here.

Prepress Mode

The **Enhancer** effects are equipped with a set of **Presets** that allow you to make instant changes to your image with one click of a button. Presets can be used as-is or modified as needed.

You can also try the AKVIS Enhancer software (available as a plugin and as a standalone program).

HDRFACTORY: CREATING HDR IMAGES

The built-in **HDRFactory** plugin is designed to create images with high dynamic range.

HDRFactory allows you to get an HDR image by merging several photos taken with different exposures into a composite image. Alternatively, you can apply the HDR effect to a single photo.

HDR feature allows overcoming the dynamic range limitations of current camera technology and makes the scene much more vivid and closer to what our eye can see.

The following features are available in the built-in **HDRFactory** plugin:

 Creating HDR Images. The mode allows producing an image with a high dynamic range. Find more information about the effect options at the pages: Creating HDR Images, Adjustment, and Effects.

HDR Image

 Local Correction. The mode allows performing additional processing of individual areas of an image. Learn more about the Local Correction parameters here.

Local Correction

Ghost Removal. The mode allows removing so-called *ghosts*. These semi-transparent defects sometimes appear when creating an HDR image. Find more information about this feature here.

Ghost Removal

The plugin is equipped with a set of **Presets** that allow you to make instant changes to your image with one click of a button. Presets can be used as-is or modified as needed.

Try the AKVIS HDRFactory software (available as a plugin and as a standalone program) to get more options for creating HDR images and tone correction.

LIGHTSHOP: LIGHT & STAR EFFECTS

The built-in **LightShop** plugin allows adding light effects to an image.

LightShop includes various glow elements for creating light effects. You can move and change each element of the effect as well as the entire effect, adjust the blending mode and the effect area.

The following features are available in the built-in **LightShop** plugin:

Adding Light Effects. Creating complex light effects consisting of several simple elements. Learn more about how to create light effects.

Light Effect

Sparkle Brush . The tool scatters small glowing elements - stars, hearts, flowers, etc. Learn more about the brush.

Sparkle Brush

The plugin is equipped with a set of **Presets** that allow you to make instant changes to your image with one click of a button. Presets can be used as-is or modified as needed.

Try the AKVIS LightShop software (available as a plugin and as a standalone program) to get more options for creating light and star effects.

MAKEUP: PORTRAIT RETOUCHING

The built-in **MakeUp** plugin allows retouching and enhancing portrait photos.

MakeUp automatically eliminates minor defects and smooths the skin, making it look radiant and even-toned. The unique retouching algorithm grants professional results without making the face look unnaturally smooth.

The plugin improves and rejuvenates the skin, without affecting other areas of a photo (eyes, hair, background).
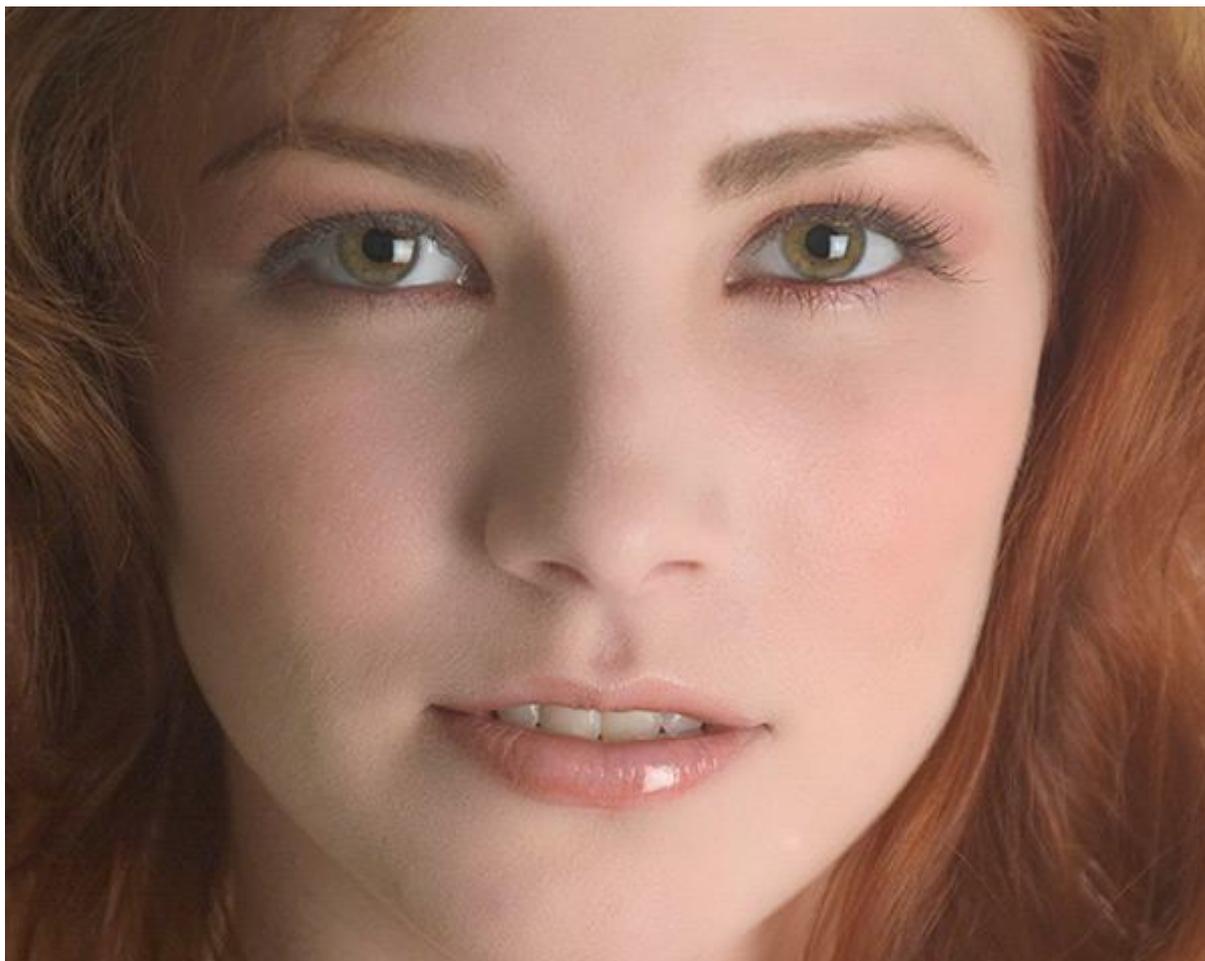
Portrait Retouching

The following features are available in the built-in **MakeUp** plugin:

Skin Smoothing. The plugin automatically recognizes the face and creates a mask on which the skin retouching will be applied. You can edit the selection with these mask editing tools: , , .

Adjust the smoothing effect with the MakeUp parameters.

Mask

Retouching Tools [icon], [icon], [icon], [icon], [icon]. The tools allow to manually remove minor defects. Use them to make final touches and correct the result of skin smoothing. Learn more about the tools.

Retouching Tools

The plugin is equipped with a set of **Presets** that allow you to make instant changes to your image with one click of a button. Presets can be used as-is or modified as needed.

Try the AKVIS MakeUp software (available as a plugin and as a standalone program) to get more portrait retouching features.

NATUREART: NATURE EFFECTS

The built-in **NatureArt** plugin offers a collection of unique effects that imitate natural phenomena.

NatureArt allows you to add the following effects to a photo: **Rain**, **Clouds**, **Rainbow**, **Water**, **Lightning**, **Frost**, and **Aurora**.

Rain. It allows you to add precipitation to an image: from various types of rain (from drizzle to rainfall) up to snow (with certain parameter settings). Learn more about the effect parameters here.

Rain Effect

Water. Using this effect, you can add a water body to a photo. It is also possible to adjust the glare settings to bring the image as close as possible to the given environmental conditions. Learn more about the effect parameters here.

Water Effect

Clouds. The effect allows you to add clouds, fog or smoke to an image. Learn more about the effect parameters here.

Fog Using Clouds Effect

Rainbow. Using the effect, you can add a rainbow to an image. Learn more about the effect parameters here.

Rainbow Effect

Lightning. The effect allows you to add lightning of any size and number to an image. Learn more about the effect parameters here.

Lightning Effect

Frost. This effect allows you to adorn an image with an openwork of frost crystals. Learn more about the effect parameters here.

Frost Effect

Aurora. The effect allows you to embellish the night sky with a unique natural phenomenon - the northern lights. Learn more about the effect parameters here.

Aurora Effect

The plugin is equipped with a set of **Presets** that allow you to make instant changes to your image with one click of a button. Presets can be used as-is or modified as needed.

Try the AKVIS NatureArt software (available as a plugin and as a standalone program) to get more nature effects (including Sun, Fire, Ice, Night Sky, and Snow).

NEON: GLOWING LINES EFFECTS

The built-in **Neon** plugin is designed to apply neon effects to an image. It turns digital photos into bright and vivid drawings, made with luminous lines.

The following features are available in the built-in **Neon** plugin:

Glowing Lines Effect. Converting a photo into a drawing made with luminous lines.

Adjust the parameters of the neon effect.

Neon Drawing

Additional Effects:

Colorizing. This option lets you add a color tint to an image.
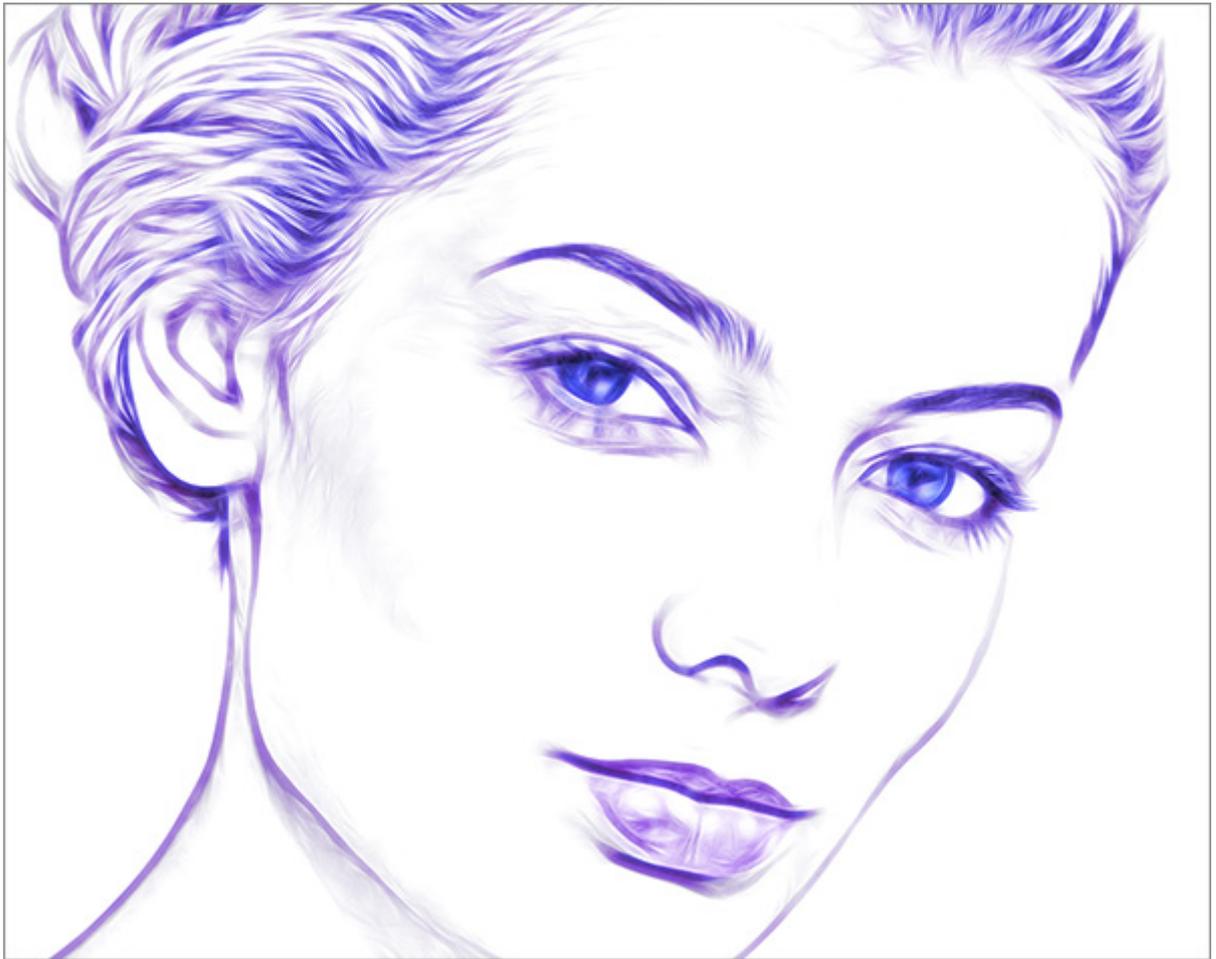
Colorizing with Blue

Deformation. The effect lets adding some distortions to an object.

Deformation Effect

The plugin is equipped with a set of **Presets** that allow you to make instant changes to your image with one click of a button. Presets can be used as-is or modified as needed.

Try the AKVIS Neon software (available as a plugin and as a standalone program) to get more neon effect features (including **Boost** parameters, **Hatching** effect, **Color** adjustment, and **Decoration** options).

NOISE BUSTER: DIGITAL NOISE REMOVAL

The built-in **Noise Buster** plugin allows reducing digital noise in photographs. Digital noise occurs when the camera sensor does not capture the information properly during the shot.

Noise Buster allows eliminating digital noise, reducing the graininess, and getting rid of non-uniform color spots without smearing fine image detail and while keeping the sharpness of the borders.

In the **Effects**, you can find a traditional noise reduction algorithm. The AI-based filter is available here: AI -> Noise Removal.

Find the description of the noise reduction parameters here.

The following features are available in the built-in **Noise Buster** plugin:

> **Digital Noise Reduction** (traditional algorithm). The plugin removes both luminance and color noise on photos.

Digital Noise Reduction

> **Remove Moiré**. The option allows reducing unwanted moiré patterns and removing halftone from scanned newspaper photos.

Remove Moiré

The plugin is equipped with a set of **Presets** that allow you to make instant changes to your image with one click of a button. Presets can be used as-is or modified as needed.

Try the AKVIS Noise Buster AI software (available as a plugin and as a standalone program) to get more options for removing digital noise.

POINTS: POINTILLISM PANTING EFFECT

The built-in **Points** plugin allows transforming photos into paintings in the pointillism technique.

Pointillism is a special way of painting in which small separate dots of pure color are used to form images. It grew out of the Impressionism movement and was used by artists such as Claude Monet, Paul Signac, and George Seurat. Pointillism is based on the optical mixing effect by which the eyes blend dots of pure color placed next to each other in an image.

Pointillism Effect

The plugin is equipped with a set of **Presets** that allow you to make instant changes to your image with one click of a button. Presets can be used as-is or modified as needed.

The pointillism effect is fully adjustable with the parameters.

Try the AKVIS Points software (available as a plugin and as a standalone program) to get more pointillism effect features (including the additional parameters and the **Decoration** options).

SMARTMASK: COMPLEX SELECTION & BACKGROUND REMOVAL

The built-in **SmartMask** plugin allows masking and cutting out parts of photos.

SmartMask lets users quickly and effortlessly create precise selections and isolate an object from the background.

The plugin works equally well with both soft and hard edges of a fragment. With just a few clicks, you can select objects with clearly drawn borders as well as with blurred, translucent edges.

The following features are available in the built-in **SmartMask** plugin:

Magic Brush 🖌. The tool helps you easily select complex objects. It works with color sets: it keeps some colors and deletes others. Fill both lists and draw with the brush along the borders of an object and over the background.
Learn more about the tool.

Magic Brush

Chroma Key. The mode allows you to quickly and precisely remove a monochrome background (usually green or blue). Learn more about the parameters.
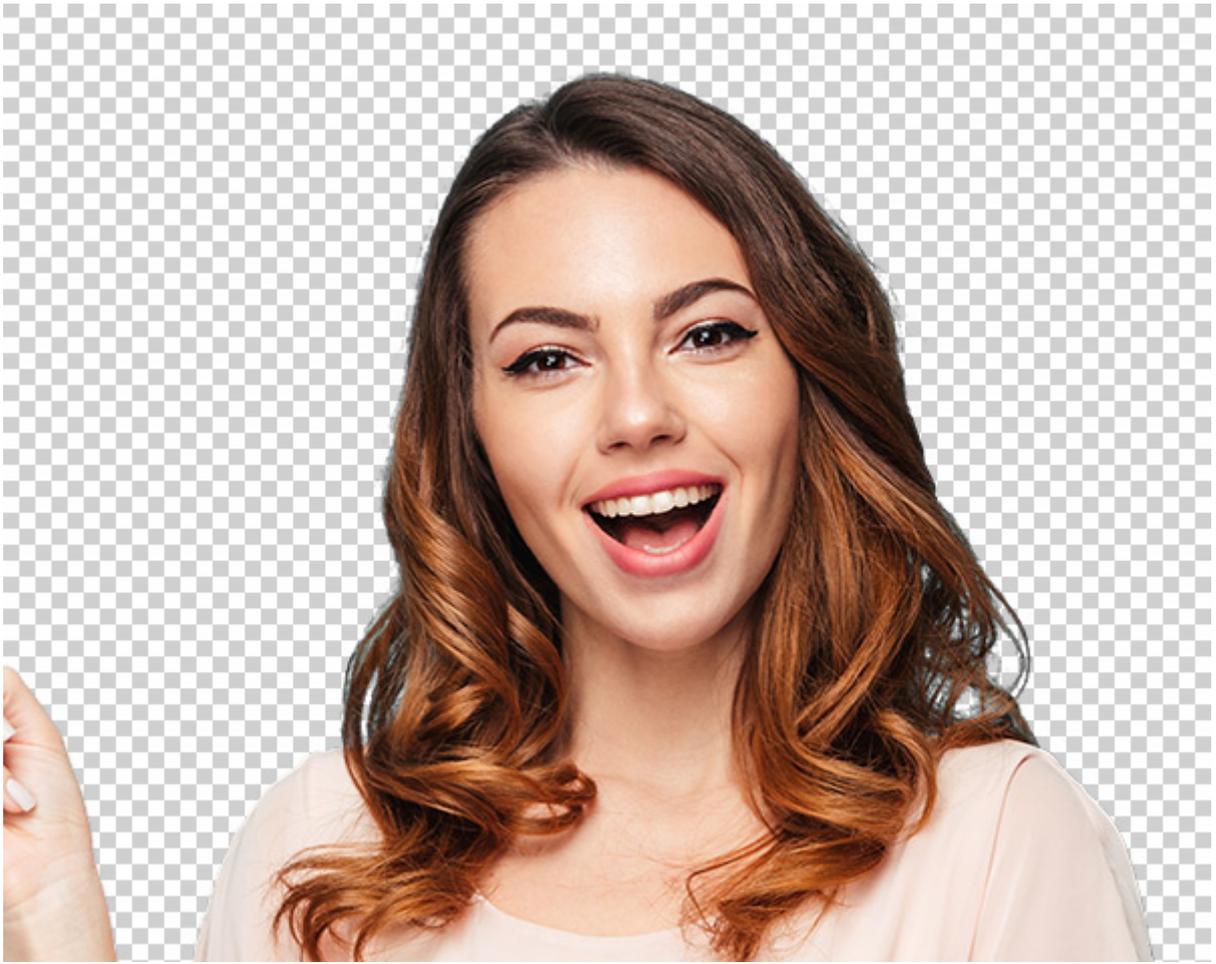
Chroma Key

Refine Edges. The mode allows editing edges of selections or cutout objects. It significantly improves the edges of the selection and make it softer and more natural. Learn more about the feature.

Refine Edges

You can also try the AKVIS SmartMask AI software (available as a plugin and as a standalone program).

AI FILTERS

The **AliveColors** image editor contains AI filters based on neural networks for fast and high-quality image processing.

AI-powered filters:

> **Image Colorization**
> **Image Enlargement**
> **JPEG Artifact Remover**
> **Motion Deblur**
> **Noise Removal**

See the system requirements.

IMAGE COLORIZATION

Image Colorization uses a trained neural network to colorize black and white photographs.

Image Colorization

Select in the main menu: **AI -> Image Colorization**.

Adjust the parameters:

> **Sensitivity** (0-25). This parameter is responsible for coloring. Use it to change shades if the colors are too monotonous or color noise appears in the photo.

> **Saturation** (-100..100). This parameter allows you to change the brightness of colors.

Fixed Preview Area. If the check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the entire image.

Click **Default** to reset the settings to default.

Click **OK** to apply the changes to the image and close the filter's settings.

Click **Cancel** to close the settings without applying changes.

IMAGE ENLARGEMENT

Image Enlargement uses modern artificial intelligence technologies to increase photos up to 800% enhancing their quality.

Image Enlargement

Select in the main menu: **AI -> Image Enlargement**.

Adjust the parameters:

New Size. In the **Width** or **Height** field, set the new size of the image (in pixels, percent, mm, cm, or inches) taking into account the **Resolution**. The maximum magnification is 800%.

Magnification Algorithm (depending on the AI model):

A. Standard. It allows you to enlarge photos, preserving details and texture and enhancing contrast. It's recommended to process photos of good quality without noticeable noise and compression artifacts.

B. Intensified. It allows you to enlarge images providing noise removal and defects compression, emphasizing edges on a picture. It works great for illustrations, artworks, low-res images from the Internet, images with text.

Smoothing (0-25). Preliminary smoothing of irregularities in the image. Higher values cause blurring.

Start image processing by clicking the **Run** button.

Click **Default** to reset the settings to default.

Click **OK** to apply the changes to the image and close the filter's settings.

Click **Cancel** to close the settings without applying changes.

JPEG ARTIFACT REMOVER

The **JPEG Artifact Remover** filter uses machine learning algorithms to remove JPEG artifacts, reduce pixelation, and clean up edges.

JPEG Artifact Remover

Select in the main menu **AI -> JPEG Artifact Remover**. The Settings Panel will appear with the options:

Original Image. Select one of the AI-modes depending on the quality of your photo:

Low Compression - to enhance images of high or above-average quality;
High Compression - to restore images saved with low quality;
High Compression with Noise - to improve low quality photos with digital noise;
Extreme - to restore badly damaged photos that have undergone multiple changes: resized, resaved in different quality and in different formats, etc.

Fixed Preview Area. If the check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the entire image.

Click **Default** to reset the settings to default.

Click **OK** to apply the changes to the image and close the filter's dialog box.

Click **Cancel** to close the dialog box without applying changes.

MOTION DEBLUR

The **Motion Deblur** filter uses a trained neural network to fix blurry photos ruined by subject movement or camera shake. The neural filter eliminates motion blur and recovers out-of-focus images.

Motion Deblur

The Settings Panel will appear when you select in the main menu: **AI -> Motion Deblur**.

Remove Artifacts (0-30). Reduction and removal of artifacts and non-existent details in a photo. Higher values can lead to blurry results.

Focus (2-9). Improvement of sharpness of a photo. Use the parameter value depending on the initial motion blur: the stronger the blur on an image, the higher the value to set.

Fixed Preview Area. If the check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the entire image.

Click **Default** to reset the settings to default.

Click **OK** to apply the changes to the image and close the filter's dialog box.

Click **Cancel** to close the dialog box without applying changes.

NOISE REMOVAL

The **Noise Removal** filter uses machine learning algorithms to remove digital noise while preserving edges and details.
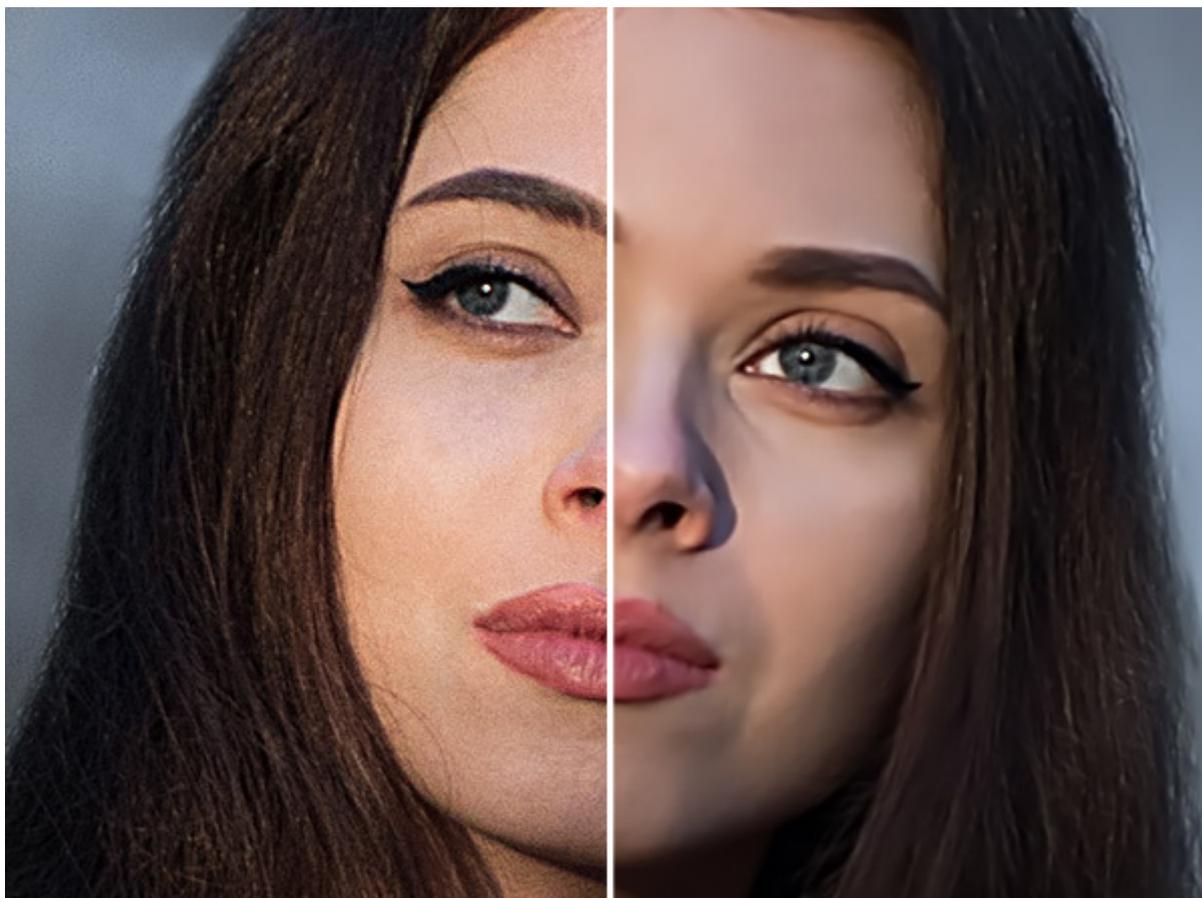
Noise Removal

Select in the main menu: **AI -> Noise Removal**. Adjust the parameters in the Settings Panel.

Noise Level. Select the noise suppression mode depending on the quality of a photo:

Weak Noise;
Strong Noise;
Strong Compression with Noise.

Post-Processing. After removing noise, you may need to add sharpness and increase the clarity of edges.

Edge Intensity (0-100). The parameter makes the edges more clear and well-defined.

Sharpness (0-100). The parameter changes the clarity of the image by enhancing the contrast between pixels.

Fixed Preview Area. If the check-box is enabled, all changes will be displayed in a small preview area. If the check-box is disabled, the changes will be applied to the entire image.

Click **Default** to reset the settings to default.

Click **OK** to apply the changes to the image and close the filter's dialog box.

Click **Cancel** to close the dialog box without applying changes.

SELECTION TOOLS

AliveColors provides a wide range of image editing options. The program includes selection tools that allow you to create selections for editing areas of an image or combining parts of different images.

The selected area is outlined by a dotted line, outside of which editing and drawing tools, effects and adjustments will not work. You can move the selection outline by placing the cursor ⬚ inside the selected area.

Some tools are available in the **Toolbar**, some of them - as commands in the **Select** menu.

Basic Selection Tools (Rectangular Selection, Elliptical Selection, Lasso, Polygonal Lasso)

Magic Wand Tool

Quick Selection Tool

Object Selection Tool (AI-based)

Select Subject (AI-based)

Color Range

Refine Edges

Modify a Selection

BASIC SELECTION TOOLS

Basic selection tools are designed to create selection areas in the form of rectangles, ellipses, various polygons, and areas of arbitrary shape.

Selection

Basic Selections Tools in AliveColors:

Rectangular Selection [icon] lets selecting rectangular and square areas. Drag over the area you want to select with the left mouse button.

Elliptical Selection [icon] lets selecting elliptical or circular areas.

Lasso [icon] allows creating freehand selections. Drag to draw a selection line around an object. When you release the left mouse button, the contour will be closed, the final point will be connected to the start one.

Polygonal Lasso [icon] lets creating a freehand selection from straight segments. Move the cursor and left-click on each point, the program will automatically draw a straight line between two points. To close the contour bring the cursor to the first point or make a double-click in the final point.

Magnetic Lasso [icon] allows you to create a selection outline that sticks to the edges of the image when you move the cursor. When you release the left mouse button, the outline closes.

Hold `Shift` to make a square or a circle and to draw a perfectly vertical/horizontal line.

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or right-click the image.

Parameters (may vary depending on the tool):

Selection Mode defines the result of the interaction of selections:

New ▣ . When creating a new selection, the previous selection disappears.

Add �ṇ . The selection area will be increased by adding new fragments. To activate this mode, you can also press the `Shift`-key.

Subtract ▚ . This mode lets removing the part of the selection. To activate this mode, press the `Alt`-key.

Intersect ▣ . This mode lets keeping only the intersection area of the selections. To activate this mode, press `Shift`+`Alt`.

Add to Selection   Subtract from Selection

Feather (0-250). The parameter lets blurring edges of the selection.
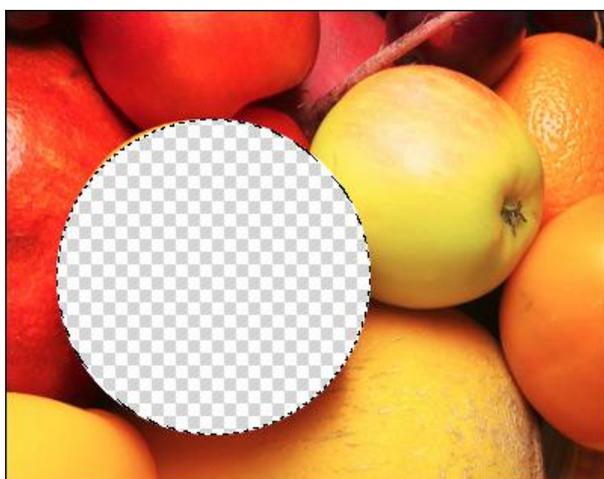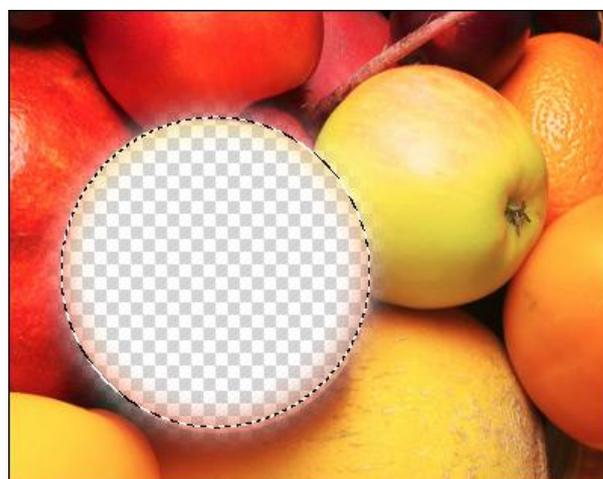
Feather = 0   Feather = 10

Anti-Aliasing. The check-box smooths the jagged edges of the selection.
Enable this option before creating a selection.

Anti-aliasing is Disabled   Anti-aliasing is Enabled
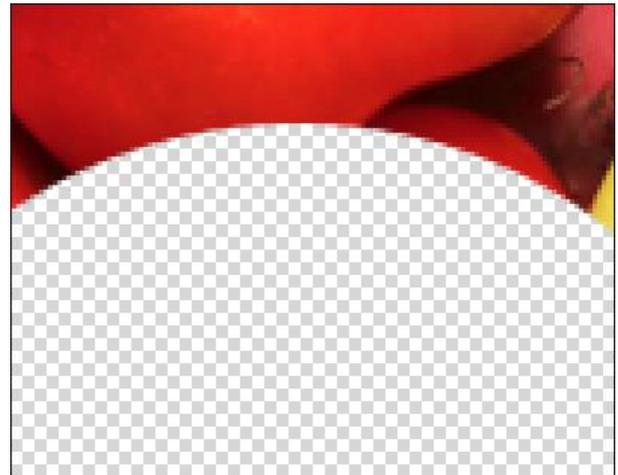
Width (0-250). It changes the radius of the area within which the boundary search will take place
(for the **Magnetic Lasso**).
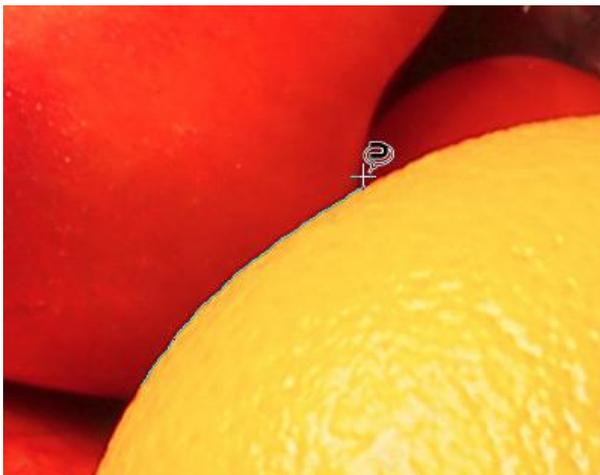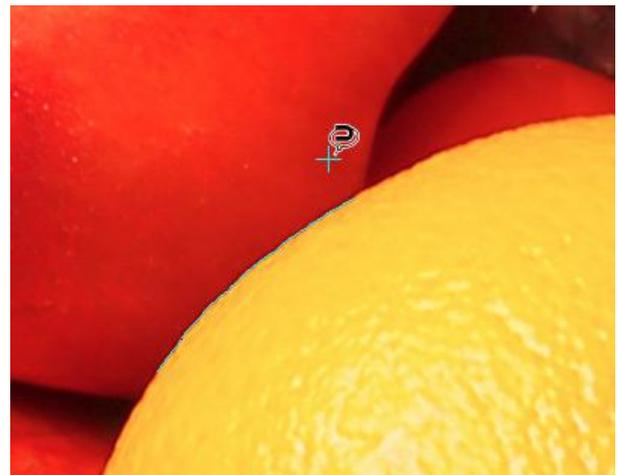
Width = 25   Width = 75

From Center. The check-box lets creating a selection (a rectangle or an ellipse) using a start point,
where the cursor is, as a center. Otherwise, selections are created from a corner.
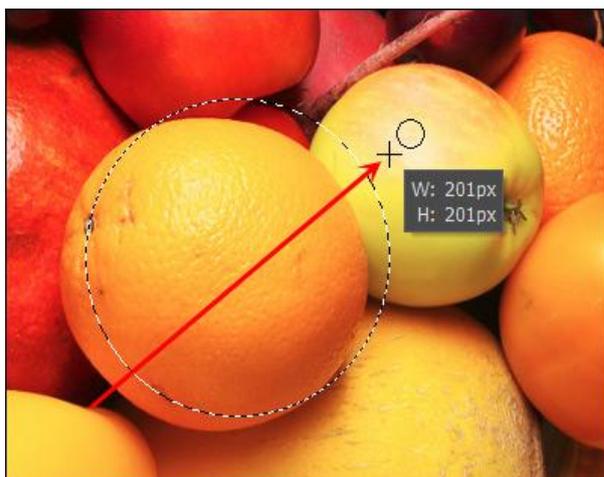
| Selection from Corner | Selection from Center |
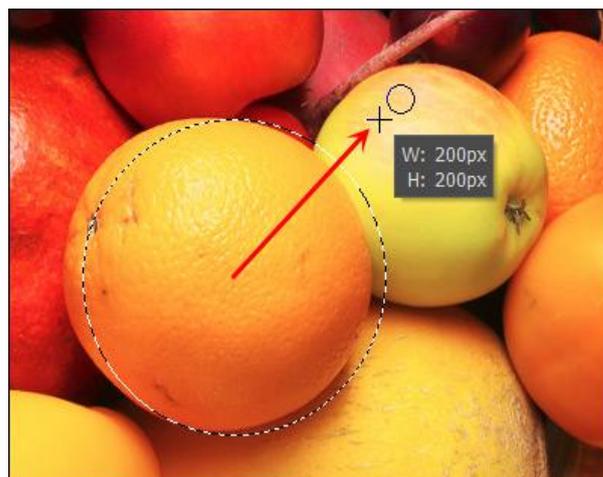
Style. You can specify a size of a selection:

> **Normal**. The size of a selection is determined by dragging the cursor.
>
> **Fixed Size**. This option lets you create a selection with exact dimensions (height and width, in pixels).
>
> **Fixed Ratio**. The ratio of height and width of a selection remains fixed.

In the **View Mode** drop-down list, choose a mask view mode. All view modes except for "marching ants" allows to edit the selection using the standard brushes.

| Selection: Marching Ants | Selection: Fill with Red |

Click the **Default** button to reset the settings to their original values.

Using the **Refine Edges** feature you can quickly adjust edges of selections.

To create and manipulate selections, you can also use the standard commands.

All selections are displayed in the **Selections** Panel.

MAGIC WAND TOOL

The **Magic Wand** mask tool ![icon] selects consistently colored areas with a single click.

The tool's parameters are shown in the **Tool Options** panel above the Image Window or by right-clicking the image. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Tool's Parameters:

Selection Modes (in the form of icons) - logic operations, which determine the result of the interaction between selected areas.

New ![icon] . When creating a new selection, the previous selection disappears.

Add ![icon] . The selection area will be increased by adding new fragments. To activate this mode, you can also press the `Shift`-key.

Subtract ![icon] . This mode lets removing the part of the selection. To activate this mode, press `Alt`.

Intersect ![icon] . This mode lets keeping only the intersection area of the selections. To activate this mode, press `Shift`+`Alt`.

Tolerance (0-250). The higher the value, the more colors are included in the selection.
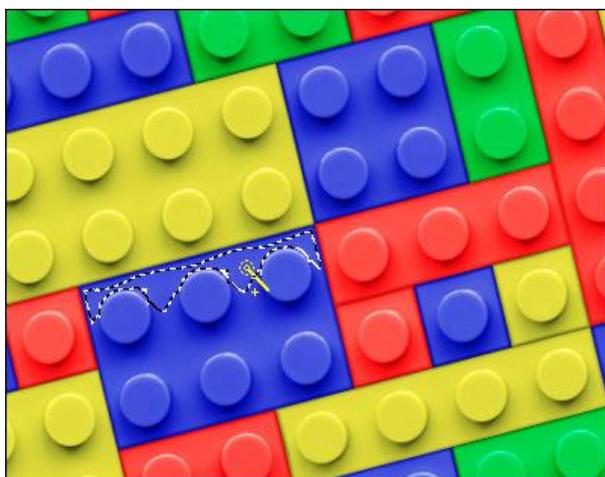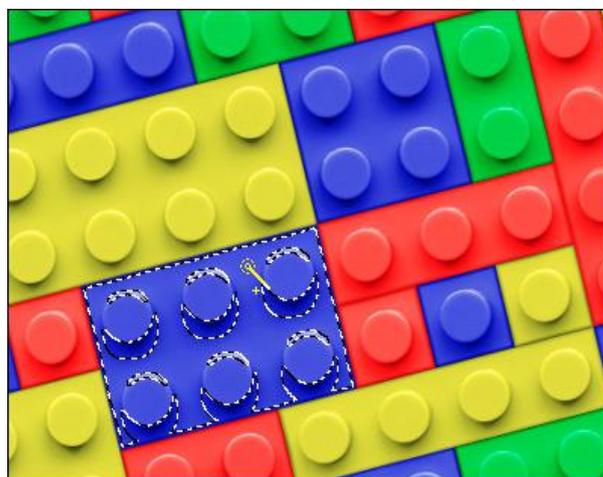
Tolerance = 10   Tolerance = 50

Contiguous check-box. If the check-box is enabled, only adjacent pixels of the same color are selected. Otherwise, all pixels of the same color throughout the image will be selected.
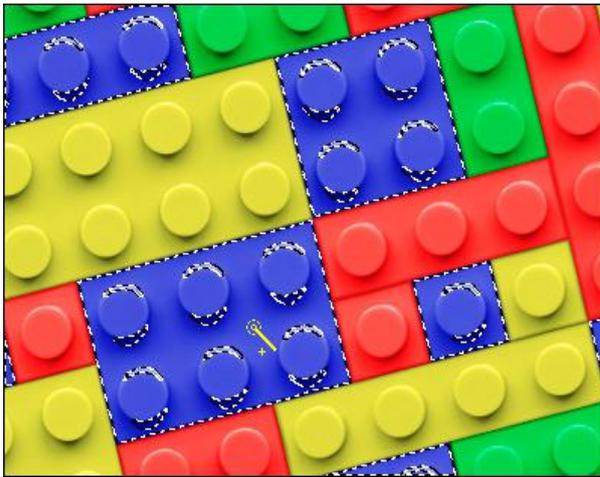
Check-box is disabled   Check-box is enabled
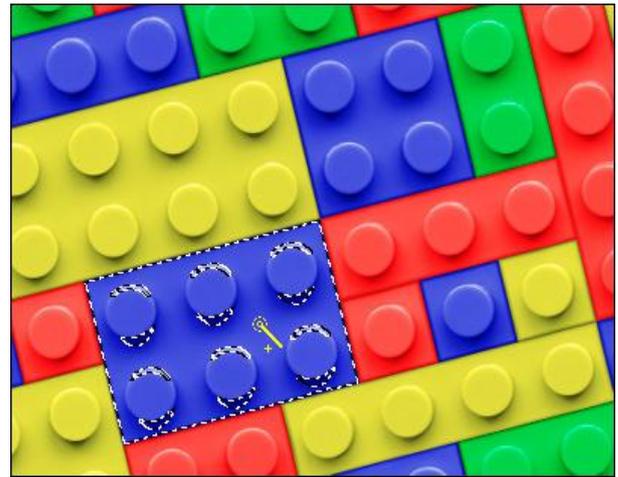
Anti-Aliasing check-box. The check-box smooths the jagged edges of the selection. Enable this option before creating a selection.
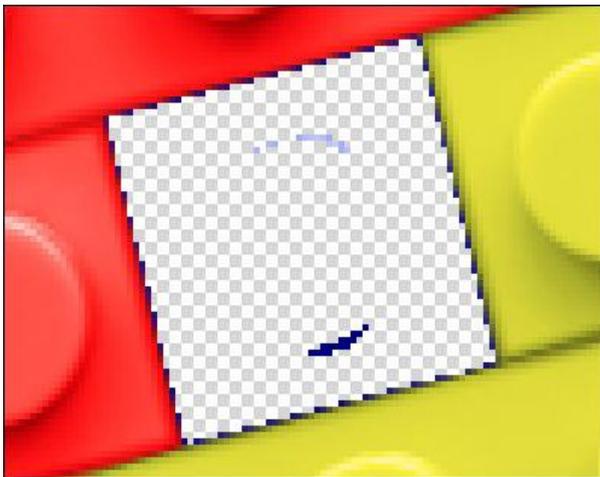
Check-box is disabled   Check-box is enabled
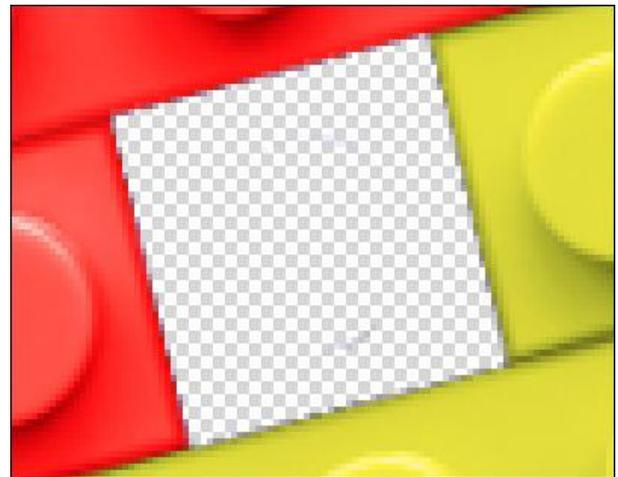
All Layers check-box. If the check-bos is enabled, the pixels are selected based on the merged color data from all visible layers. Otherwise, based on the color data of the current layer.

Check-box is disabled   Check-box is enabled

In the **View Mode** drop-down list, you can choose a mask view mode. All view modes except for "marching ants" allows editing the selection using the standard brushes.

Selection: Marching Ants

Selection: Fill with Red

Click the **Default** button to reset the settings to their original values.

Using the **Refine Edges** feature you can quickly adjust edges of selections.

To create and manipulate selections, you can also use the standard commands.

All selections are displayed in the **Selections** Panel.

QUICK SELECTION TOOL

The **Quick Selection** tool ⬚ selects an object by analyzing colors of neighboring pixels. Draw with this brush over the image, and the selection expands, automatically finding edges and filling areas.

The tool's parameters are shown in the **Tool Options** panel above the Image Window or by right-clicking the image. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Tool's Parameters:

Selection Modes (in the form of icons) - logic operations, which determine the result of the interaction between selected areas.

New ⬚ . When creating a new selection, the previous selection disappears.

Add ⬚ . The selection area will be increased by adding new fragments. To activate this mode, you can also press the `Shift`-key.

Subtract ⬚ . This mode lets removing the part of the selection. To activate this mode, press the `Alt`-key.

Intersect ⬚ . This mode lets keeping only the intersection area of the selections. To activate this mode, press `Shift`+`Alt`.

Size (1-250). This parameter specifies the diameter of the tool. All similar colors will be selected considering the edges of the objects and the value of the **Tolerance** parameter.

Tolerance (0-250). When the value of this parameter is increased, more colors are included in the selected area. If it is set to 0 the brush selects only the areas where it's applied.
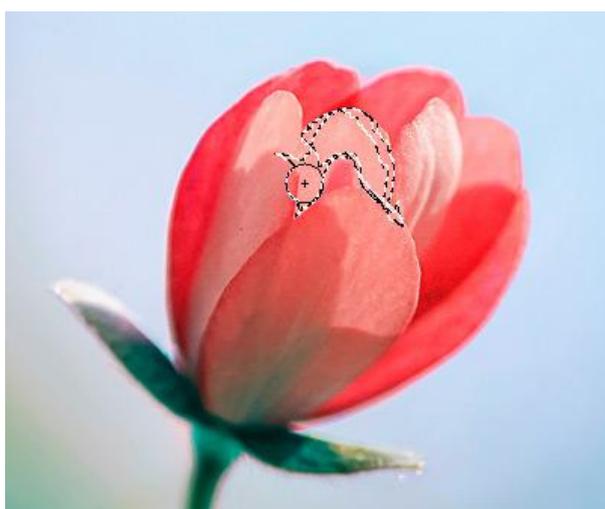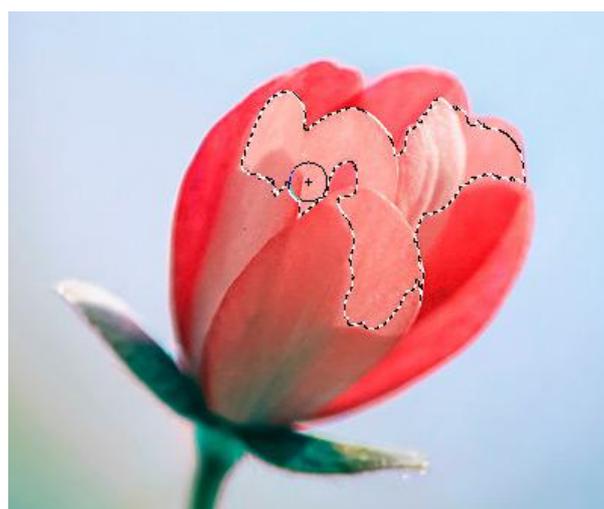
Tolerance = 10   Tolerance = 50

Feather (0-250). The parameter lets blurring edges of the selection.
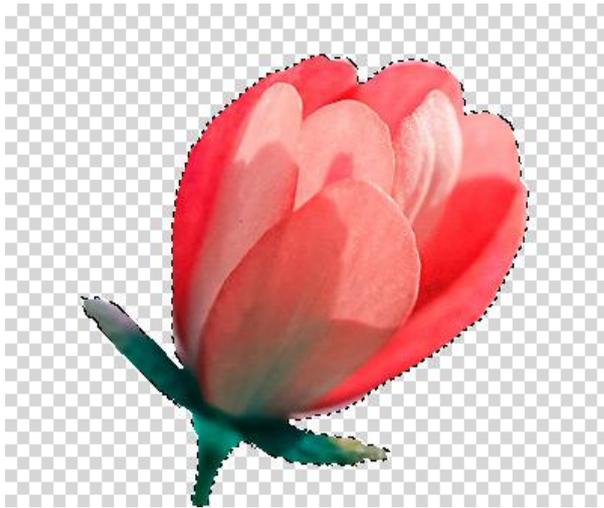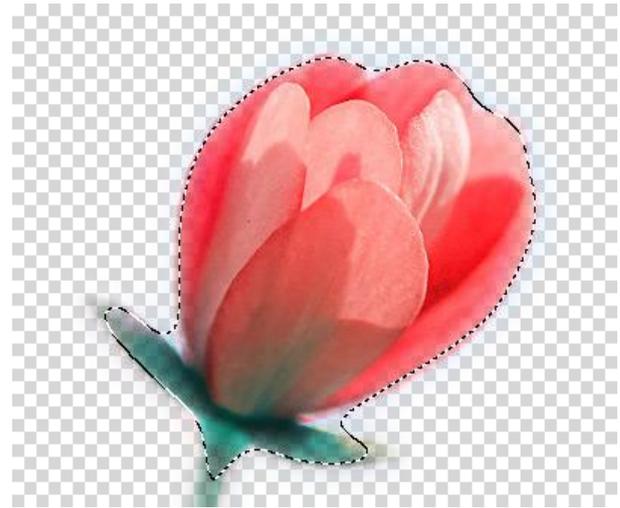
Feather = 0   Feather = 10

All Layers check-box. If the check-box is enabled, the pixels are selected based on the merged color data from all visible layers. Otherwise, based on the color data of the current layer.

Check-box is disabled   Check-box is enabled

In the **View Mode** drop-down list, you can choose a mask view mode. All view modes except for "marching ants" allows editing the selection using the standard brushes.

Selection: Marching Ants   Selection: Black Background

Click the **Default** button to reset the settings to their original values.

Using the **Refine Edges** feature you can quickly adjust edges of selections.

To create and manipulate selections, you can also use the standard commands.

All selections are displayed in the **Selections** Panel.

OBJECT SELECTION TOOL

The **Object Selection** tool [icon] is designed to automatically select objects or areas in an image using a specially trained neural network. This tool is helpful when you need to separate an object from the other ones.

Enable the **Object Selection** tool [icon] in the Toolbar, create an approximate selection around the object you want to select - a precise selection will be created automatically after releasing the mouse button.

Object Selection

Tool's Parameters:

> **Selection Modes** (in the form of icons) - logic operations, which determine the result of the interaction between selected areas.

>> **New** [icon] . When creating a new selection, the previous selection disappears.

>> **Add** [icon] . The selection area will be increased by adding new fragments. To activate this mode, you can also press the `Shift`-key.

>> **Subtract** [icon] . This mode lets removing the part of the selection. To activate this mode, press the `Alt`-key.

>> **Intersect** [icon] . This mode lets keeping only the intersection area of the selections. To activate this mode, press `Shift`+`Alt`.

Selection Type. In the drop-down list, select a tool for creating a rough selection around the object: **Rectangular Selection** or **Lasso**.

Contrast. When the check-box is enabled, clearer selection borders are created.

Check-Box is Enabled

Check-Box is Disabled

In the drop-down list, you can select the **View Mode** of the selection. When the selection is rendered in any way other than "marching ants", it can be edited with brushes.

Selection: Marching Ants

Selection: Highlighted in Red

Using the **Refine Edges** feature you can quickly adjust edges of selections.

To create and manipulate selections, you can also use the standard commands.

All selections are displayed in the **Selections** Panel.

SELECT SUBJECT

The **Select Subject** command allows you to create an automatic selection of the main, the most noticeable subject (or several noticeable subjects) in an image using a specially trained neural network.

Choose from the menu: **Select -> Subject**, and the selection will be created immediately.
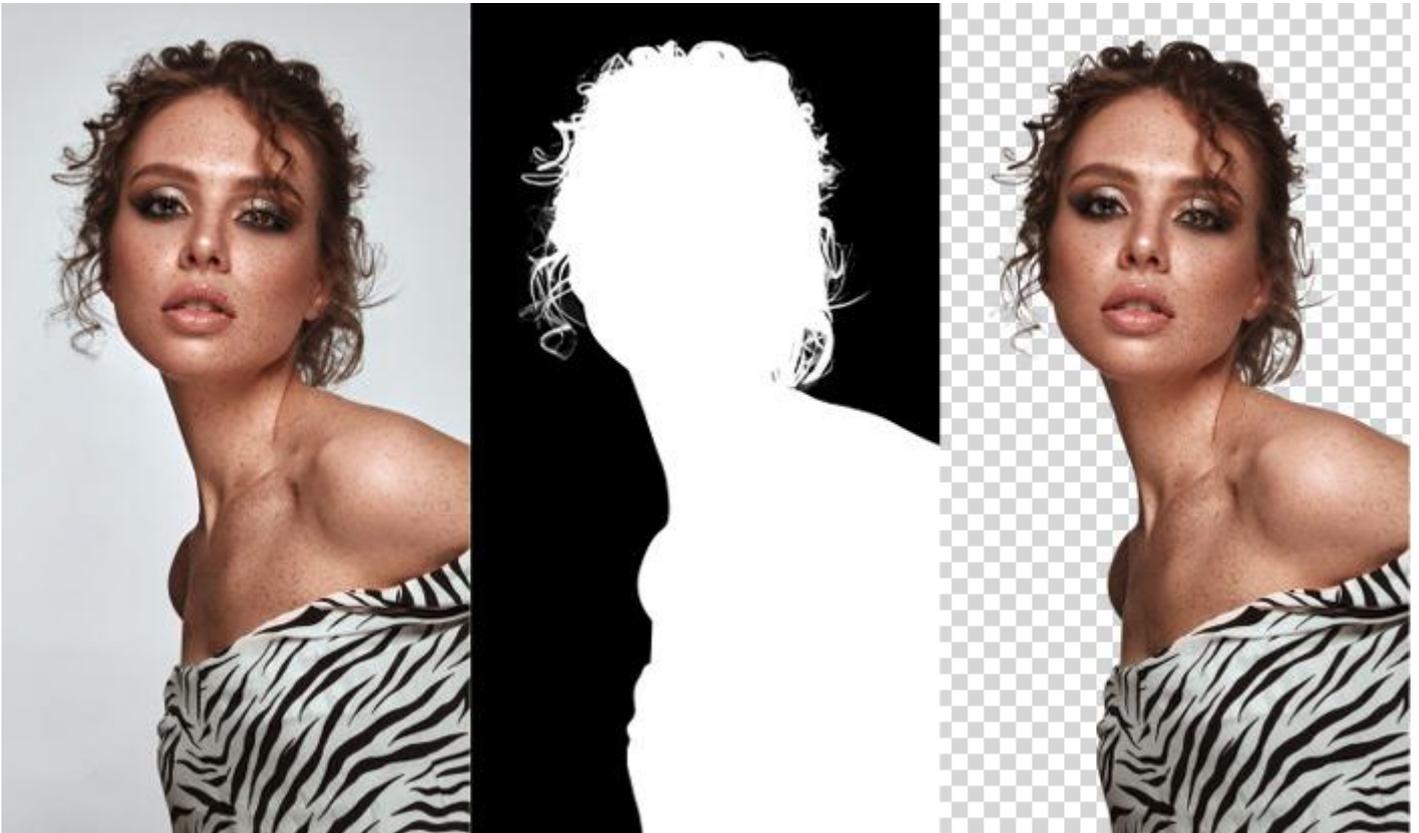
Subject Selection

Use the **Refine Edges** feature to quickly adjust edges of selections.

To create and manipulate selections, you can also use the standard commands.

All selections are displayed in the **Selections** Panel.

COLOR RANGE

The **Color Range** tool selects areas with the specified color or tonal range. To call it, choose **Select -> Color Range...**

The pixels of the current layer are selected based on all visible colors in the image.

You can save the settings as **Presets**. Find all available presets in the drop-down list. If you modify the parameters, the preset name automatically changes to **Custom**, and the **Save Custom Preset** button ![+] appears next to the list. To save the current settings, press this button.

A new preset is automatically assigned a name (for example, *Custom_1*, *Custom_2*, etc.) that can be changed as needed by entering any combination of letters and numbers in the highlighted field. After pressing Enter, a new preset will appear in the drop-down list.

To remove a user preset, select it and press the **Delete Custom Preset** button ![trash].

Click on ![export] to export user presets to a *.presets* file. To load the presets into the program, press on ![import].

Adjust the color selection using the following parameters:

> **Selection Modes** (in the form of icons) - logic operations, which determine the result of the interaction between selected areas.

> > **New** ![icon] . When creating a new selection, the previous selection disappears.

Add ⬜. The selection area will be increased by adding new fragments. The mode is activated by holding the `Shift` key.

Subtract ⬜. This mode lets removing the part of the selection. The mode is activated by holding the `Alt` key.

Use a drop-down list to select one of the standard color (red, yellow, etc.) or tonal ranges (highlights, midtones, shadows). Also, you can pick a color using the Eyedropper tool. Only the pixels corresponding with the chosen color or brightness will be selected.

Red areas are selected	Light areas are selected
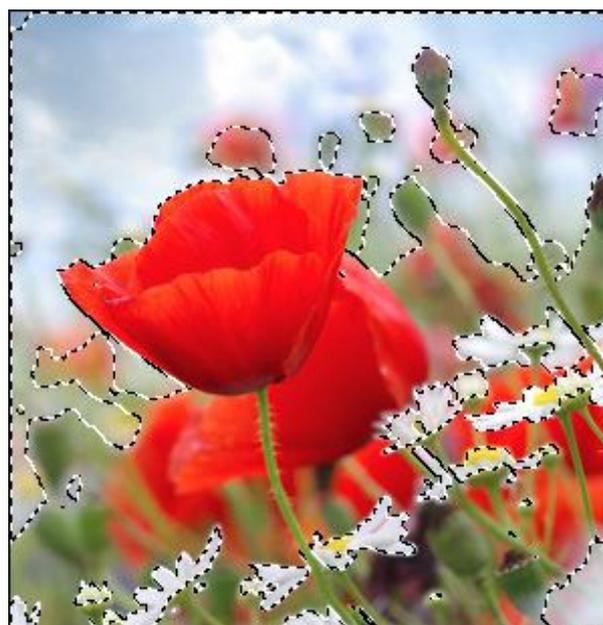
Tolerance (0-200). The parameter specifies the width of the color range included into the selection when picking a color from the image.
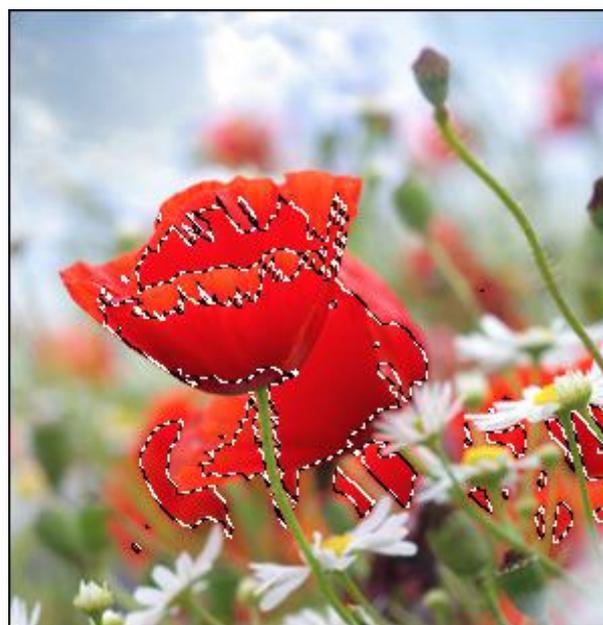
Tolerance = 20	Tolerance = 100

Local Area check-box. Using the check-box, you can create a selection with the specified radius, whose center is located at the point where you clicked with the eyedropper.

Radius = 25   Radius = 50

The **Invert** check-box. The option inverts the selection.

Selection   Inverted Selection

The **Preview Window** displays either the source image or the selected area in the grayscale mode. In the second case, white indicates the selected areas, black - not selected areas, and gray - the transition zone.

In the **View Mode** drop-down menu, you can determine how the selection will be displayed in the Image Window.

Press **OK** to create a selection, or **Cancel** to close the window without saving the changes.

To create and manipulate selections, you can also use the standard commands.

All selections are displayed in the **Selections** Panel.

REFINE EDGES

The **Refine Edges** feature is extremely helpful for quick editing edges of selections or masks. It is called using the **Select -> Refine Edges...** command.
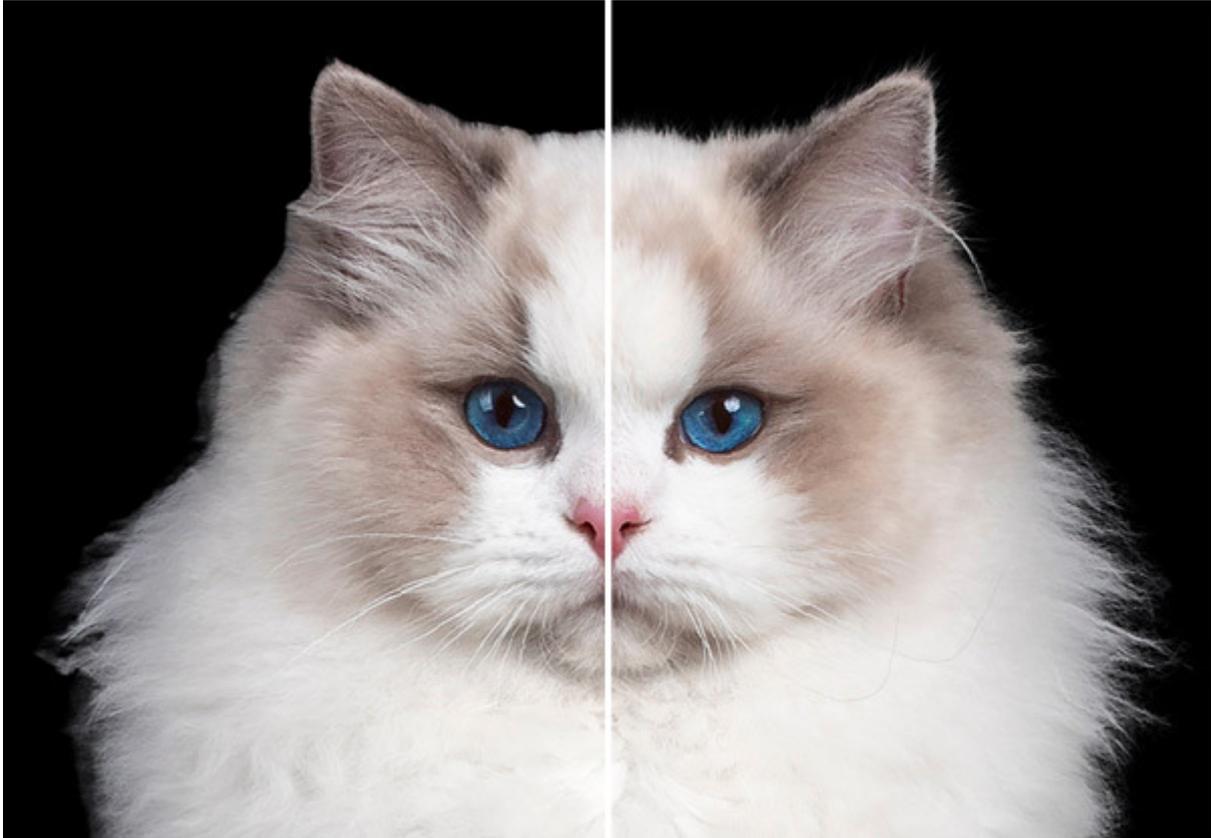
Refine Edges

The **Refine Radius** tool allows you to more accurately define the area of edge refinement for the selection or mask (blue zone).

The **Restore Edge** tool restores the original selection/mask (red zone).

The **Eraser** tool allows you to remove strokes, both blue and red.

The tool's options:

     Size (10-3000). The maximum line width that can be achieved with a brush (in pixels).

     Hardness (0-100). The degree of blurriness of the outer edge of the brush.

     Show Strokes check-box. When the check-box is enabled, the area drawn with the tool is always displayed; when it is inactive, it is hidden.

Using the buttons / you can undo/redo the operations with the tools.

Adjust edges with the following parameters:

Radius (0-250). The parameter specifies the width of the area around the selection/cutout, where the edge refinement is applied.

Radius = 5   Radius = 50

Threshold (-10..90). The parameter specifies the brightness/color range of pixels that will be deleted when increasing the parameter.

Threshold = -5   Threshold = 25

Transition (0-100). The parameter increases the smoothness of the transition within the specified area.

<table>
<tr><td>Transition = 25</td><td>Transition = 75</td></tr>
</table>

Note: The **Threshold** and **Transition** parameters affect the image only if the value of the **Radius** parameter is not zero or the **Refine Radius** tool was used.

The **Radius** parameter and the **Refine Radius** tool work in a similar way, with the main difference being that the parameter sets the same width for the area along the entire edge, and the tool allows you to change the size of the area in different parts of the border.

Smoothness (0-100). The parameter smoothes the corners of the area, makes the selection/mask contour smoother.

<table>
<tr><td>Smoothness = 5</td><td>Smoothness = 50</td></tr>
</table>

Feather (0-100). The parameter softens the transition between the selection/mask and the surrounding background creating a semi-transparent area.
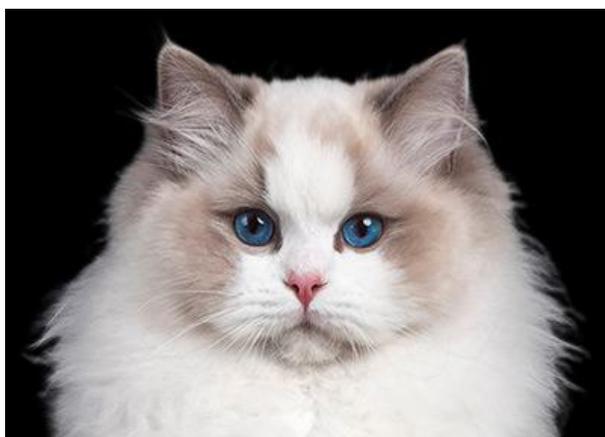
<table>
<tr><td>Feather = 5</td><td>Feather = 25</td></tr>
</table>

Contrast (0-100). The parameter sharpens the edges of the selection or mask.

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Contrast = 10   Contrast = 50

Shift (-100..100). The parameter reduces or enlarges the selection/mask within the transition area.
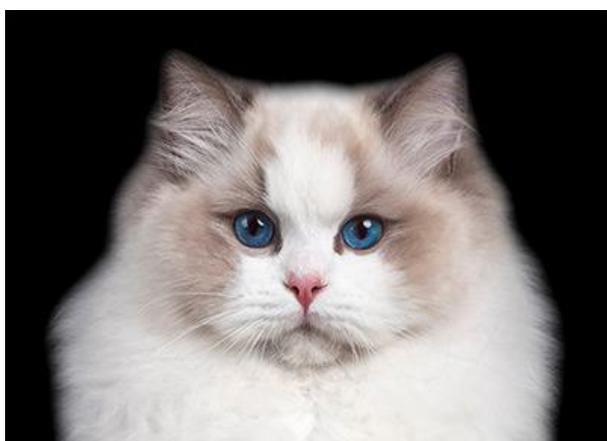
Shift = -50   Shift = 50

In the **View Mode** menu, choose how to display the selection/mask in the Image Window.

In the **Result** menu, choose how the result with the refined edges will be shown: selection, mask, layer, or layer with a mask.

You can save the settings as **Presets**. Find all available presets in the drop-down list. If you modify the parameters, the preset name automatically changes to **Custom**, and the **Save Custom Preset** button ➕ appears next to the list. To save the current settings, press this button.
A new preset is automatically assigned a name (for example, *Custom_1*, *Custom_2*, etc.) that can be changed as needed by entering any combination of letters and numbers in the highlighted field. After pressing Enter, a new preset will appear in the drop-down list.
To remove a user preset, select it and press the **Delete Custom Preset** button 🗑.

Click on ⬇ to export user presets to a *.presets* file. To load the presets into the program, press on ⬆.

Press **OK** to apply changes, or **Cancel** to close the options.

MODIFY SELECTIONS

To change the selection edges, you can use the commands in the **Select** menu.

Modify Commands:

The **Expand** command allows you to move the selection border outward by the specified number of pixels.

Original Selection   Expand Command

The **Contract** command allows you to move the selection border inward by the specified number of pixels.

Original Selection   Contract Command

The **Smooth** command allows you to smooth the corners of a selection.

| Original Selection | Smooth Command |

The **Border** command allows you to select a line of pixels of a specified width along an existing selection border.

| Original Selection | Border Command |

The **Feather** command allows you to soften the edges of a selection by gradually decreasing the sharpness.

Original Selection   Feather Command

The **Grow Selection** command in the **Select** menu allows you to extend the selection with adjacent pixels.

Original Selection   Grow Selection Command

The **Similar** command in the **Select** menu allows you to include pixels of similar colors throughout the image in the selection.

Original Selection   Similar Command

SELECTION COMMANDS

The standard editor commands are available to create and manipulate a selection.

Select menu commands:

> **Select All** - selects the entire image (`Ctrl`+`A` on Windows, `⌘`+`A` on Mac).
>
> **Deselect** - cancels the selection (`Ctrl`+`D` on Windows, `⌘`+`D` on Mac).
>
> **Reselect** - restores the previous selection (`Ctrl`+`Shift`+`D` on Windows, `⌘`+`⇧`+`D` on Mac).
>
> **Invert** - unselects currently selected parts and selects currently unselected parts (`Ctrl`+`Shift`+`I` on Windows, `⌘`+`⇧`+`I` on Mac).
>
> **Transform Selection** - lets transform the selection edges without affecting the image content.

Edit menu commands:

> **Cut** - cuts the selected area of the current layer to the clipboard (`Ctrl`+`X` on Windows, `⌘`+`X` on Mac).
>
> **Copy** - copies the selected area of the current layer to the clipboard (`Ctrl`+`C` on Windows, `⌘`+`C` on Mac).
>
> **Copy Merged** - copies the selected area of merged layers and places it on the clipboard (`Ctrl`+`Shift`+`C` on Windows, `⌘`+`⇧`+`C` on Mac).
>
> **Paste** - inserts the contents of the clipboard into a new layer (`Ctrl`+`V` on Windows, `⌘`+`V` on Mac).
>
> **Erase** - removes the selected area of the current layer (`Delete`).

Layers -> New menu commands:

> **Layer via Copy** - creates a new layer by copying the selected area of the current layer (`Ctrl`+`J` on Windows, `⌘`+`J` on Mac).
>
> **Layer via Cut** - creates a new layer by cutting the selected area of the current layer (`Ctrl`+`Shift`+`J` on Windows, `⌘`+`⇧`+`J` on Mac).

STANDARD BRUSHES

Using **AliveColors** you can edit a photo, improve a portrait, create a colorful image, etc. The program features a wide range of versatile tools for any purpose.

Among them, you can find the standard (essential) brushes for retouching, colorization, cloning, painting, etc. They are always at hand in the program's Toolbar. These brushes can only be applied on raster layers.

Standard Brushes:

Color Brush

Color Pencil

Spray

Recolor Brush

Texture Brush

Eraser

History Brush

Paint Bucket

Gradient Fill

Clone Stamp

Chameleon Brush

Blur

Sharpen

Smudge

Lighten

Darken

Saturation

Brush Editor: Advanced Brush Settings

COLOR BRUSH

The **Color Brush** ![brush icon] is used to draw free-form lines with soft borders. Using this tool, you can draw either a clear or blurry line, but they will always be soft.

You can change the brush color using the **Color** panel, **Swatches** panel, **Color Wheel** panel, or by clicking the image with the **Eyedropper** tool. To pick a color sample, press and hold the I key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Element - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.

Size (1-5000). The maximum width of a line which can be drawn with the brush (in pixels).

Hardness (0-100). The amount of blurriness of the outer edge. The higher the value of this parameter, the harder the edge of the brush becomes. At almost 100%, the brush draws almost as hard as a pencil; while at a lower value the transition from the edge to the background is processed more smoothly.

Hardness = 40   Hardness = 90

Opacity (1-100). Opacity of the brush strokes in relation to the background color. As the value is decreased, the line becomes paler and its interaction with the background grows stronger.

Opacity = 25   Opacity = 75

Fill (1-100). The paint's density in a single brush stroke. When strokes are painted over one another, the paint becomes denser (as opposed to the **Opacity** parameter). At lower values of this parameter, the color of applied strokes is weaker. When the parameter is set to 100%, the brush paints with maximum opacity.

Fill = 25   Fill = 75

Blend Mode. It defines how the brush strokes blend with the background. The program provides 27 blend modes.

Multiply Mode   Overlay Mode

Beside the above-listed settings, there are some **additional parameters** that regulate the shape of the brush stroke.

Press the **Default** button to set all settings to their default values.

To draw a straight line, first specify the starting point with the left mouse button, then, while keeping `Shift` pressed, move the cursor to the desired end point of the line and release `Shift`. If `Shift` is not released, a new line will be drawn to each point where the mouse is clicked.

COLOR PENCIL

The **Color Pencil** is designed to draw free-form lines with hard edges.

You can change the pencil's color using the **Color** panel, **Swatches** panel, **Color Wheel** panel, or by clicking the image with the Eyedropper tool. To pick a color sample, press and hold the I key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Element - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.

Size (1-5000). The maximum width of a line made by the brush (in pixels).

Opacity (1-100). The opacity of the pencil strokes against the color of the background. This parameter sets the opacity color, by which a line is drawn: at lower values, the color of the line is paler and its interaction with the color of the background increases.
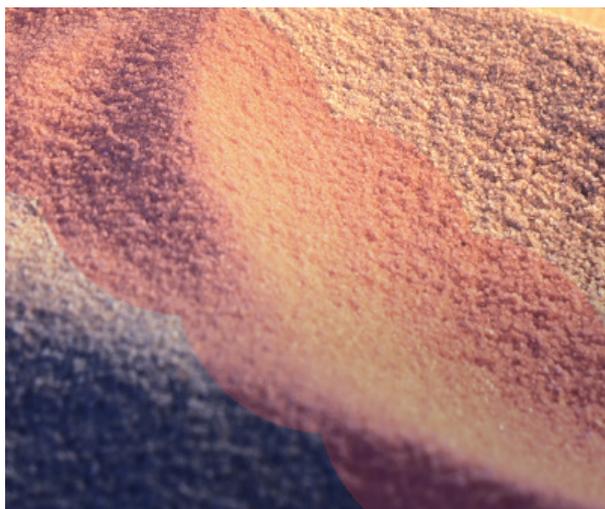
| Opacity = 25 | Opacity = 75 |
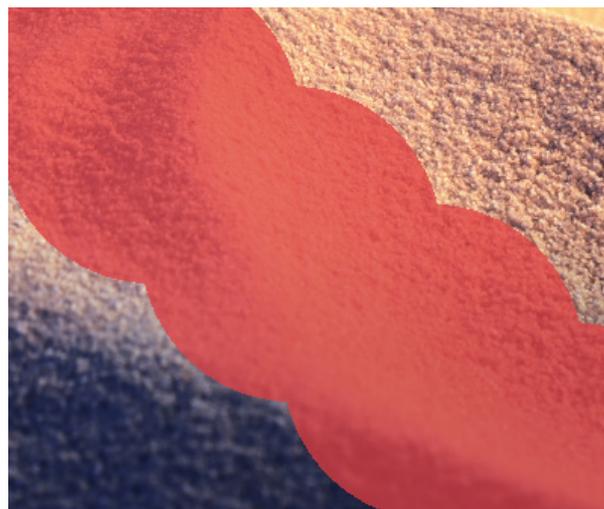
Fill (1-100). The parameter determines the density of paint in the brush stroke. If you hold the mouse button while drawing, the strokes are overlapped and the filling effect increases (unlike the **Opacity** parameter). The smaller the parameter, the thinner and more transparent the layer of the color is. At the value = 100%, the brush strokes are as opaque as possible.

Fill = 25

Fill = 75

Blend Mode. It defines how the pencil strokes blend with the background. The program provides 27 blend modes.
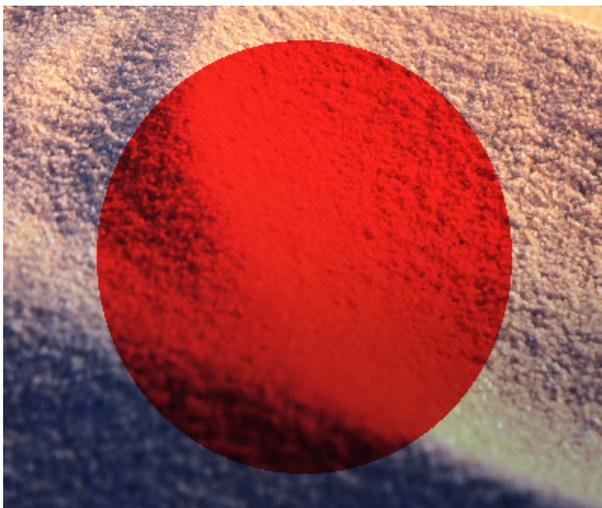
Multiply Mode

Overlay Mode

In addition to the above-mentioned parameters, you can adjust the **advanced settings** that affect the shape and position of the brush marks.

Press the **Default** button to set all settings to their default values.

In order to draw a straight line, click the left mouse button at its starting point, then, press `Shift`, click the end point, and let go of `Shift`. If `Shift` is not released, a new line will be drawn to each point where the mouse is clicked.

SPRAY

The **Spray** brush imitates spraying paint on an image. It does not apply paint in a continuous layer but rather as droplets scattered along the stroke.

You can change the paint color using the **Color** panel, **Swatches** panel, **Color Wheel** panel, or by clicking the image with the Eyedropper tool. To pick a color sample, press and hold the $\boxed{\text{I}}$ key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the $\boxed{\text{F5}}$ key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (10-1000). The maximum width of a line made by the brush (in pixels).

Opacity (1-100). The transparency of the brush strokes against the background color. This parameter sets the opacity of paint applied to the image: at lower values drop color becomes lighter and interacts more with the background color.
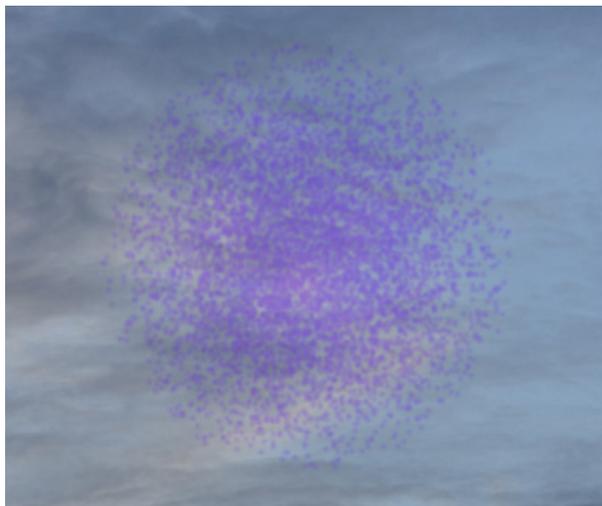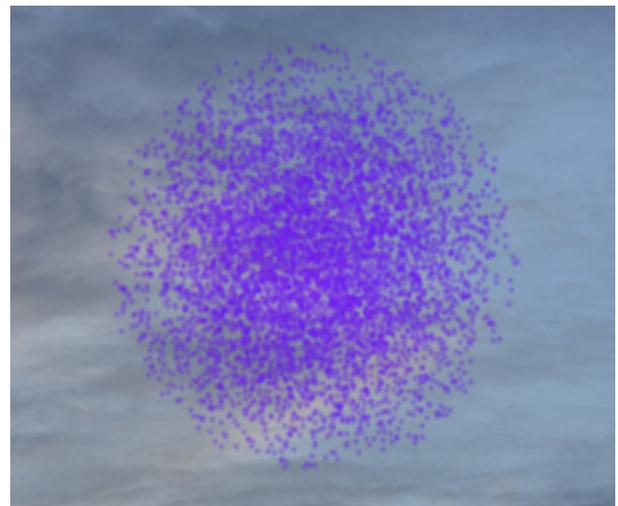
Opacity = 40   Opacity = 90

Blend Mode. The parameter defines how the pixels of the brush strokes mix with the pixels of the layer being processed. The program provides 27 blend modes.
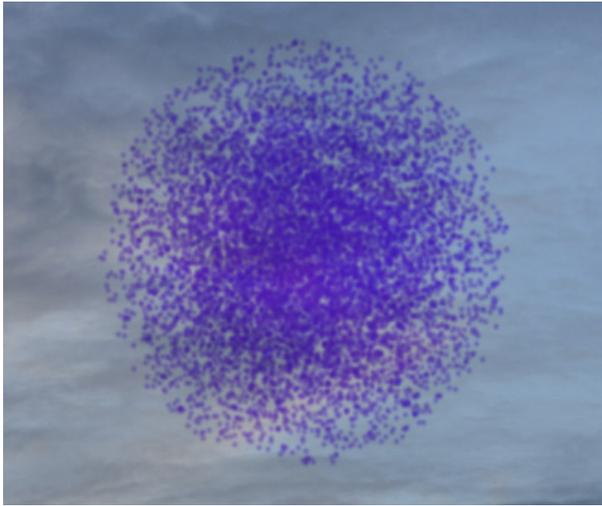
Multiply Mode
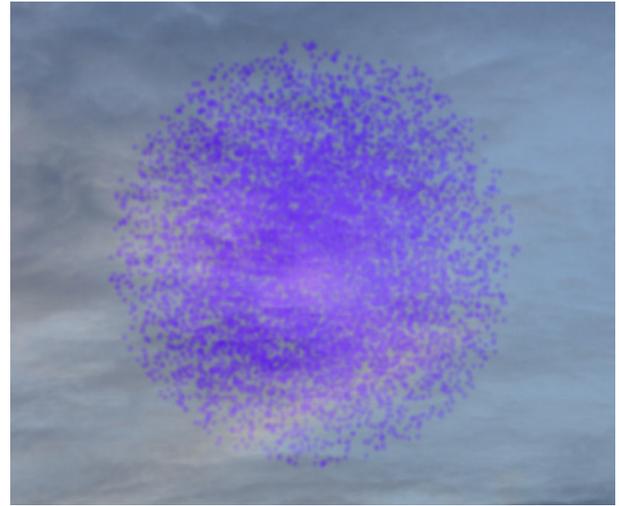
Overlay Mode

Drop Density (1-100). The amount of spots in a stroke. At higher values of this parameter the spray becomes denser.

Drop Density = 10

Drop Density = 50

Drop Size (1-50). The diameter of individual drops. Larger drops will merge, forming an irregularly shaped line with rough edges.

Drop Size = 5

Drop Size = 30

Intensity (1-100). The intensity of drop color in a single stroke. As drops are sprayed their interaction with one another increases. The lower the value of this parameter, the paler the paint color.

Intensity = 10

Intensity = 50

The parameters in the **Dynamics** tab affect the dynamic changes when applying paint drops.

Drop Density Variation (0-100). The parameter defines how the density of paint drops varies for each spacing interval.

Drop Density Variation = 10   Drop Density Variation = 100

Drop Size Variation (0-100). The parameter defines how the size of paint drops varies for each spacing interval.

Drop Size Variation = 25   Drop Size Variation = 75

Color Intensity Variation (0-100). The parameter defines how the intensity of paint color varies for each spacing interval.

| Color Intensity Variation = 20 | Color Intensity Variation = 90 |

In addition to the above-mentioned parameters, you can adjust the **advanced settings**.

Press the **Default** button to set all settings to their default values.

To spray paint along a straight line, click to set the starting point, then hold down Shift, move the cursor, click the end point, and release Shift. If Shift is not released, the line will be drawn following all selected points.

RECOLOR BRUSH

Recolor Brush is used to colorize the layer with the selected color.

You can adjust the brush color in the **Color**, **Swatches**, or **Color Wheel** panel as well as sample it directly from the image. To select a color from the image, hold down the I key to access the Eyedropper tool. When you release the hotkey, the tool will be activated again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Element - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.

Size (1-5000). The maximum width of a line drawn with the tool (in pixels).

Hardness (0-100). The amount of blurriness of the brush's edge. As the value of this parameter increases the edge of the brush becomes harder. Near 100% the border between processed and unprocessed areas will be more distinct; at lower values the boundary between these areas will be smoother.

| Hardness = 40 | Hardness = 90 |

Strength (1-100). The amount of influence on the image. The higher the value of the parameter, the more intense the color overlay is when drawing with the brush.

| Strength = 25 | Strength = 75 |

Fill (1-100). The parameter determines the density of paint in the brush stroke. If you hold the mouse button while drawing, the strokes are overlapped and the filling effect increases. The smaller the parameter, the thinner and more transparent the layer of the color is. At the value = 100%, the brush strokes are as opaque as possible.

| Fill = 25 | Fill = 75 |

Mode. The option indicates how the brush color pixels blend with the pixels of the layer being processed. There are 2 coloring modes for the brush:

Contrast - the contrast of the image is preserved; the color will be lighter in the light areas and darker in the dark areas. Light colors have greater saturation.

Uniform - the coloring is more uniform; the color becomes darker in dark areas, the light areas get colorized. Dark colors have greater saturation.

Contrast Mode   Uniform Mode

In addition to the above-mentioned parameters, you can adjust the **advanced settings** that affect the shape and position of the brush marks.

Press the **Default** button to set all settings to their default values.

To draw a straight line, first select the starting point by clicking the left mouse button, then, while keeping Shift pressed, bring the cursor to the desired end point and release Shift. If Shift is not released, additional lines will be drawn to each point where the mouse is clicked.

TEXTURE BRUSH

Texture Brush ![icon] is designed to draw lines of arbitrary shape with soft edges filled with the specified texture.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

The current appearance of the stroke, as well as all changes made to the parameters, are displayed in the preview window at the bottom of the expanded **Tool Options** panel.

> **Element** - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.
>
> **Size** (1-5000). The maximum width of a line drawn with the tool (in pixels).
>
> **Hardness** (0-100). The amount of blurriness of the brush's edge. As the value of this parameter increases the edge of the brush becomes harder. Near 100% the border between processed and unprocessed areas will be more distinct; at lower values, the boundary between these areas will be smoother.

| Hardness = 40 | Hardness = 90 |

> **Opacity** (1-100). The amount of transparency of the brush strokes against the background colors. The parameter sets the opacity of the texture used when generating strokes: the smaller its value, the paler the color of the drawn lines is and the stronger their interaction with the background colors is.
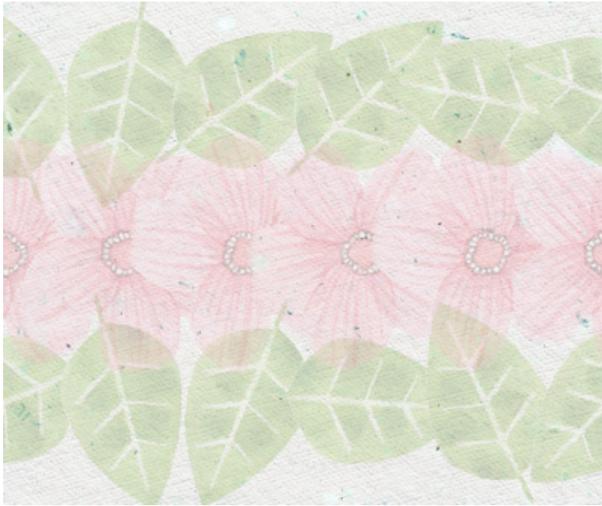
| Opacity = 25 | Opacity = 75 |

Fill (1-100). The parameter determines the density of the texture in the base element. If you hold the mouse button while drawing, the elements are overlapped and the filling effect increases (unlike the **Opacity** parameter). The smaller the parameter, the thinner and more transparent the layer of the applied texture is.
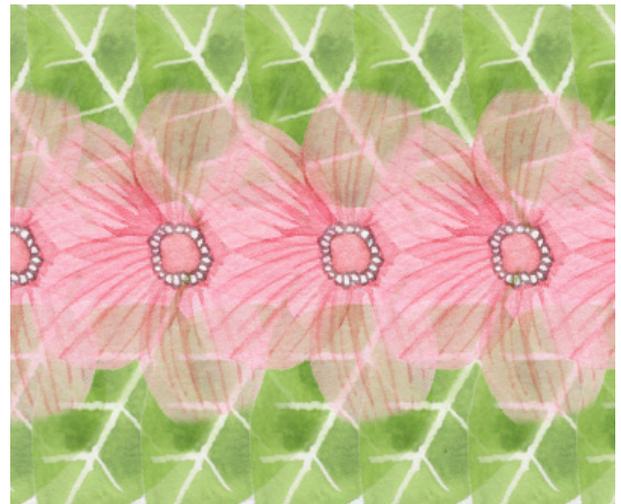
| Fill = 25 | Fill = 75 |

Blend Mode. The parameter defines how the pixels of the brush strokes mix with the pixels of the layer being processed. The program provides 27 blend modes.

| Blend Mode: Normal | Blend Mode: Multiply |

You can select and adjust the texture in the **Texture** tab by clicking the button ⚙ in the expanded **Tool Options** panel.

In the **Texture Library**, the available textures are shown as thumbnails.
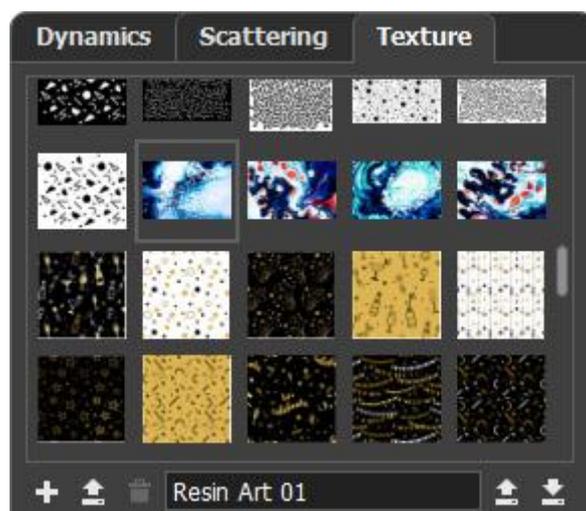
Texture Library

Under the texture list, the following options are located:

New Texture ➕. The button creates a texture from the contents of the active document (also, you can use the **New Texture** command in the **Edit menu**).

Add Texture ⬆. The button loads an image from the disk, which will be used as a texture.

Delete Texture 🗑. The button removes the selected texture from the list.

> **Attention!** If you delete the texture that is recorded in the brush preset, the default texture will be used in the preset instead of it.

Texture Name. Make the field editable by clicking it, enter a new texture name and press the `Enter` key to apply it.

Import Library . The button allows you to load a texture library from the disk (*.brush_textures* file).

Export Library . The button allows you to save a texture library to the disk (with the *.brush_textures* extension).

The parameters of the selected texture:

Properties tab:

Scale (1-200). The parameter sets the size of the texture pattern. The default texture scale is 100%.

| Scale = 50% | Scale = 100% | Scale = 150% |

Tile. When the check-box is enabled, the texture is repeated several times to fill the entire area of the brush cursor (if **Scale** is less than 100%).
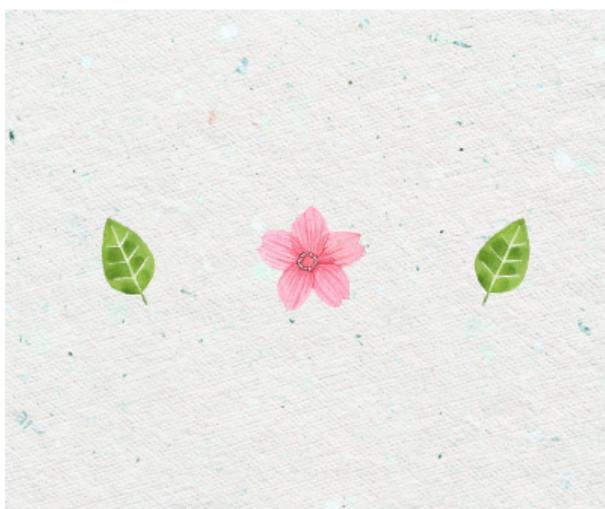
| Check-box disabled | Check-box enabled |

Mirror. When the check-box is enabled, adjacent textures are mirrored.

| Check-box disabled | Check-box enabled |

Flip Horizontal. Enable the check-box to interchange the left and the right parts of the texture.

Flip Vertical. Enable the check-box to interchange the top and the bottom parts of the texture.

| Source Texture | Flipped Horizontally | Flipped Vertically |

Color Tab:

Apply per Tip. When the check-box is enabled, color variations will be will be applied to individual elements of the brush stroke. When the check-box is disabled - to individual strokes.

Check-box enabled   Check-box disabled

Hue (-100..100). The parameter shifts all colors by the same hue value.

Hue = -25   Hue = 25

Hue Variation (0-100). The parameter sets the variation of shades of the brush marks. At the value = 0, all the elements have the same color. The higher the value, the more shades are used.

| Hue Variation = 20 | Hue Variation = 70 |

Saturation (-100..100). The intensity of the colors of the texture: from neutral gray (-100) to the brightest colors (+100).

| Saturation = -50 | Saturation = 50 |

Saturation Variation (0-100). The parameter sets the variation of saturation of the base element. At the value = 0, all the elements have the same saturation. At higher values, the saturation of individual elements will change.

| Saturation Variation = 40 | Saturation Variation = 90 |

Brightness (-100..100). The parameter adjusts the brightness of the texture. As the parameter increases, the texture becomes brighter, and when the parameter decreases, the texture becomes darker.
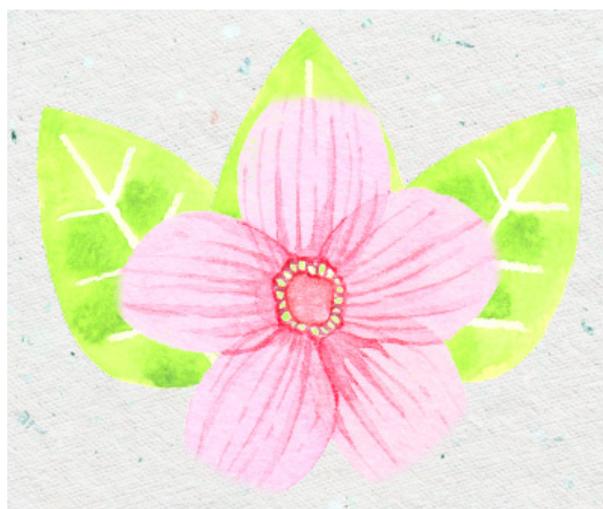
| Brightness = -25 | Brightness = 25 |

Brightness Variation (0-100). The parameter sets the variation of brightness of the base element. At the value = 0, all the elements have the same brightness. At higher values, the brightness of individual elements may change.

Brightness Variation = 10   Brightness Variation = 50

In addition to the above-mentioned parameters, you can adjust the **advanced settings** that affect the shape and position of the brush marks.

If the preset's settings have been changed, you can restore them using the **Default** button.

To draw an arbitrary straight line, you need to left-click to specify the starting point, then hold Shift, move the mouse cursor, click at the end point and release the Shift key. If you do not release Shift, all the new points will be connected into a single line.

ERASER

The **Eraser** tool ◈ alters the transparency of an image (on the selected raster layer). Processed sections are shown as transparent areas, with a checkerboard background.

Attention! When saving a file into a format that does not support transparency (JPEG), the transparent areas will be replaced by white. To keep the transparency, use PNG format.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Element - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.

Size (1-5000). The maximum width of the transparent line which the eraser leaves behind (in pixels).

Hardness (0-100). The amount of blurriness of the brush's edge. As the value of this parameter increases the edge of the brush becomes harder. Near 100% the border between erased and unerased areas will be more distinct; at lower values the boundary between these areas will be smoother.
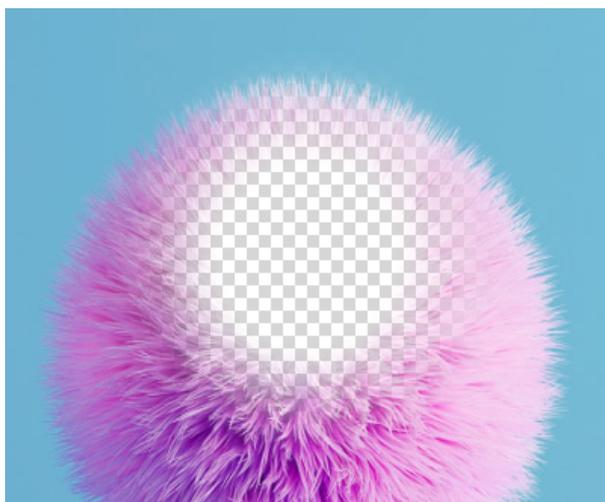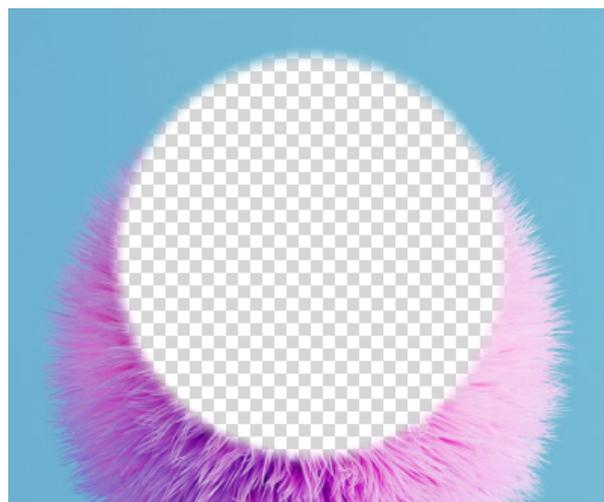
Hardness = 40   Hardness = 90

Strength (1-100). The amount of influence on an image. As this parameter's value is increased, the degree of transparency left by the brush increases.
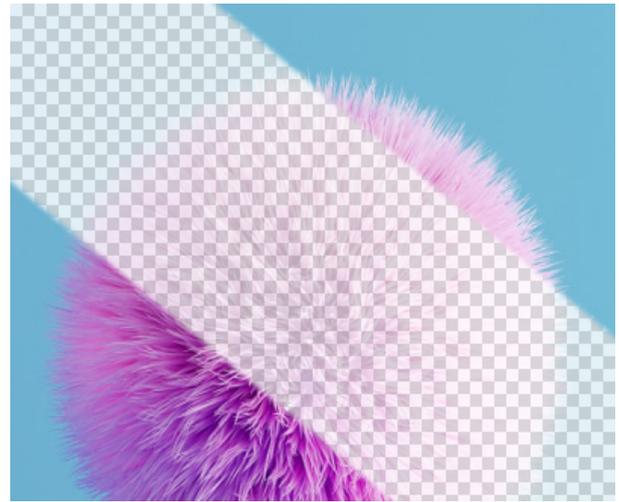
Strength = 30   Strength = 80

Fill (1-100). The parameter affects the intensity of the **Strength** parameter in a single brush stroke. At the value = 100%, the **Strength** parameter is not affected.

Fill = 30   Fill = 80

Mode. In the drop-down list, select the operation mode of the eraser:

    Brush - the tool has a soft edge, like a brush;
    Pencil - the tool has a hard edge, like a pencil.
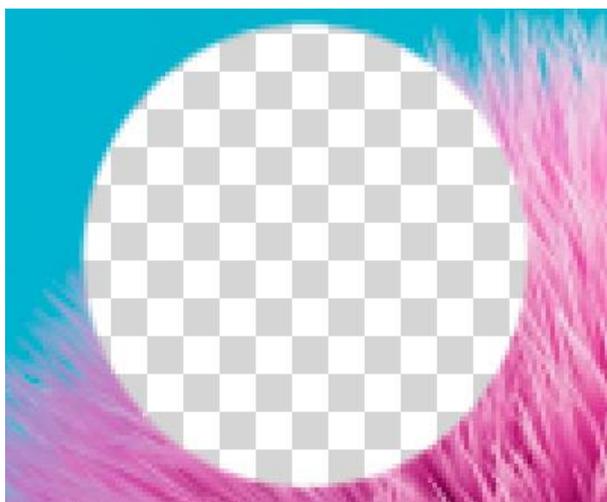
Brush Mode
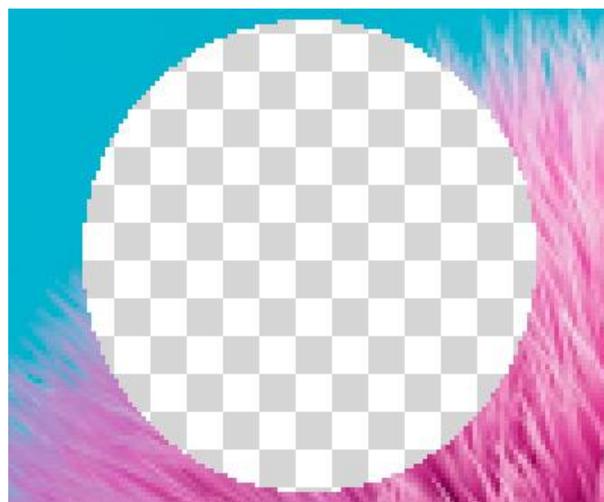
Pencil Mode

Color Sampling. When the check-box is disabled, the tool removes pixels of all colors. When the check-box is enabled, you can adjust the **Tolerance** value. At low values, the tool deletes colors similar to the pixel you click on. The higher the value, the wider the range of removable colors will be.

Color Sampling is disabled

Color Sampling is enabled

In addition to the above-mentioned parameters, you can adjust the **advanced settings** that affect the shape and position of the brush marks.

Press the **Default** button to set all settings to their default values.

In order to erase in a straight line, select the starting point of the line with the left mouse button, then, press and hold down `Shift`, move the cursor to the desired endpoint, and release `Shift`. If `Shift` is not released, then successive lines will be drawn to each point where the mouse is clicked.

HISTORY BRUSH

The **History Brush** partially or fully restores the processed image layer to the selected state, weakening or canceling the applied changes or effects.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the `F5` key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

> **Element** - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.
>
> **Size** (1-5000). The maximum width of a line made by the brush (in pixels).
>
> **Hardness** (0-100). The degree of blurriness of the brush's edges. As the value of this parameter is increased the brush's edges become harder. At values near 100% the border between the brush's edges and the background is very distinct; at lower values the transition between these areas is smoother.

| Hardness = 40 | Hardness = 90 |

> **Strength** (1-100). The degree of restoration to the selected state. At lower values there will be less restoration and more blending with the effect; at values near 100% the image will be restored completely.
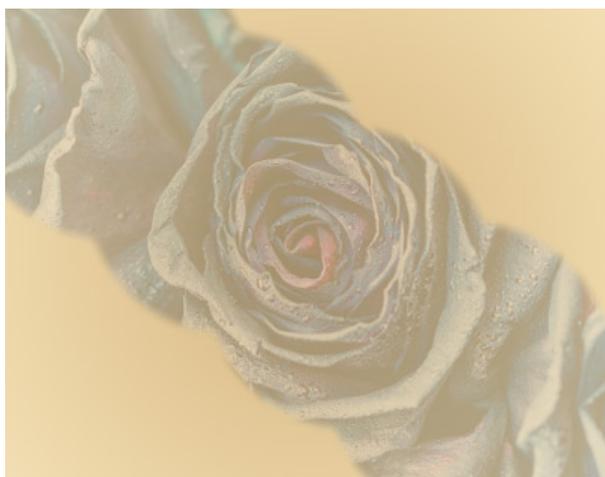
Strength = 25   Strength = 75

Fill (1-100). The parameter affects the intensity of the **Strength** parameter in a single brush stroke. At the value = 100%, the **Strength** parameter is not affected.

Fill = 25   Fill = 75

In the **Restore to** drop-down list, select one of the previous states of the image. Areas processed with the tool will return to this state. By default, the brush restores the image to its initial state.

In addition to the above-mentioned parameters, you can adjust the **advanced settings**.

Press the **Default** button to set all settings to their default values.

To draw a straight line, first specify the starting point with the left mouse button, then, while keeping `Shift` pressed, move the cursor to the desired end point of the line and release `Shift`. If `Shift` is not released, a new line will be drawn to each point where the mouse is clicked.

PAINT BUCKET

The **Paint Bucket** tool ⬦ is used to quickly fill solid areas of an image with color or texture.

You can change the fill color using the **Color** panel, **Swatches** panel, or by clicking the image with the **Eyedropper** tool. To pick a color sample, press and hold the $\boxed{I}$ key and then click the image with the **Eyedropper** tool. After the hotkey is released, the painting tool becomes active again.

You can also use the **Fill** command in the **Edit** menu to fill an entire layer or a selection area. When using the command, you can choose between the following fill types: **Color**, **Pattern**, and **History**.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the $\boxed{F5}$ key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Opacity (0-100). The transparency of the fill relative to the background. The parameter determines the opacity of the color: the smaller the value, the more transparent the fill color and the stronger its interaction with background colors.
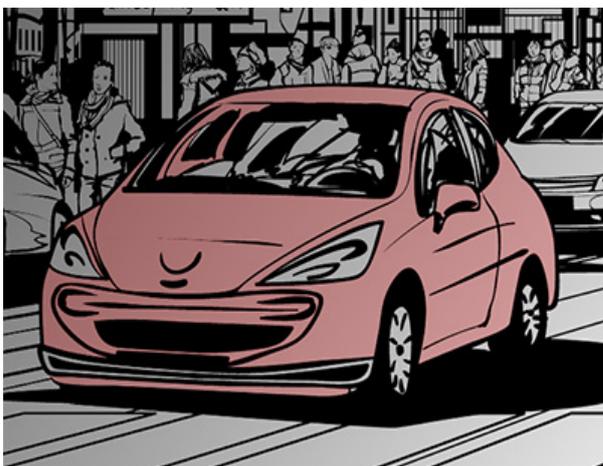
Opacity = 25   Opacity = 75

Tolerance (0-250). At the minimum value, the tool fills only pixels of the same color nearby to the one you click. The higher the value, the wider the range of colors to be filled.
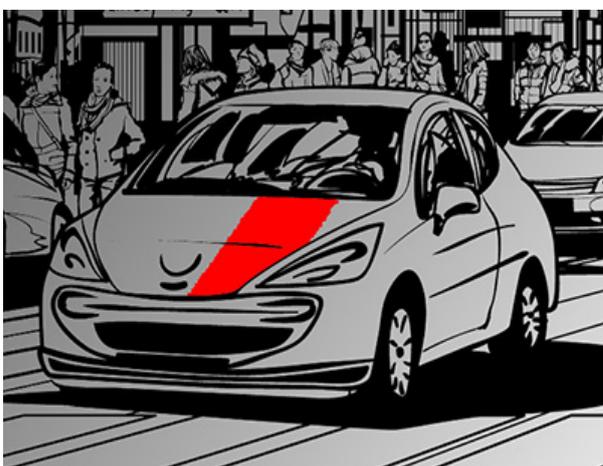
Tolerance = 5   Tolerance = 50

Blend Mode. The parameter controls how the fill pixels are mixed with the ones of the layer. The program provides 27 blend modes.

Multiply Blend Mode

Overlay Blend Mode

Contiguous check-box. If the check-box is activated, only adjacent pixels of the same color are filled. If it is deactivated, all pixels of the same color throughout the image will be filled.

Check-box is Disabled
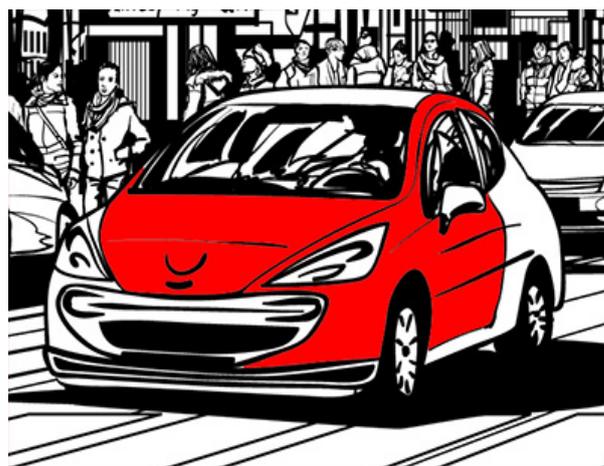
Check-box is Enabled

Anti-Aliasing check-box. The check-box eliminates irregularities in the boundaries of the fill area. To make the edge smoother, enable the check-box before using the tool.

| Check-box is Disabled | Check-box is Enabled |

All Layers check-box. If the check-box is enabled, the pixels are filled based on the merged color data from all visible layers. Otherwise, based on the color data of the current layer.
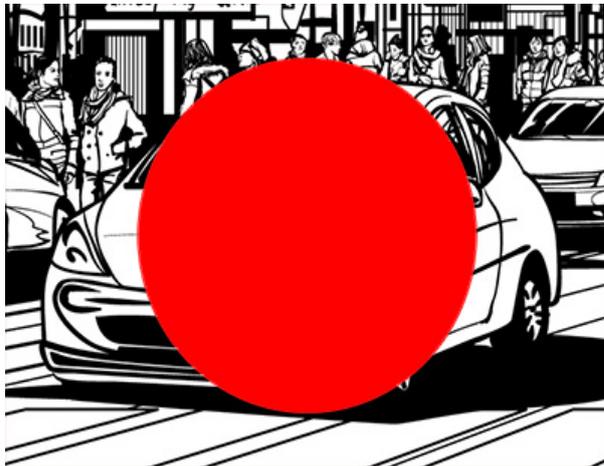
| Check-box is Disabled | Check-box is Enabled |

Fill with Pattern check-box. When the check-box is enabled, the area will be filled with the selected pattern.

Open the **Texture Library** by left-clicking on the selected texture sample.

Texture Library

In the Library, below the list of texture samples, there are the following icons:

Add Texture ⬆. Upload an image to be used as a pattern.

Delete Texture 🗑. Remove the selected pattern from the library.

Texture Name. Click to make the field editable. Enter a new pattern name and press `Enter` to apply it.

Import Library ⬆. Load the library from disk (*.brush_textures* file).

Export Library ⬇. Save the library to disk (to the *.brush_textures* file).

Texture Parameters:

Scale (10-400). The size of the texture pattern.

Scale = 50

Scale = 150

Angle (-180..180). The texture rotation angle.

| Angle = -10 | Angle = 50 |

Mirror. When the check-box is enabled, adjacent textures are mirrored.

| Check-box is Disabled | Check-box is Enabled |

Flip Horizontal. Enable the check-box to interchange the left and the right parts of the texture.

Flip Vertical. Enable the check-box to interchange the top and the bottom parts of the texture.

| Without Flip | Flipped Vertically |

When using the **Fill** command in the **Edit** menu, in addition to the **Color** and **Pattern** fills, the following fill type is available:

> **History**. The layer will be filled with the selected history state. You can select the state to fill with the **Source for History Brush** command in the context menu of the **History** panel. By default, the original state of the document is selected.

Preserve Transparency (only for the **Fill** command). If the check-box is enabled, the transparency of the areas will be preserved when filling.

Press the **Default** button to set all settings to their default values.

GRADIENT FILL

The **Gradient Fill** tool ▣ lets you apply a gradual blend of colors to a layer. You can use it on raster, shape, and *Fit Text to Path* layers.

To apply a gradient, press the left mouse button at the starting point of the gradient, drag the cursor to the place where the end point of the gradient should be located, and release. If you hold down the `Shift` key while applying the gradient, the angle of inclination will change in steps of 45°. Once a gradient has been applied, it can be modified using a guide. While holding down the `Alt` key, the gradient guide can be moved with the mouse beyond its extreme points.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the `F5` key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Select the **Gradient Type** from the drop down list:

Linear Gradient ▣. The option draws the gradient from the starting point to the end point in a straight line.
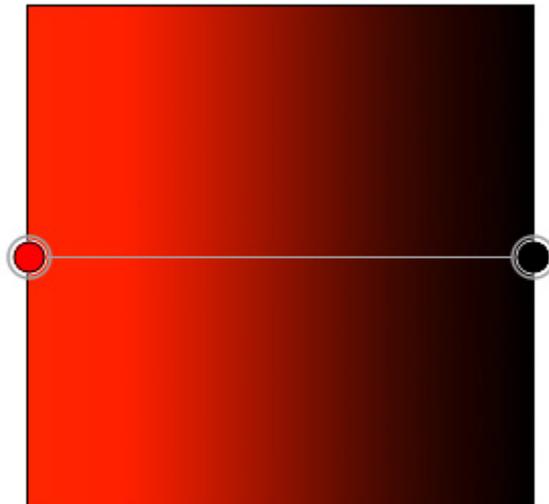
Radial Gradient ▣. The option defines a fill pattern that radiates out from the center of an object.
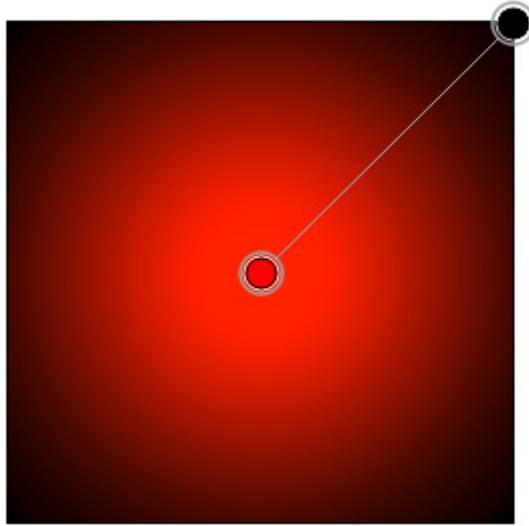
Angular Gradient ▮. The option defines a spiral fill pattern which rotates counterclockwise back to its starting point.
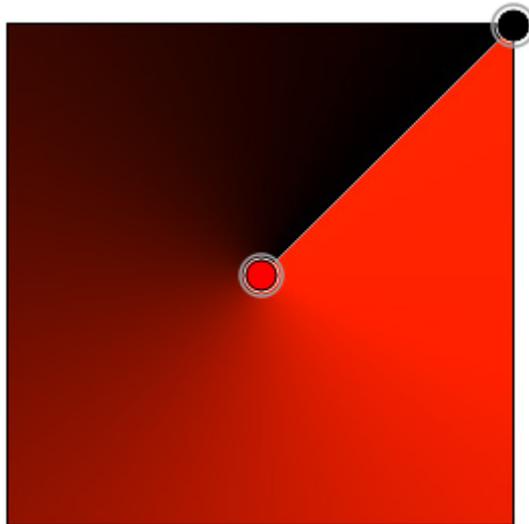
Reflected Gradient ▭. The option draws the linear gradient which extends in both directions from the starting point.
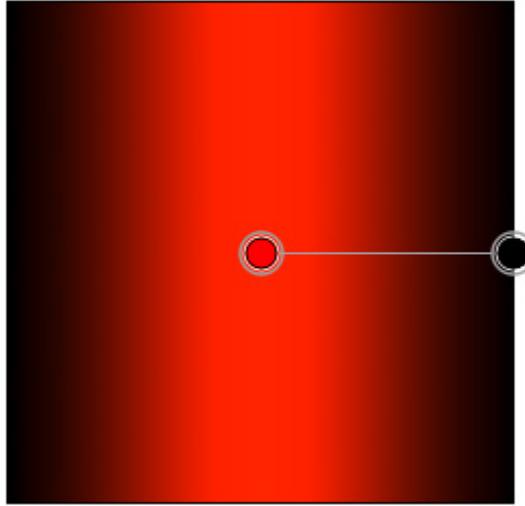
Diamond Gradient . Creates a gradient extending from the center point in a diamond shape.
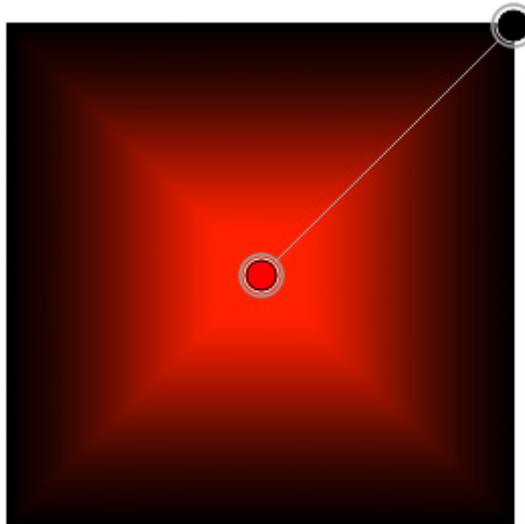
Reverse . The button reverses the order of colors in the gradient fill. Click the button again to restore the original sequence.
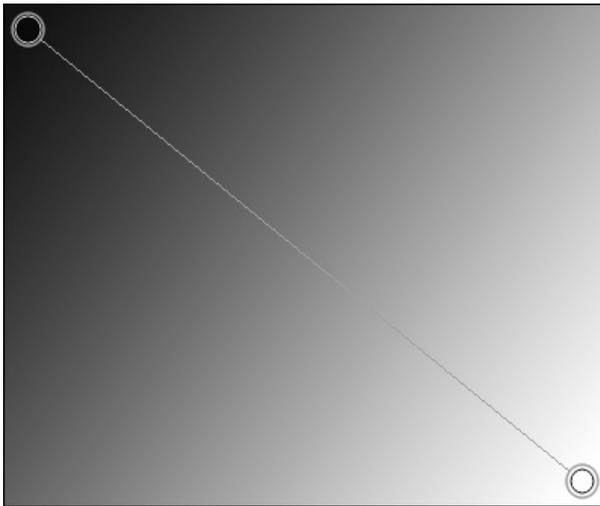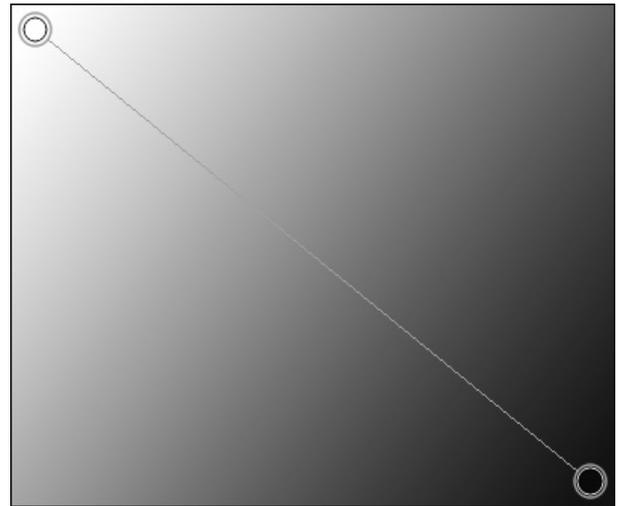
Original Sequence   Reverse Sequence

Blend Mode. The parameter defines how the pixels of the gradient blend with the pixels of the current layer. The program provides 27 blend modes.
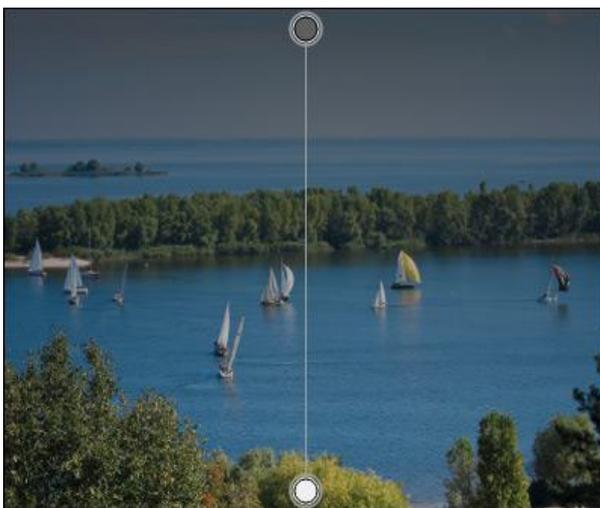
Multiply   Overlay

Angle (-180..180). The parameter allows you to rotate the gradient around the starting point. Holding down the `Shift` key will change the angle in increments of 5°, while holding down the `Ctrl` - in increments of 10°.

| Angle = 60 | Angle = 120 |

Opacity (0-100). The transparency of the gradient in relationship to the colors of the background. The parameter sets the overall opacity of the gradient: the lower the value, the paler the color of the gradient and the stronger the interaction with the colors of the background.

| Opacity = 40 | Opacity = 90 |

Smoothing (0-100). The parameter makes the gradient smoother by smoothing the transitions between the individual colors and shades of colors. As the value of this parameter is reduced, the transitions become more visible.
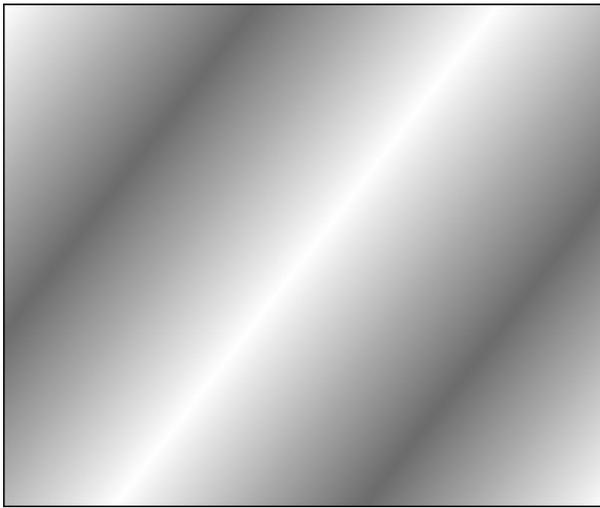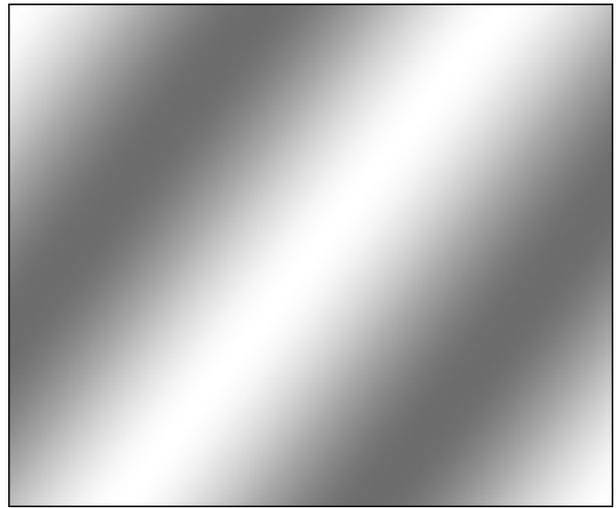
Smoothing = 0   Smoothing = 100

Dithering check-box. Activate the check-box to make the gradient smoother and reduce the number of stripes.

Check-box is disabled   Check-box is enabled

After the gradient is created, you can edit it using the options in the **Tool Options** panel. Using the gradient line you can increase the number of gradient colors and adjust the color and transparency of the gradient components.

To add colors to the gradient, click the gradient line in the **Image Window**. To remove a color point from the gradient, drag it aside and release the mouse button.

To adjust the color, transparency and position of the gradient points, call the menu by right-clicking on a point.

Using the spectral bar, you can specify the color of the point. Also, you can use the color selection dialog, which is displayed by clicking on the color square.

The **Color** check-box enables/disables for the point the selected color shown in the square box to the right. Smaller squares represent the last colors used when creating the gradient. If the check-box is disabled, the color of this point is determined depending on adjacent pixels and cannot be changed.

The **Opacity** (0-100) check-box controls the transparency of the gradient at that point. If the **Opacity** value is less than the maximum, the transparency of the gradient varies smoothly from point to point. If the check-box is disabled, the transparency of the gradient at that point cannot be changed and depends on the total opacity of the gradient.

Using the **Position** (0-100) parameter you can specify the exact position of each point of the gradient.

> **Nota:** At the extreme points of the gradient the **Color** and **Opacity** check-boxes are always enabled, and the **Position** parameter cannot be changed.

You can save the gradient to use it in the future. Click the tool's icon in the **Tool Options** panel (F5) to see the full list of gradients - the Gradient Library.
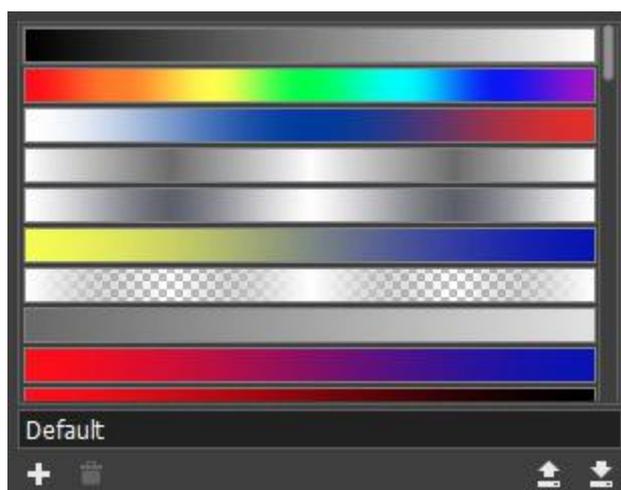
To name the new gradient or rename the selected one, enter a new name in the field at the bottom of the list and press Enter.

Click ✚ to create a new list item.

Click 🗑 to delete the selected gradient from the library/list.

Click ⬇ to save all gradients to a file with the **.gradlib** extension.

Click ⬆ to load a gradient library.

To apply a gradient to the image, click anywhere in the image or select another tool.

CLONE STAMP

The **Clone Stamp** tool ![icon] is designed for copying areas of an image while maintaining the original color range, shadows, texture, illumination, and other characteristics of the cloned part. Cloning can be done within one layer, between different layers, or between loaded images.

To clone an object, **first select the area to be cloned**: do this by first holding down `Alt` on Windows (`Option` on Mac), and then clicking on the area from which the clone will be taken.

Once the reference point is defined, place the cursor over the area you wish to place the clone. Left-click to apply the clone. When you left-click a cross-shaped cursor will appear over the source image, identifying the original fragment.

> **Note:** The sample can be selected from any type of layers, but copied only to a raster layer.

> **Attention!** On **Linux**, by default, the system intercepts `Alt`+click to move a window with the mouse. For the **Clone Stamp** tool, you can use `Alt`+`Ctrl` or change the system settings and set a different keyboard shortcut for moving the window.

Clone Stamp

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the `F5` key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

> **Element** - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.

> **Size** (1-5000). The maximum diameter of the source used for cloning (in pixels).

> **Hardness** (0-100). The degree of blurriness of the fragment's edges. At higher values of this parameter, the less the fragment's border interacts with the background. At values near 100% the

border between the fragment and the image is very distinct; at lower values the border between these areas will be smoother.

Hardness = 10   Hardness = 100

Opacity (1-100). The opacity of the fragment in relation to the background. This parameter affects the opacity of the fragment where it is stamped: at lower values, the fragment is paler and its interaction with the background is greater.

Opacity = 40   Opacity = 90

Fill (1-100). The opacity of the clone in a single brush stroke. When applying strokes to each other, the opacity of the clone increases.

Fill = 40   Fill = 90

Blend Mode. It defines how the cloned fragment blends with the background. The program provides 27 blend modes.

Multiply Mode   Overlay Mode

Aligned check-box. This option sets how the fragment is cloned. When the check-box is activated, a single clone will be created using information from around the selected source: in this case each time the left mouse button is pressed a clone will be selected from the relevant area. When the check-box is not activated, each time the mouse button is released the cursor returns to the source area, and new clone fragments are created from this same area.
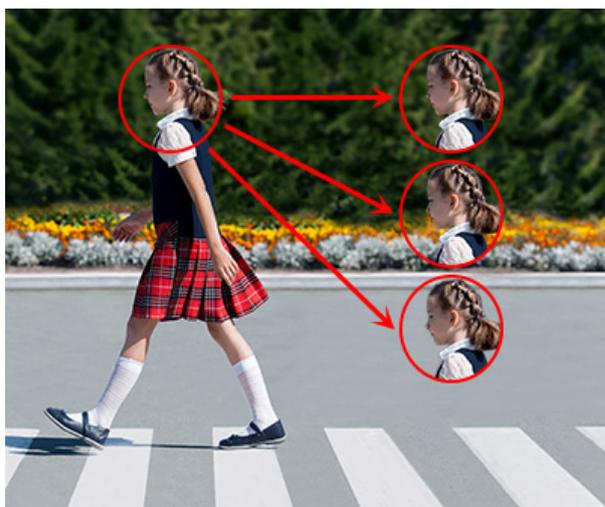
Aligned check-box is disabled   Aligned check-box is enabled

Sample. Set a source for the sample:

Current Layer - active layer data,
Current & Below - data from the active and all visible underlying layers,
All Layers - data from all visible layers.

Clone Source settings [icon]. The changes are applied when the settings menu is closed: by pressing the `Enter` key or by clicking anywhere in the program window.

Clone Source Settings

You can set up to five different patterns in the drop-down list and switch between them. The selected samples are stored in the list as "document name/layer name" until the source (document or layer) is closed. To add a new sample, select an "empty" list item, switch to the image and, holding down the `Alt` key, set a new source point. If, when adding a new clone point from an image, an existing sample is selected in the list, it will be overwritten.

Transformation of the cloned area. For each sample in the list there are separate transformation settings:

Shift. In the **X** and **Y** fields, you can specify the coordinates of the starting point for copying the sample. The values will be set automatically when selecting the source point with the `Alt` key pressed.

Scale. The size of the clone relative to the original fragment. In the **W** and **H** fields, you can set new scale values. To maintain the clone's proportions, close the link icon .

Clone Scaling (Left to Right: 50%, 100%, 75%)

Flip Horizontal . The command allows a clone to be mirrored along the standing axis, i.e. interchanging the left and right sides.

Flip Vertical . The command mirrors a clone by turning it upside down.

Original Image

Regular Clon

Flip Horizontal

Flip Vertical

Rotate. Rotation of the cloned area.

Reset. Press the button to return the transformation settings to the original ones.

Sample Preview:

Show Overlay. When the check-box is enabled, the copied area of the image will be displayed inside the cursor.

Opacity. The parameter allows you to change the transparency of the sample inside the cursor.

Check-Box is Disabled   Check-Box is Enabled

Beside the above-listed settings, some **additional parameters** are available for this tool.

Press the **Default** button to set all settings to their default values.

To draw a straight line, first specify the starting point with the left mouse button, then, while keeping `Shift` pressed, move the cursor to the desired end point of the line and release `Shift`. If `Shift` is not released, a new line will be drawn to each point where the mouse is clicked.

CHAMELEON BRUSH

The **Chameleon Brush** ![icon] copies a fragment of an image from one part to another with respect to the color range, tone, texture, illumination, and other characteristics of the background, to which the clone is applied. Unlike the **Clone Stamp** tool, this preserves the characteristics of the background, adapting the cloned object to a new environment. Cloning can be performed within the same layer, between different layers, or between loaded images.

To clone an object first choose **Chameleon Brush** from the left, and **select an image source** by holding down `Alt` (`Option` on Mac), and click the left mouse button over the area from which the cloned fragment will be selected.

Once the reference point is defined, move the cursor to another location. To place the cloned fragment click the left mouse button. When the left mouse button is released, a cross-shaped cursor will appear over the source area, to indicate from where the clone fragment is selected.

> **Note:** The sample can be selected from any type of layers, but copied only to a raster layer.

> **Attention!** On **Linux**, by default, the system intercepts `Alt`+click to move a window with the mouse. For the **Chameleon Brush** tool, you can use `Alt`+`Ctrl` or change the system settings and set a different keyboard shortcut for moving the window.

Chameleon Brush

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use

the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Element - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.

Size (1-5000). Diameter of the source area, from which the fragment is cloned (in pixels).

Fill (1-100). The opacity of the clone in a single brush stroke. When applying strokes to each other, the opacity of the clone increases.
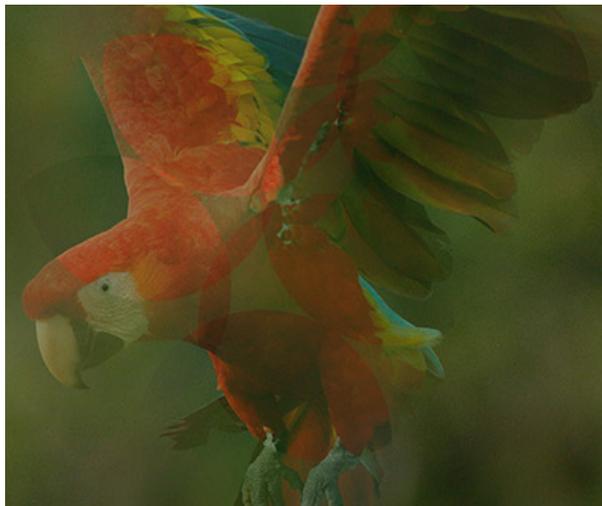
Fill = 25   Fill = 75

The **Aligned** check-box sets the cloning method. When the check-box is enabled, one clone is created from an area: in this case each new line draws information from the relevant area around the source point. When the check-box is deactivated, each time the mouse button is clicked, a cross-shaped cursor will appear above the source area, and new lines will create a clone from only this area.

Aligned check-box is enabled   Aligned check-box is disabled

Sample. Set a source for the sample:

>   **Current Layer** - active layer data,
>   **Current & Below** - data from the active and all visible underlying layers,
>   **All Layers** - data from all visible layers.

Clone Source settings ▤🏛. The changes are applied when the settings menu is closed: by pressing the `Enter` key or by clicking anywhere in the program window.

Clone Source Settings

You can set up to five different patterns in the drop-down list and switch between them. The selected samples are stored in the list as "document name/layer name" until the source (document or layer) is closed. To add a new sample, select an "empty" list item, switch to the image and, holding down the `Alt` key, set a new source point. If, when adding a new clone point from an image, an existing sample is selected in the list, it will be overwritten.

Transformation of the cloned area. For each sample in the list there are separate transformation settings:

>   **Shift**. In the **X** and **Y** fields, you can specify the coordinates of the starting point for copying the sample. The values will be set automatically when selecting the source point with the `Alt` key pressed.

>   **Scale**. The size of the clone relative to the original fragment. In the **W** and **H** fields, you can set new scale values. To maintain the clone's proportions, close the link icon 🔗.

Clone Scaling (Left to Right: 30%, 60%, 100%)

Flip Horizontal ⏐▌. The command allows a clone to be mirrored along the standing axis, i.e. interchanging the left and right sides.

Flip Vertical ⏁. The command mirrors a clone by turning it upside down.

Original Image

Regular Clon

Flip Horizontal   Flip Vertical

Rotate. Rotation of the cloned area.

Reset. Press the button to return the transformation settings to the original ones.

Sample Preview:

Show Overlay. When the check-box is enabled, the copied area of the image will be displayed inside the cursor.

Opacity. The parameter allows you to change the transparency of the sample inside the cursor.
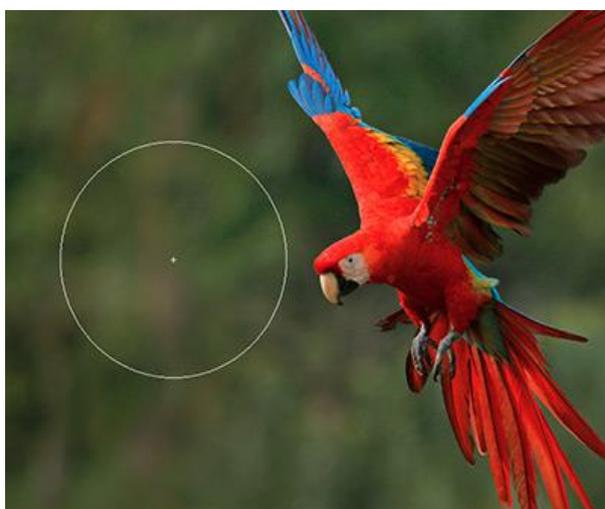
Check-Box is Disabled   Check-Box is Enabled

The **Artistic Cloning** mode temporarily disables the consideration of the neighboring pixels when applying a clone fragment. In this mode, you can change the brush size, choose a new source from which to copy a clone, remove parts from a clone area, etc. To remove a part of the clone, press the `Ctrl`-key on the keyboard (⌘ on Mac) and, keeping it pressed, draw over the area.

This mode is useful when cloning from a large image or creating a clone from different parts of an image.

To process the fragment and close the **Artistic Cloning** mode, you can use one of the methods:

- press the button Ⓥ in the Tool Options panel,

- disable the **Artistic Cloning** check-box in the Tool Options panel, or

- press the **Exit AC Mode** button ⬆ in the **History** panel.

To exit the **Artistic Cloning** mode without applying the changes, click ⊘ in the Tool Options panel.

> **Note:** When using the **Artistic Cloning** mode, only the actions performed in this mode are displayed in the **History** panel. When you exit the mode, the full image processing history will be restored.

In addition to the above-mentioned parameters, you can adjust the **advanced settings** that affect the shape and position of the clone.

Press the **Default** button to set all settings to their default values.

To draw a straight line, first specify the starting point with the left mouse button, then, while keeping `Shift` pressed, move the cursor to the desired end point of the line and release `Shift`. If `Shift` is not released, a new line will be drawn to each point where the mouse is clicked.

BLUR

The **Blur** tool reduces image sharpness by decreasing color contrast between neighboring pixels.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Element - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.

Size (1-500). Blur brush size (in pixels).

Hardness (0-100). The width of the tool's outer edge, where the image is partially blurred. The higher the value, the larger the area within the brush where blur is applied completely.
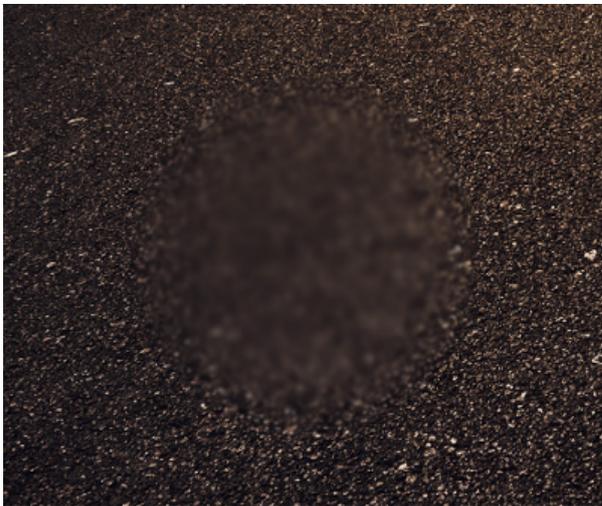
| Hardness = 40 | Hardness = 90 |

Radius (0.1-5.0). Intensity of the effect on an image. This parameter specifies the area where points are searched for blurring: at higher values the blurring radius is larger.
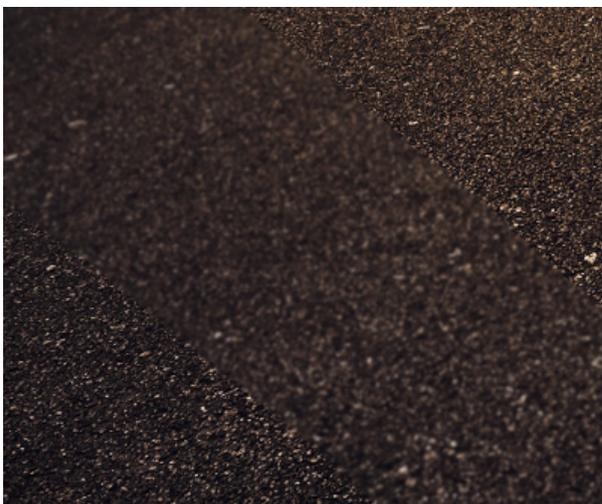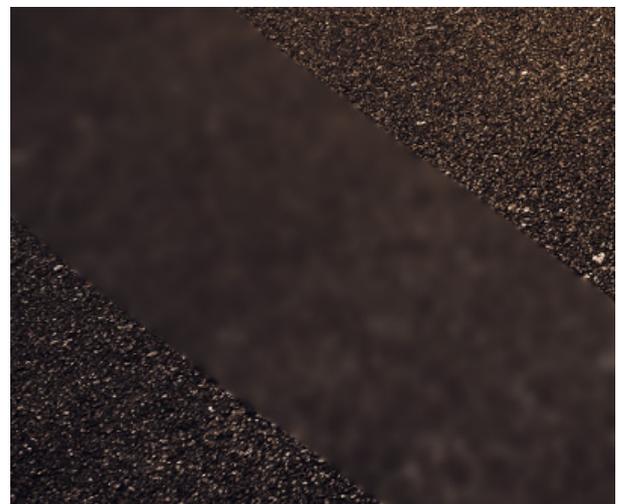
| Radius = 1.0 | Radius = 4.0 |

Fill (1-100). The amount of blur in a single brush stroke. If you hold the mouse button while drawing, the strokes are overlapped and the blur effect increases.

Fill = 25	Fill = 75

In addition to the above-mentioned parameters, you can adjust the **advanced settings** that affect the shape and position of the brush marks.

Press the **Default** button to set all settings to their default values.

To draw a straight line, first specify the starting point with the left mouse button, then, while keeping `Shift` pressed, move the cursor to the desired end point of the line and release `Shift`. If `Shift` is not released, a new line will be drawn to each point where the mouse is clicked.

SHARPEN

The **Sharpen** tool ▲ improves the clarity of an image by increasing the color contrast between pixels.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Element - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.

Size (1-500). Sharpen tool size (in pixels).

Hardness (0-100). The width of the tool's outer edge, where sharpness is partially applied. At higher values the amount of sharpness applied to the inner area of the tool increases.
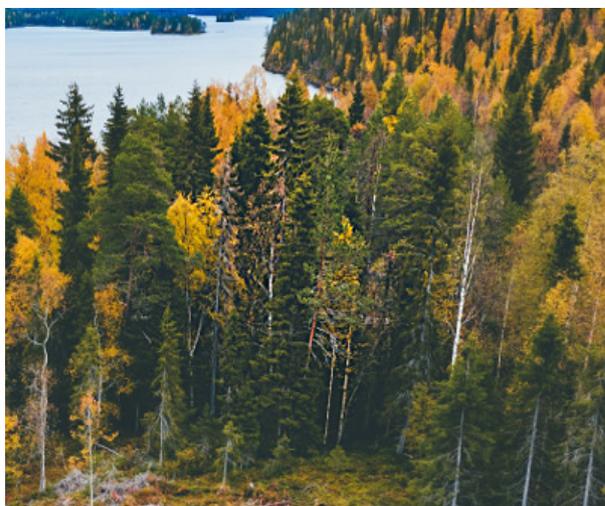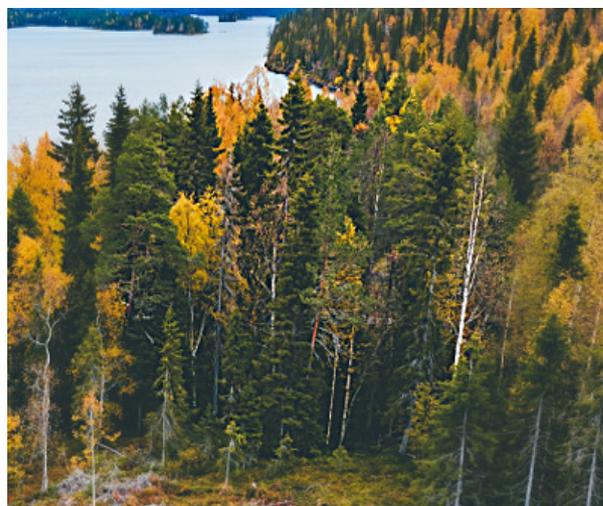
| Hardness = 40 | Hardness = 90 |

Amount (1-250). The amount of contrast between pixels. At a value of 100% contrast is increased 2 times, at 200% by 4 times, etc.
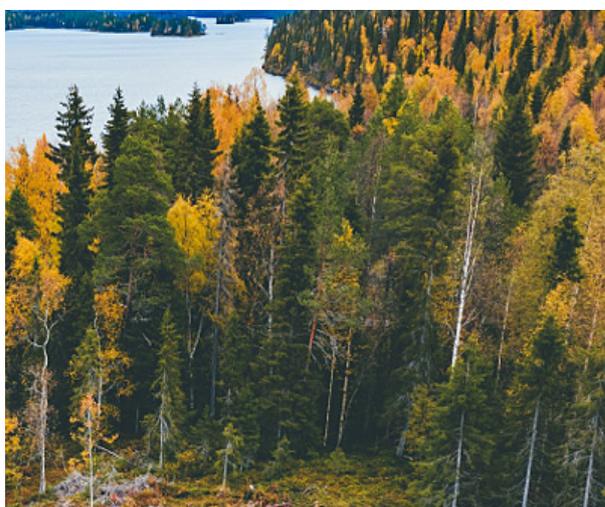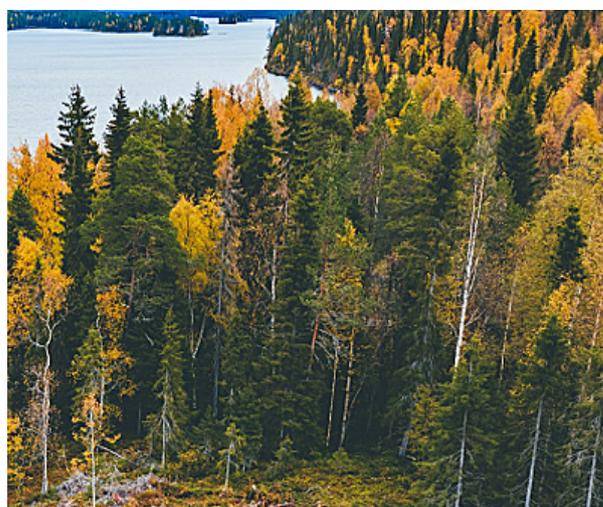
| Amount = 50 | Amount = 150 |

Radius (0.1-20.0). The degree of edge sharpness. This parameter specifies the number of neighboring pixels that are affected by the sharpness of a pixel. When the value is increased, the intensity of transition between colors increases.

Radius = 1.0   Radius = 10.0

Fill (1-100). The sharpen intensity with a single brush stroke. If you hold the mouse button while drawing, the strokes are overlapped and the sharpen effect increases.
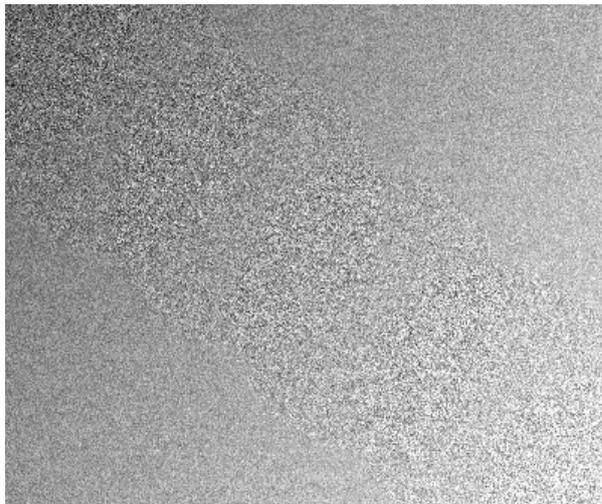
Fill = 25   Fill = 75

In addition to the above-mentioned parameters, you can adjust the **advanced settings** that affect the shape and position of the brush marks.

Press the **Default** button to set all settings to their default values.

To enhance sharpness along a straight line, select a starting point with the left mouse button, then, while keeping `Shift` pressed, move the cursor to the end point and release `Shift`. If `Shift` is not released, a new line will be drawn each time the mouse is clicked over the image.

SMUDGE

The **Smudge** tool mixes colors by displacing pixels, like a finger passing through wet paint.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Element - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.

Size (1-500). Width of the Smudge Tool.

Hardness (0-100). The amount of blurriness of the outer edge. The higher the value, the harder the brush edge is.

| Hardness = 10 | Hardness = 90 |

Strength (1-100). The lengthiness of a stroke's colors. The higher the value of this parameter, the more the element is smeared.

| Strength = 30 | Strength = 65 |

Use Color (0-100). Intensity of primary colors at the beginning of each stroke. The higher the value, the brighter the color at the beginning of the stroke. If this parameter is set to zero the stroke will be applied in the normal way (without using the primary color).

The primary color can be selected in the **Color**/**Swatches** panels. To select a color, move the cursor to the spectral strip (the cursor will take the form of a pipette) and click the desired color, or choose a color from the standard **Select Color** dialog box. In some cases it is more convenient to change colors manually, by adjusting the sliders.
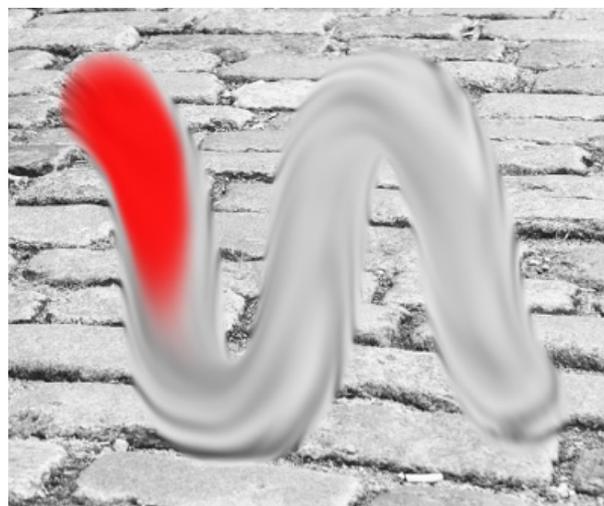
Use Color = 20   Use Color = 90

In addition to the above-mentioned parameters, you can adjust the **advanced settings**.

Press the **Default** button to set all settings to their default values.

To spread color along a straight line, first select a starting point by clicking the left mouse button and while holding `Shift`, move the cursor to the desired endpoint and release `Shift`. If `Shift` is not released, then new lines will be drawn to each point where the mouse is clicked.

LIGHTEN

The **Lighten** tool tones an image by enhancing the brightness of colors. Each stroke applied increases the lightening effect.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Element - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.

Size (1-5000). Diameter of the Lighten Tool.

Hardness (0-100). The degree of softness of the tool's edge. The higher the value, the sharper the tool's edge are. At 100% there is a sharp transition between the affected area and the unaffected area; at lower values the transition between these areas is smoother.

Hardness = 40   Hardness = 90

Strength (1-100). Amount of Lighten applied to an image. When Strength = 100% the maximum amount of lightening is applied to an image.

Strength = 25   Strength = 75

Fill (1-100). The intensity of lighten effect with a single brush stroke. If you hold the mouse button while drawing, the strokes are overlapped and the lighten effect increases.

Fill = 25   Fill = 75

The drop-down menu **Range** contains three ways to process pixels:

Shadows. Darker areas are processed more than lighter areas.

Midtones. The brush affects both light and dark areas equally.

Highlights. Lighter areas of the image are processed more than darker areas.

| Shadows | Midtones | Highlights |

In addition to the above-mentioned parameters, you can adjust the **advanced settings** that affect the shape and position of the brush marks.

Press the **Default** button to set all settings to their default values.

To lighten an area in a straight line, first select the starting point by clicking the left mouse button, then, while keeping `Shift` pressed, bring the cursor to the desired end point and release `Shift`. If `Shift` is not released, additional lines will be drawn to each point where the mouse is clicked.

DARKEN

The **Darken** tool tones an image by decreasing the brightness of colors. The effect is increased with each successive brush stroke.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Element - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.

Size (1-5000). Size of the Darken brush.

Hardness (0-100). The degree of softness of the tool's edge. The higher the value, the sharper the tool's edges are. At values near 100%, the boundary between the darkened area and untreated area is more distinct; at lower values there is a smoother transition between these areas.

Hardness = 40   Hardness = 90

Strength (1-100). The amount the image is darkened. At a Strength value near 100% the colors are darkened near maximum.

| Strength = 25 | Strength = 75 |

Fill (1-100). The intensity of darken effect with a single brush stroke. If you hold the mouse button while drawing, the strokes are overlapped and the darken effect increases.

| Fill = 25 | Fill = 75 |

The drop-down menu **Range** provides three methods for darkening an image:

Shadows. Dark areas are processed more strongly than light areas.

Midtones. Dark and light areas are processed equally.

Highlights. Light areas are processed more strongly than dark areas.

Shadows   Midtones   Highlights

Beside the above-listed settings, some **additional parameters** are available for this tool.

Press the **Default** button to set all settings to their default values.

To darken colors in a straight line, first select a starting point for the line by left-clicking over the desire point, then, while pressing `Shift`, move the cursor to the desired end point and release `Shift`. If `Shift` is not released, additional lines will be drawn to each point where the mouse is clicked.

SATURATION

The **Saturation** tool ⬙ tones an image by changing the saturation and contrast of neighboring pixels.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Element - in the drop-down list, select the type of the basic element of the brush: **Ellipse** or **Select Shape**.

Size (1-5000). Size of the Saturation tool.

Hardness (0-100). The softness of the tool's edge, where the effect is applied partially. At higher values the boundary between treated and untreated areas is more distinct; at lower values the transition between these areas is processed more smoothly.

Hardness = 40   Hardness = 90

Strength (1-100). The strength of the effect. The higher the value, the stronger the change.
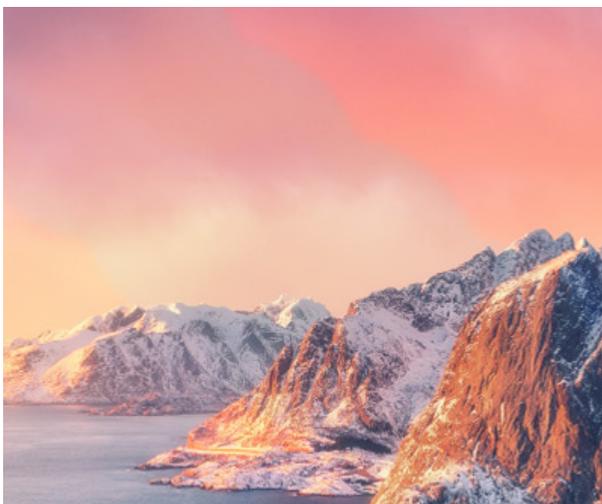
Strength = 25   Strength = 75

Fill (1-100). The intensity of the effect in a single brush stroke. If you hold the mouse button while drawing, the strokes are overlapped and the saturation/desaturation effect increases.

Fill = 25   Fill = 75

The tool works in two modes: in **Saturate** mode colors become more saturated, in **Desaturate** mode colors become less saturated.
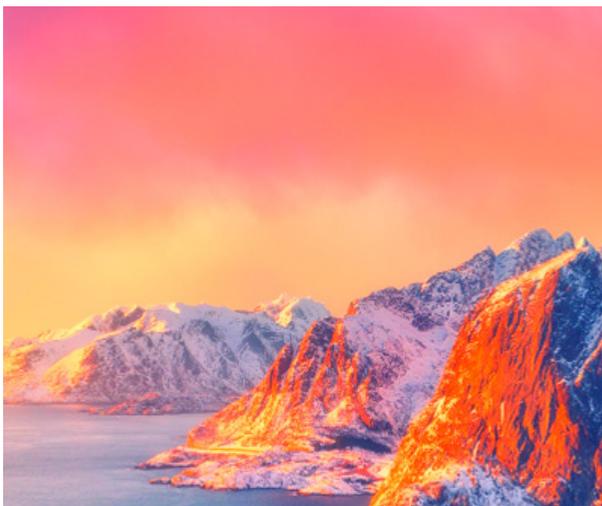
Saturate Mode   Desaturate Mode

In addition to the above-mentioned parameters, you can adjust the **advanced settings** that affect the shape and position of the brush marks.

Press the **Default** button to set all settings to their default values.

To change saturation in a straight line, pick a starting point by left-clicking the mouse, then, while pressing `Shift`, move the cursor to the desired end point and release `Shift`. If `Shift` is not released, then a new line will be drawn to each point where the mouse is clicked.

BRUSH EDITOR: ADVANCED BRUSH SETTINGS

Use the advanced brush settings to create new brushes and modify existing ones.

Advanced settings are the same for most standard brushes. The parameters are located in the expanded **Tool Options** panel, which is opened by clicking the tool icon or by using the F5 key.

To change the value of a parameter, enter a numeric value in the input field of this parameter or move the slider.

Standard Parameters:

Spot Spacing (1-500). Distribution of elements, from which the line is comprised. Increasing this parameter creates a line that is composed of a series of brush marks; the distance between the brush marks depends on the parameter's value.
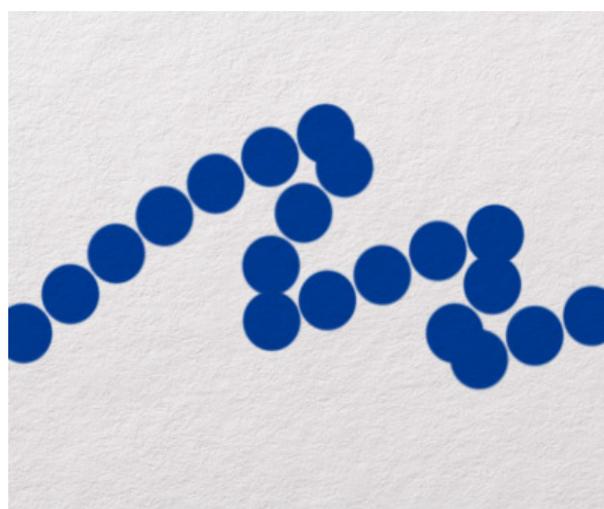
Spot Spacing = 10   Spot Spacing = 100

Aspect (1-100). The compression of the base element. At value = 1 the brush is flattened into a line, at 100 it is a circle, and at intermediary values it is an ellipse. The lower the value for this parameter, the further the ellipse is compressed in the direction specified by the **Angle** parameter.
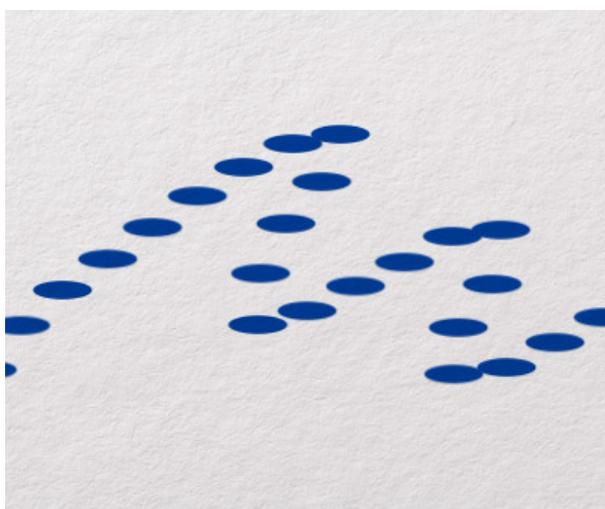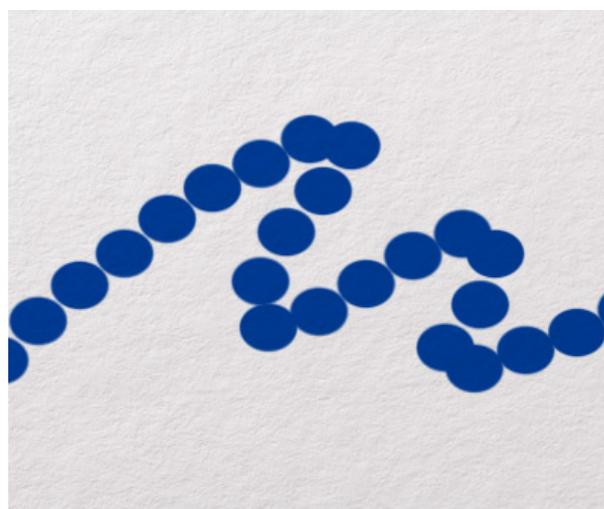
Aspect = 30   Aspect = 80

Angle (-180..180). The angle of the base element.
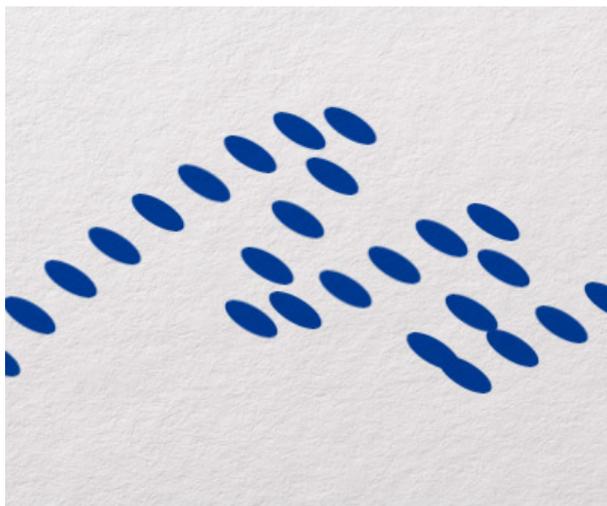
<div align="center">Angle = -30</div>
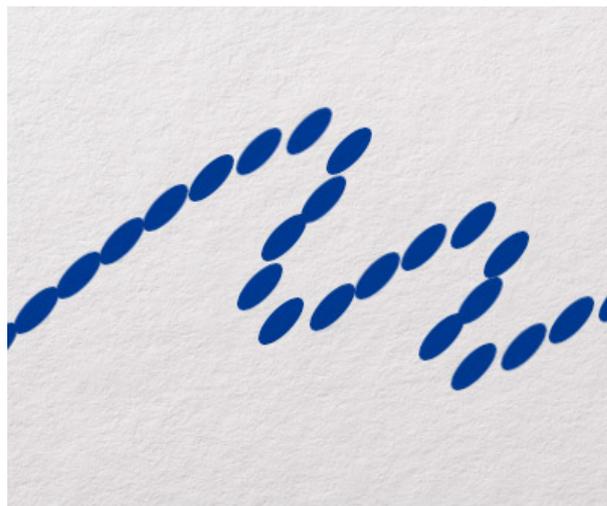
<div align="center">Angle = 45</div>

Round Brush. If the check-box is enabled, the brush has a shape of an ellipse, if disabled - a rectangular shape.
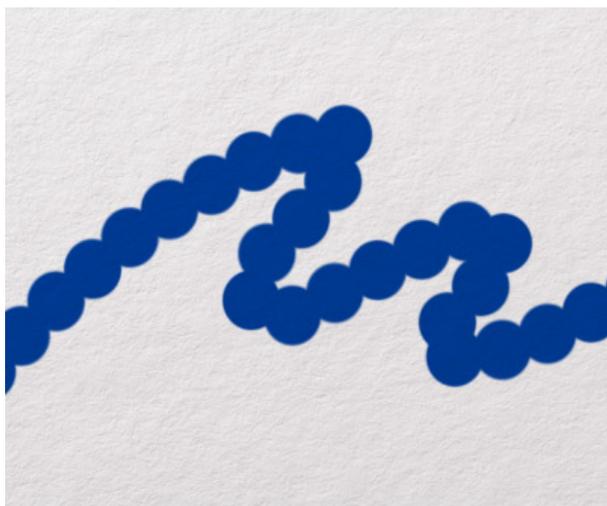
<div align="center">Round Brush
(check-box enabled)</div>
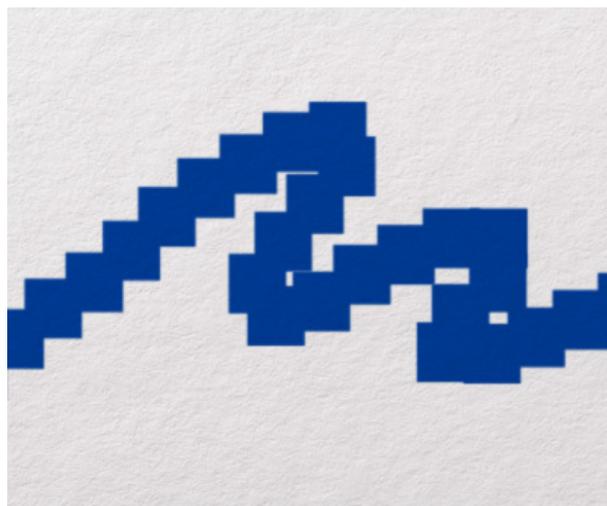
<div align="center">Square Brush
(check-box disabled)</div>

Noise. The check-box adds noise to the soft edge of the brush. At a lower value of **Hardness** and a higher value of **Spot Spacing**, the noise effect is more prominent.
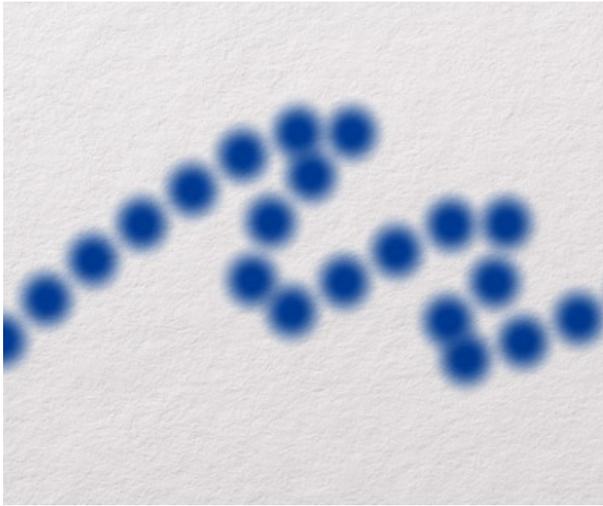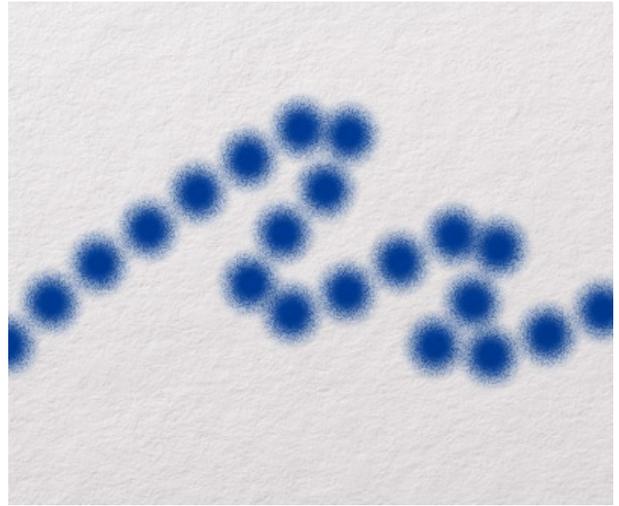
| Check-Box Disabled | Check-Box Enabled |

Auto Repeat. The check-box activates the automatic (continuous) drawing mode when holding the cursor over any point of the image.
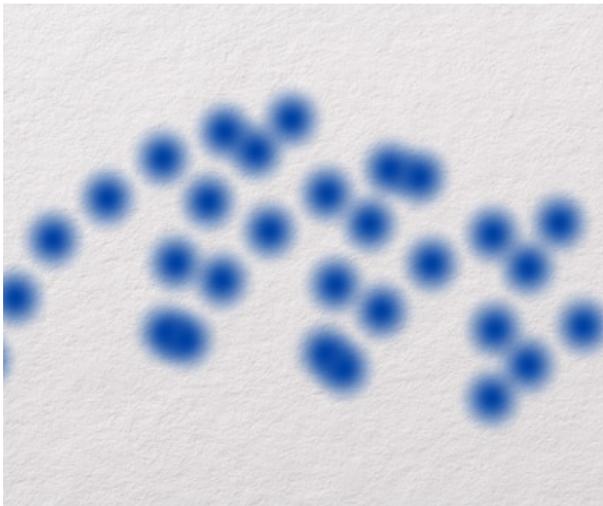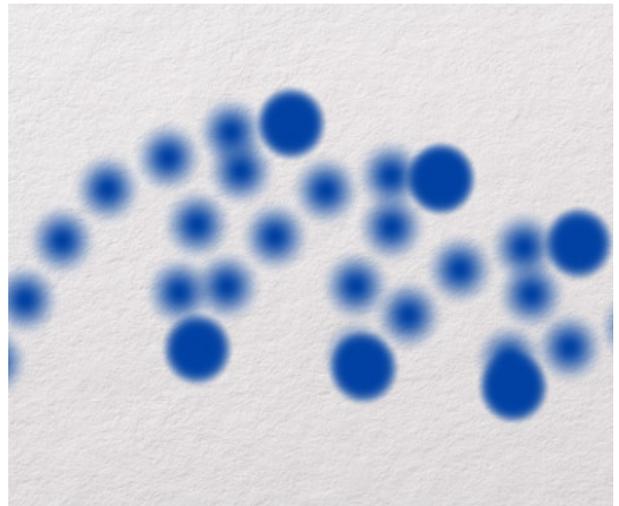
| Check-Box Disabled | Check-Box Enabled |

Smoothing. Activate the check-box to make the stroke edge smoother.

| Check-Box Disabled | Check-Box Enabled |

Advanced Settings are accessible in the menu, which is called by clicking the button ⚙ in the expanded **Tool Options** panel.

In the **Shape** tab, you can select the shape of the basic element of the brush. The tab is only visible when **Element = Select Shape** is selected.
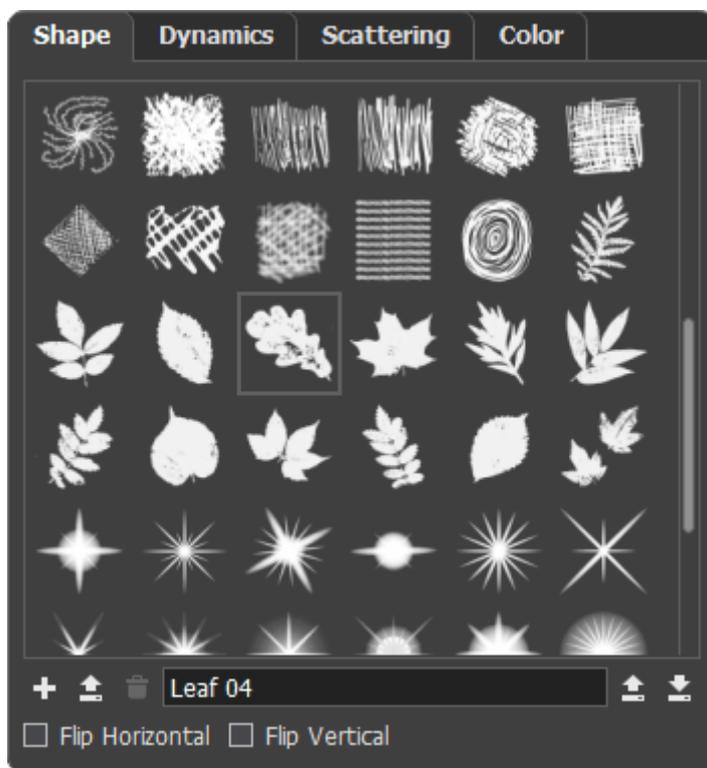
Brush Shape Library

Under the shape list the following options are located:

New Shape ⊞ - creates a brush shape from the contents of the active document (alternatively, you can use the **New Brush** command from the **Edit** menu).

Add Shape 🔼 - loads an image to be used as a brush shape.

Delete Shape 🗑 - removes the selected brush shape from the list.

> **Note:** If you delete the shape recorded in the brush preset, the default shape will be used in the preset instead.

Shape Name. Make the field editable by clicking it, enter a new shape name and press the `Enter` key to apply it.

Import Library 🔼 - allows you to load a shape library from the disk (*.brush_shapes* file).

Export Library 🔽 - allows you to save a shape library to the disk (with the *.brush_shapes* extension).

The **Dynamics** tab contains parameters that define random changes of the base element (they can vary for different tools and brush types):

> **Size Variation** (0-100). The parameter defines the variation of size of the brush marks (as a percentage of the specified brush size). At the value = 0, the size of all elements is the same; when increasing the parameter, smaller elements appear.

> **Min Size** (0-100). The parameter sets the minimum percentage by which the brush marks can scale. The parameter has an impact if the **Size Variation** value is not 0 and/or one of the **Control** commands is enabled.
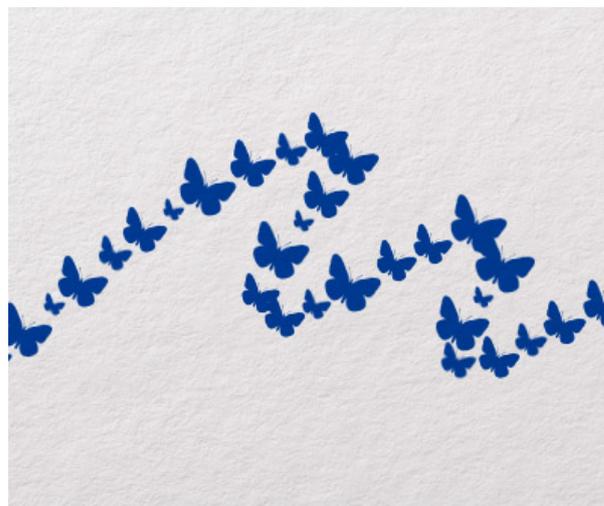
Size Variation = 25	Size Variation = 75

> **Hardness Variation** (0-100). The parameter specifies how the hardness of brush marks varies for each spacing interval. At the value = 0, all the elements have the same hardness; when increasing the parameter, the hardness of certain elements decreases.
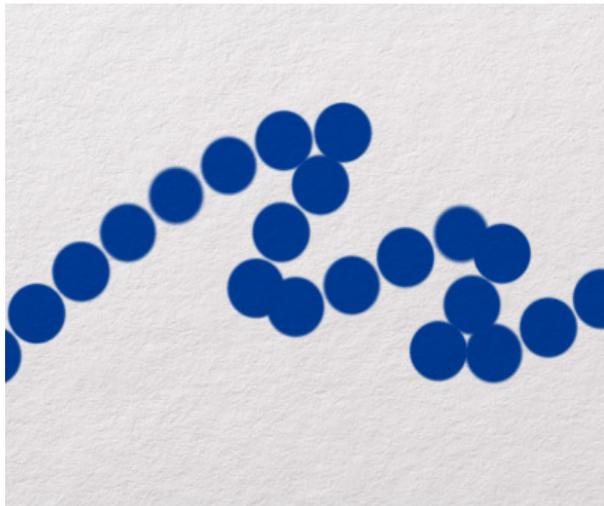
| Hardness Variation = 25 | Hardness Variation = 75 |
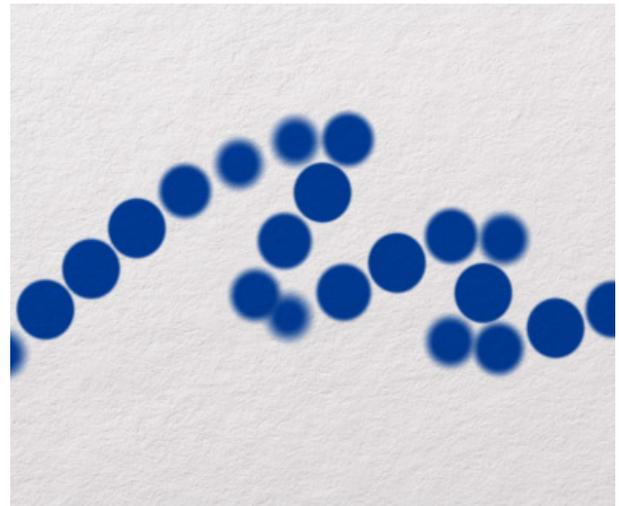
Pressure Variation (0-100). The parameter sets the variation of brush pressure. At the value = 0, the pressure is invariable; as the parameter increases, the pressure of certain elements decreases.

| Pressure Variation = 25 | Pressure Variation = 75 |
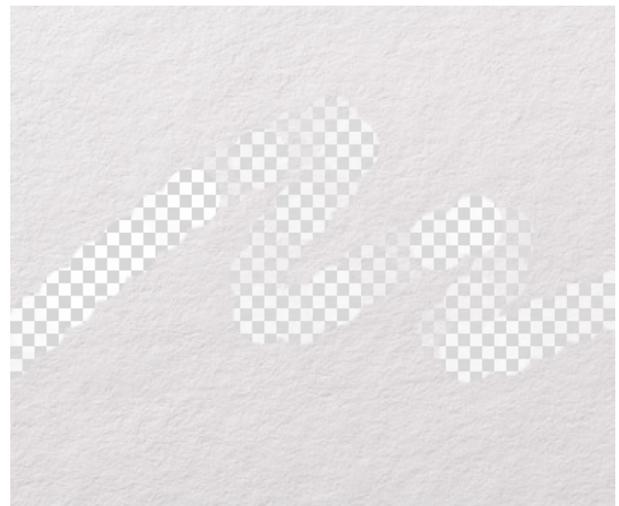
Opacity Variation (0-100). The parameter sets the variation of the opacity of the brush marks. At the value = 0, all the elements have the same opacity. At higher values, the transparency of certain elements increases.
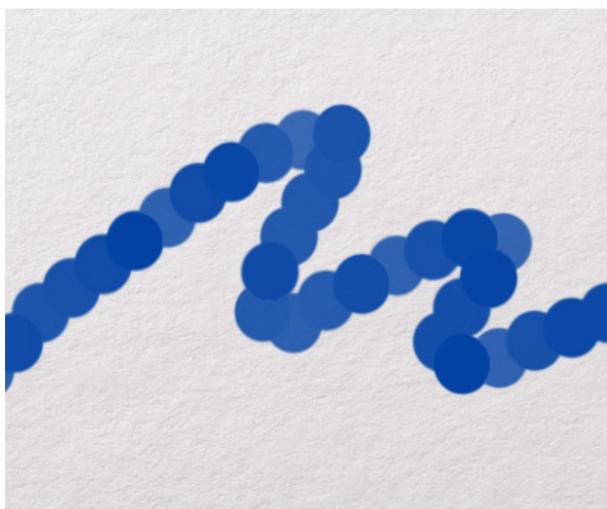
| Opacity Variation = 25 | Opacity Variation = 75 |
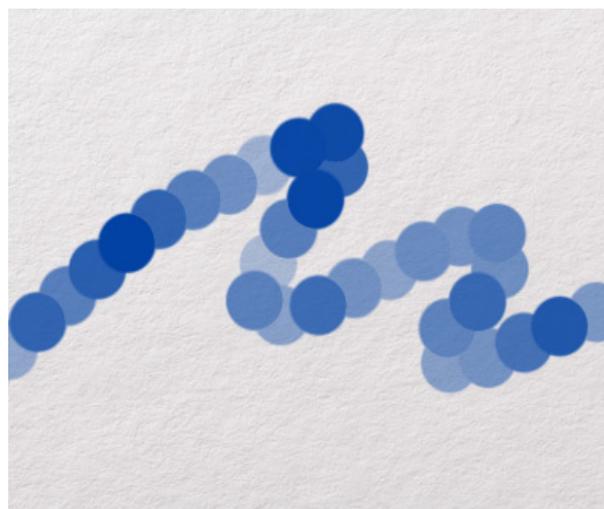
Fill Variation (0-100). The parameter specifies how the filling of brush marks varies for each spacing interval. At the value = 0, all the elements have the same filling density; when increasing the parameter, the filling of certain elements decreases.
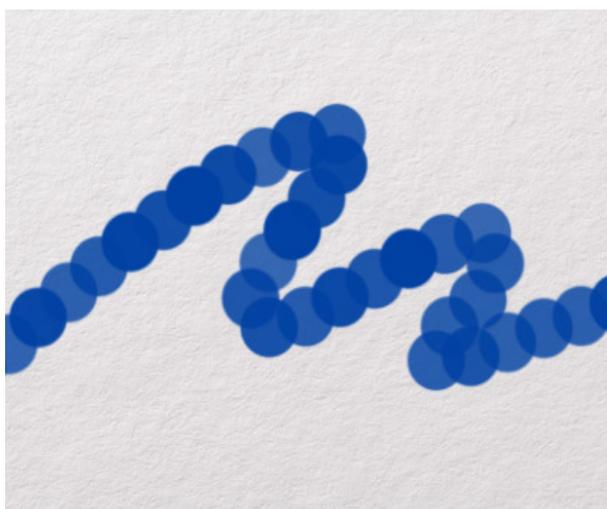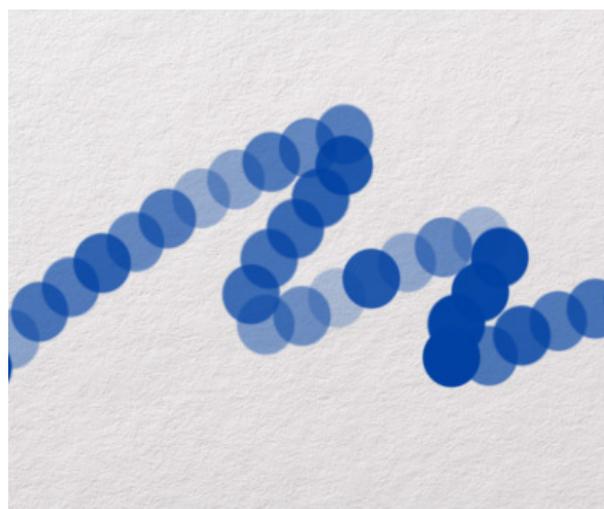
| Fill Variation = 25 | Fill Variation = 75 |

Aspect Variation (0-100). The parameter specifies how the shape of brush marks varies for each spacing interval. At the value = 0, all the elements have the same shape; when increasing the parameter, the compression of certain elements increases.
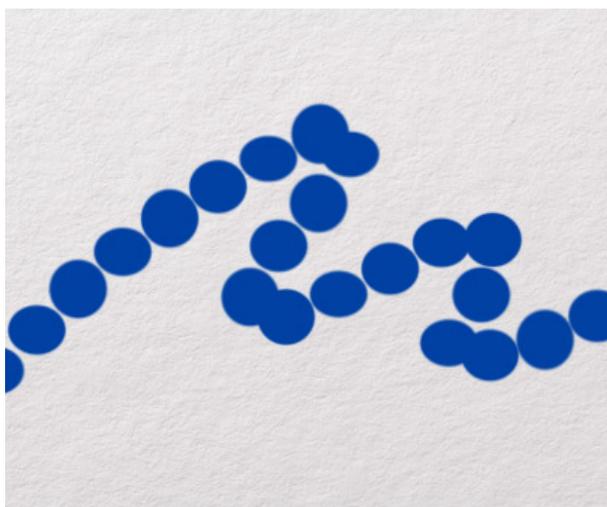
| Aspect Variation = 25 | Aspect Variation = 75 |
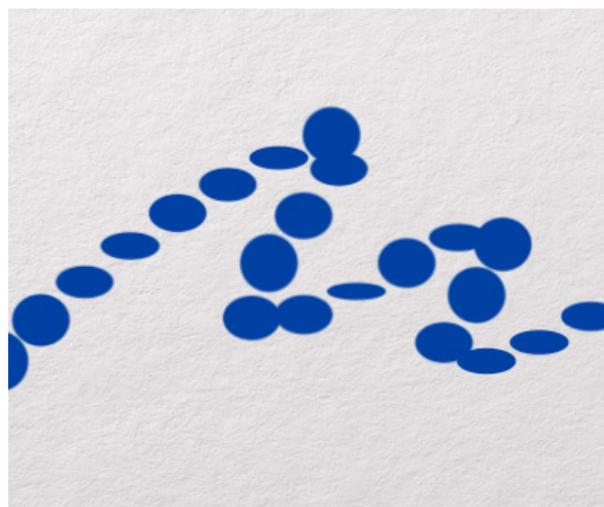
Angle Variation (0-100). The parameter specifies how the rotation angle of brush marks varies for each spacing interval. At the value = 0, all the elements have the same rotation angle; when increasing the parameter, the rotation angle of certain elements increase.
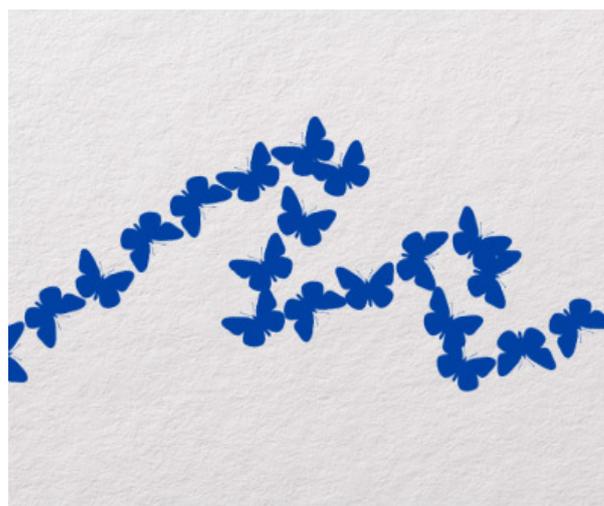
| Angle Variation = 25 | Angle Variation = 75 |

The **Scattering** tab contains parameters that affect the quantity and position of basic elements in the stroke.

Scatter (0-1000). The parameter sets the distribution of brush marks. The higher the value of the parameter, the farther from the brush cursor the elements can be located.

When the **X-Axis** check-box is enabled, the elements are distributed along the direction of the brush movement. When the **Y-Axis** check-box is enabled, the elements are distributed across the direction of the brush movement. If both check-boxes are enabled, then brush marks will be distributed in both directions.
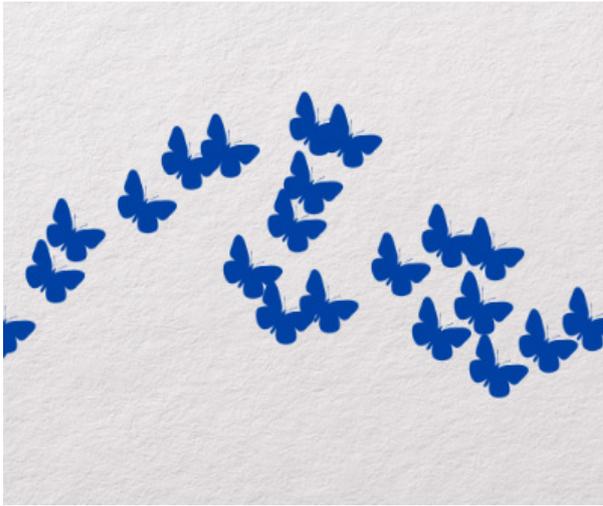
Scatter = 50   Scatter = 150

Count (1-20). The parameter sets the number of brush marks applied at each spacing interval.
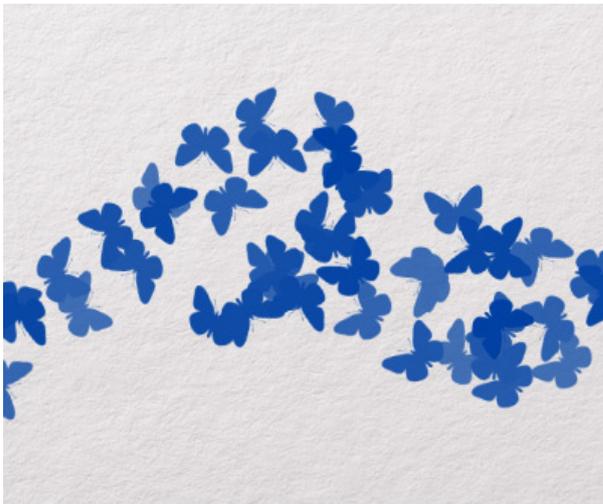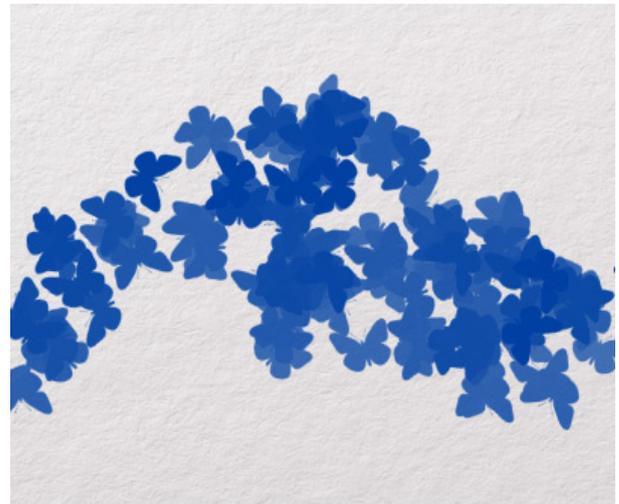
Count = 2   Count = 5

Count Variation (0-100). The parameter specifies how the number of brush marks varies for each spacing interval. At the value = 0, the number of elements is equal to the number specified by the previous parameter. As the parameter increases, the number of elements in each spacing interval may decrease.
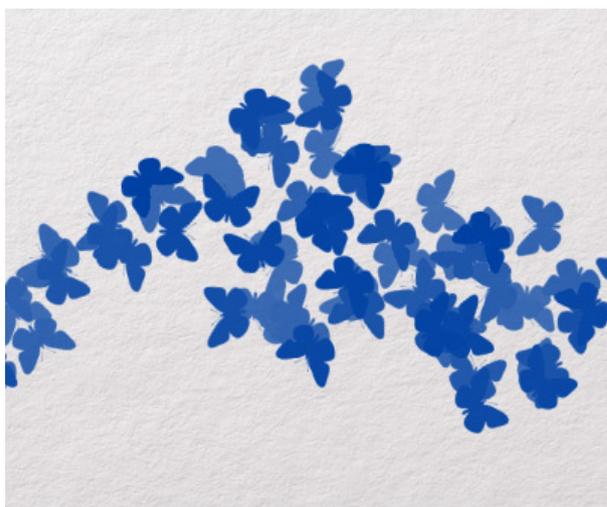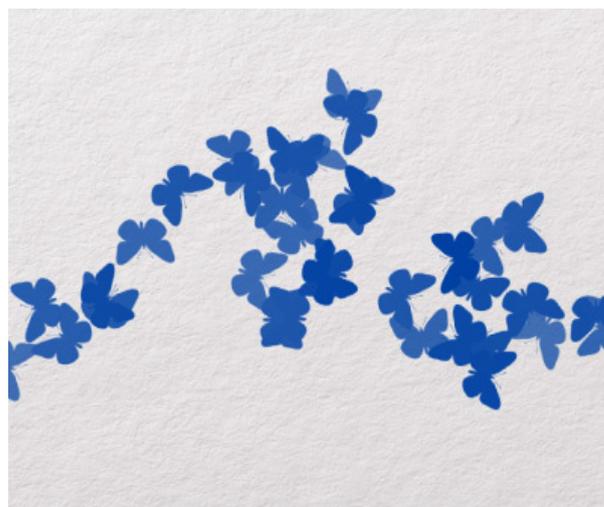
| Count Variation = 10 | Count Variation = 100 |

The **Color** tab contains parameters that affect the hue, saturation, and brightness of the basic elements or strokes.

Apply per Tip. When the check-box is enabled, color variations will be will be applied to individual elements of the brush stroke. When the check-box is disabled - to individual strokes.
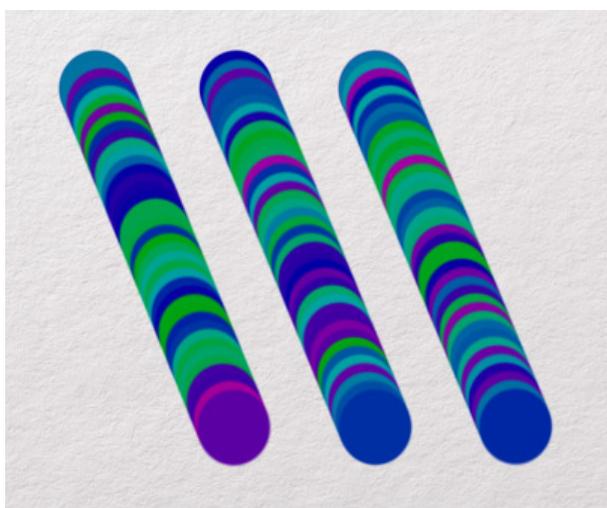
| Check-Box Enabled | Check-Box Disabled |

Hue Variation (0-100). The parameter sets the variation of shades of the brush marks. At the value = 0, all the elements have the same color. The higher the value, the more shades are used.

Hue Variation = 10	Hue Variation = 50

Saturation Variation (0-100). The parameter sets the variation of saturation of the base element. At the value = 0, all the elements have the same saturation. At higher values, the saturation of certain elements will change.

Saturation Variation = 30	Saturation Variation = 90

Brightness Variation (0-100). The parameter sets the variation of brightness of the base element. At the value = 0, all the elements have the same brightness. At higher values, the brightness of individual elements may change.

Brightness Variation = 10   Brightness Variation = 50

Control. Next to some variation parameters the control button is located. If you click this control button with the left mouse button, the selected control command is turned on/off. If you right-click or hold down the left mouse button on this control key, a drop-down list opens, where you can adjust how this brush parameter should be operated:

Pressure - varies the parameter settings by using the pen pressure values provided by a graphic tablet.

Tilt - varies the parameter settings by using the pen tilt values provided by a graphic tablet.

Rotation - varies the parameter settings by using the pen rotation values provided by a graphic tablet.

Fade - reduces the value of the selected parameter to the minimum in the number of steps indicated in the field next to it.

Brush Size Fading

Direction - the given angle of inclination of the element is kept along the direction of movement (at Angle Variation = 0).

Angle Is Kept Along the Direction of Movement

Initial Direction - the given angle of inclination of the element is kept regardless of the direction of movement (at Angle Variation = 0).
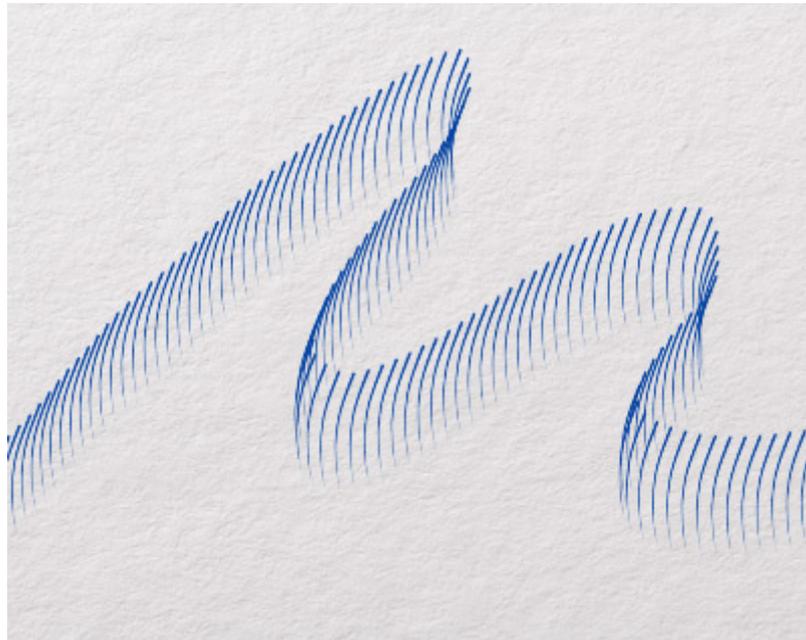
Initial Angle Is Kept

When clicking the **Reset** button, the parameters of the selected tab will be reset to zero, and the control settings will be disabled.

You can save the specified settings of the brush as a preset. The list of presets is located in the **Tool Options** panel on the left (in both minimized and expanded views). To add a new preset, click the **New Brush Preset** button. To delete a preset from the list, click the **Delete Brush Preset** button.

Click the button to save the list of your brush presets into a file with the *.brush_presets* extension.

You can load brushes (*.brush_presets* or *.abr* files) with the button. When loading brush presets, the associated shapes and textures will be loaded into the appropriate libraries.

Click the **Default** button to reset all the modified parameters of the selected preset to the original settings.

RETOUCHING TOOLS

AliveColors allows you to edit a photo and improve a portrait. The program provides a number of useful tools.

Retouching tools are designed to improve portrait shots - enhancing colors and tones, removing small skin imperfections, correcting red eyes, whitening teeth. All brushes can be found in the **Toolbar**. You can use retouching brushes only on a raster layer.

Retouching Tools:

Tuning Brush

Spot Remover

Red Eye Remover

Teeth Whitening

TUNING BRUSH

The **Tuning Brush** allows you to slightly change the colors of an object, add shades, midtones, smooth creases, folds, and wrinkles, get rid of odd tones or unnecessary details.
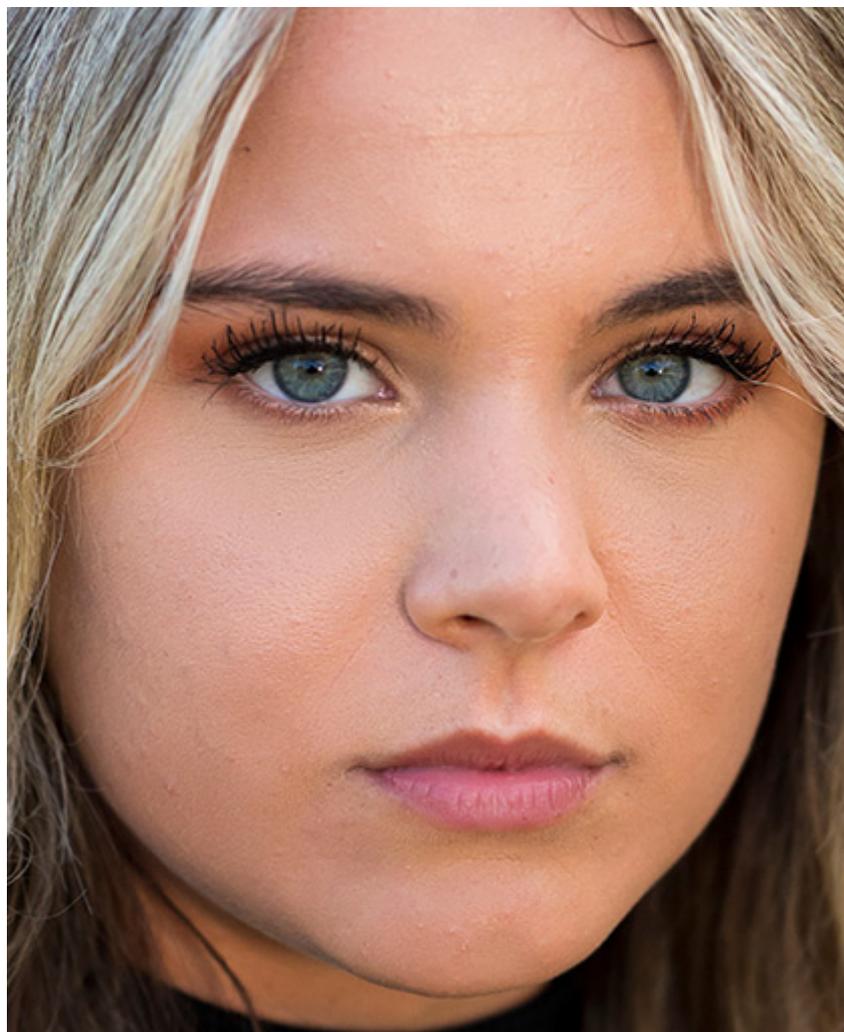
Using Tuning Brush

Adjust the brush color in the **Color**, **Swatches**, or **Color Wheel** panel as well as sample it directly from the image. To select a color from the image, hold down the I key to access the Eyedropper tool. When you release the hotkey, the tool will be activated again.

The tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. You can also show the parameters by clicking the tool icon in the **Tool Options** panel or using the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

> **Size** (1-5000). The diameter of the brush (in pixels).
>
> **Hardness** (0-100). The amount of blur of the outer edge of the brush. The higher the value of the parameter, the harder the edge becomes.
>
> **Strength** (1-100). The amount of influence on the image.

Smoothing Radius (1-10). At low values, the parameter smoothes out large details. At large values, it smoothes out smaller details and keeps large ones.

Sample (0-100). When set to 0, the brush uses the color from the starting point of the stroke. The higher the value of the parameter, the weaker the original color and the brighter the color from the palette appears. At the value = 100, the original color is not used.

Color Mixing (0-100). The amount of blending with the selected color.

Click **Default** to reset all settings to their default values.

SPOT REMOVER

The **Spot Remover** tool ![icon] allows you to get rid of small imperfections with a mouse click. It not only heals the skin problems but also recovers images by removing spots, blemishes, and small defects while keeping the texture.
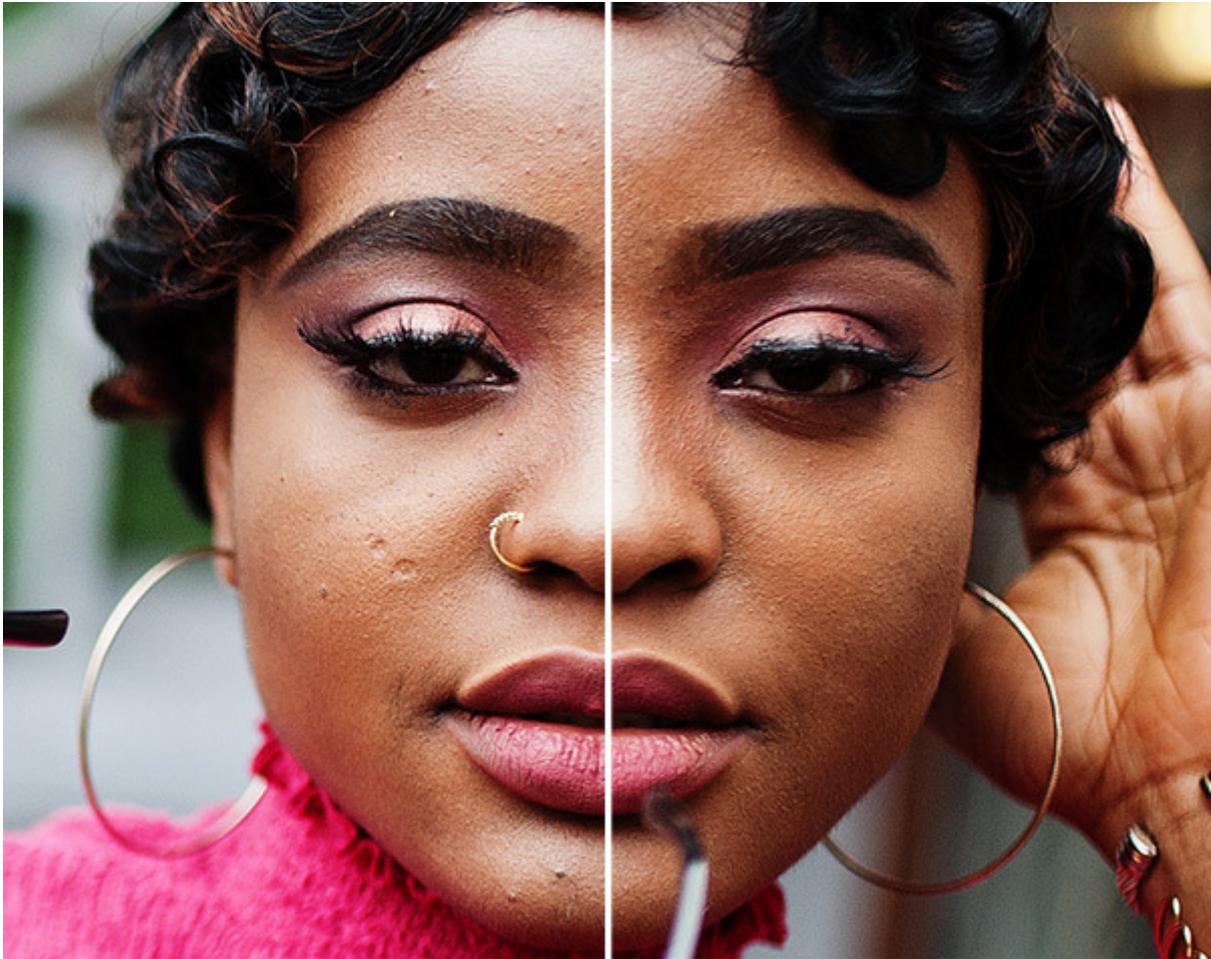
Using Spot Remover

The tool settings are shown in the Tool Options panel above the Image Window. To display the list of the parameters, click the tool icon in the Tool Options panel or press the F5 key. You can also open the parameters of the tool in the floating dialog by right-clicking in the image. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

>   **Size** (7-200). The size of the tool.

Click the **Default** button to reset to the default settings.

RED EYE REMOVER

The **Red Eye Remover** tool allows you to fix the red-eye defect and bring your natural eye color back.
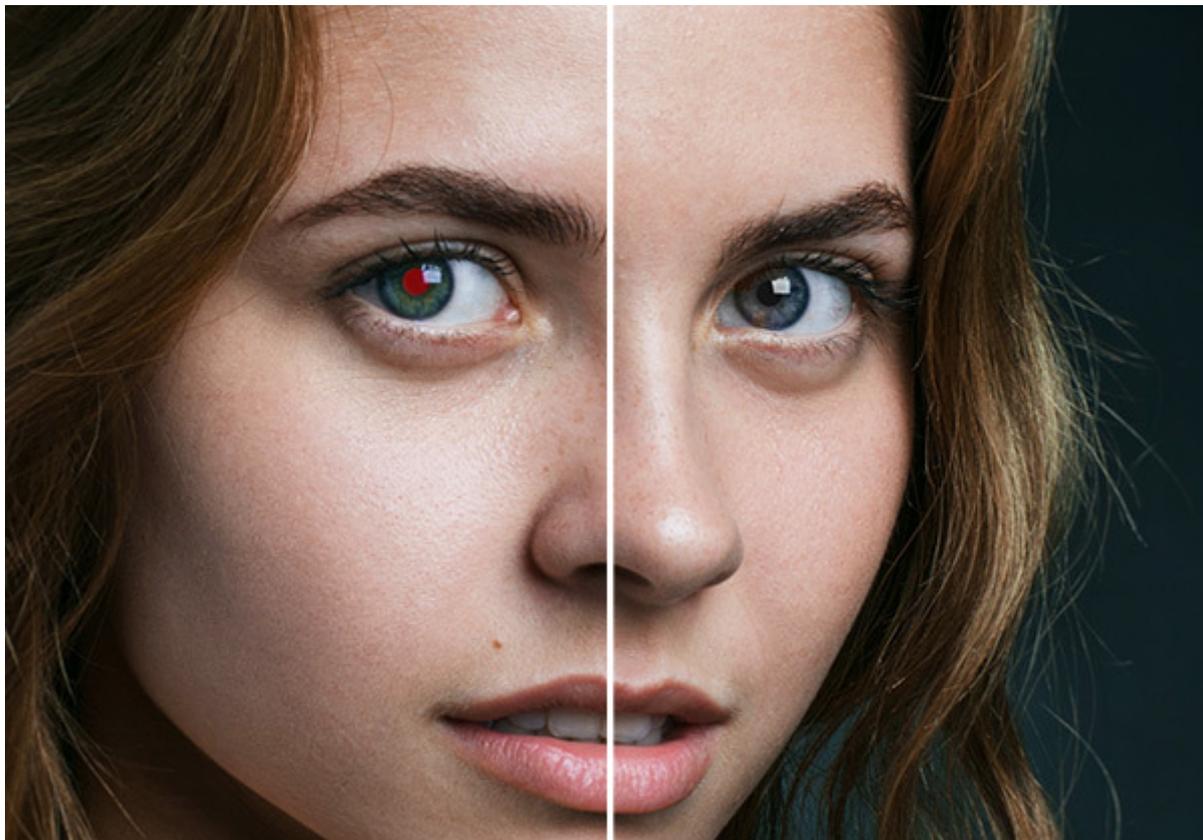
Using Red Eye Remover

The tool settings are shown in the Tool Options panel above the Image Window. To display the list of the parameters, click the tool icon in the Tool Options panel or press the F5 key. You can also open the parameters of the tool in the floating dialog by right-clicking in the image. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (10-300). The size of the tool.

Brightness (-25..25). Makes the processed area darker or lighter.

Click the **Default** button to reset to the default settings.

TEETH WHITENING

The **Teeth Whitening** tool ![icon] allows you to improve the color of the teeth, make them whiter, and remove dark plaque. A white smile symbolizes health and enhances any portrait.

Using Teeth Whitening

The tool settings are shown in the Tool Options panel above the Image Window. To display the list of the parameters, click the tool icon in the Tool Options panel or press the F5 key. You can also open the parameters of the tool in the floating dialog by right-clicking in the image. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (20-200). The size of the tool.

Smoothing (0-10). The softness of the tool's edge.

Tolerance (0-100). Sensitivity of the tool: the higher the value, the more areas are changed.

Strength (10-100). The strength of the effect.

Click the **Default** button to reset to the default settings.

DEFORMATION (LIQUIFY) TOOLS

The **AliveColors** image editor allows you to edit a photo, improve a portrait, create a colorful drawing. The program provides a large number of different tools.

The **Deformation Tools** ⌐)(⌐ (similar to the Liquify filter) are designed to distort parts of an image. They allow you to retouch portrait shots, edit facial features, reshape face or body, or create caricatures and various striking effects. You can find these tools ⌐)(⌐ in the **Toolbar**.

Using Deformation Tools

Click ⌐)(⌐ in the Toolbar and switch between the tools in the top panel:

Forward Warp

Push

Bloat

Pucker

Twirl

Reconstruct

When you select any of these tools, the **Deformation** mode is activated.

A deformation mesh allows you to track distortions more precisely. In the tool options, you can set the size of the grid cells and its color, as well as enable or disable its visibility.

After creating a distortion, you can save the deformation mesh for later application to other images. Press the button in the Tool Options panel. To load the saved deformation, click and select a file with the **.dmesh** extension.

To close the **Deformation** mode applying all changes, press in the Tool Options panel or in the **History** panel.

To exit the **Deformation** mode without accepting the changes, press in the Tool Options.

> **Note:** After activating the **Deformation** mode, the **History** panel will display only the actions performed in this mode. When you exit the mode, the full image processing history will be shown.
>
> To return to the mode to continue editing, in the **History** panel, go to the **Deformation** group and select any of the actions.

After the mode is closed, a new use of any deformation tool will create a new **Deformation** group in the **History**.

FORWARD WARP TOOL

The **Forward Warp** tool ⬤ allows you to stretch objects in the image.
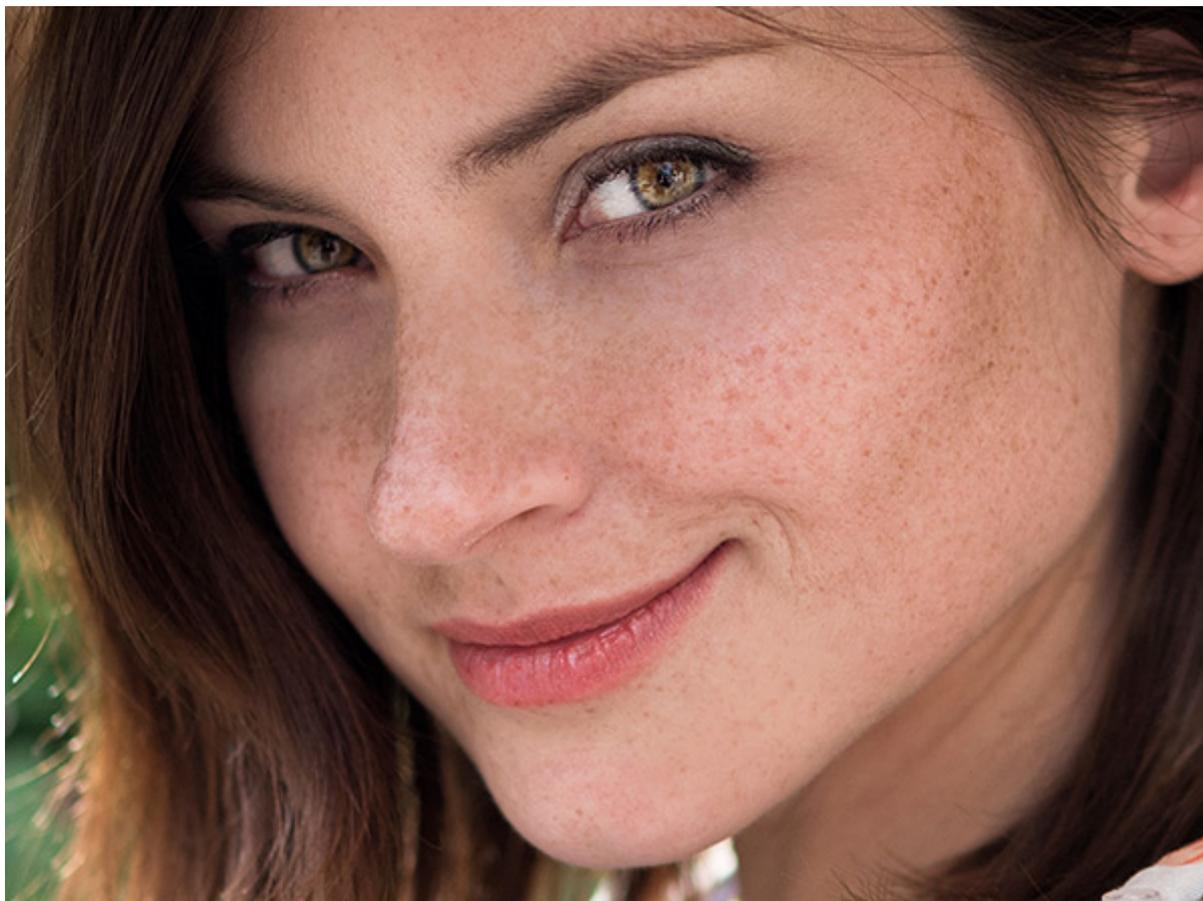

Using the Forward Warp Tool

The basic tool settings are shown in the Tool Options panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the Tool Options panel or use the `F5` key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (20-500). The size of the brush.

Hardness (0-100). The softness of the tool's edge. The effect is strongest in the center of the brush and lighter at the edge. Increasing the value intensifies the effect at the edge of the brush.

Strength (1-100). The strength of the effect. The higher the value, the stronger the changes are.

Click the **Default** button to reset all settings to their default values.

PUSH TOOL

The **Push** tool allows you to move the boundaries of objects in an image inward (when moving the cursor counterclockwise) or outward (when moving clockwise).

Using the Push Tool

The basic tool settings are shown in the Tool Options panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the Tool Options panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (20-500). The size of the brush.

Hardness (0-100). The softness of the tool's edge. The effect is strongest in the center of the brush and lighter at the edge. Increasing the value intensifies the effect at the edge of the brush.

Strength (1-100). The strength of the effect. The higher the value, the stronger the changes are.

Click the **Default** button to reset all settings to their default values.

BLOAT TOOL

The **Bloat** tool allows you to increase the size of the processed object.

Using the Bloat Tool

The basic tool settings are shown in the Tool Options panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the Tool Options panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (20-500). The size of the brush.

Hardness (0-100). The softness of the tool's edge. The effect is strongest in the center of the brush and lighter at the edge. Increasing the value intensifies the effect at the edge of the brush.

Strength (1-100). The strength of the effect. The higher the value, the stronger the changes are.

Rate (0-100). Frequency of application of deformations.

Click the **Default** button to reset all settings to their default values.

PUCKER TOOL

The **Pucker** ◼ tool allows you to reduce the size of the processed object, shrinking it while you move the cursor along the edges.

Using the Pucker Tool

The basic tool settings are shown in the Tool Options panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the Tool Options panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (20-500). The size of the brush.

Hardness (0-100). The softness of the tool's edge. The effect is strongest in the center of the brush and lighter at the edge. Increasing the value intensifies the effect at the edge of the brush.

Strength (1-100). The strength of the effect. The higher the value, the stronger the changes are.

Rate (0-100). Frequency of application of deformations.

Click the **Default** button to reset all settings to their default values.

TWIRL TOOL

The **Twirl** tool ![icon] rotates processed pixels around the center of the cursor into a spiral.


Using the Twirl Tool

The basic tool settings are shown in the Tool Options panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the Tool Options panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (20-500). The size of the brush.

Hardness (0-100). The softness of the tool's edge. The effect is strongest in the center of the brush and lighter at the edge. Increasing the value intensifies the effect at the edge of the brush.

Strength (1-100). The strength of the effect. The higher the value, the stronger the changes are.

Rate (0-100). Frequency of application of deformations.

Clockwise. When the check-box is enabled, the twirling is clockwise, when it's disabled, the twirling is counterclockwise.

Click the **Default** button to reset all settings to their default values.

RECONSTRUCT TOOL

The **Reconstruct** tool allows you to weaken the added distortions or cancel them restoring the image to its original state.

Note: The tool removes distortions only within the Deformation group in which they were added, i.e. before pressing .

Using the Reconstruct Tool

The basic tool settings are shown in the Tool Options panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the Tool Options panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (20-500). The size of the brush.

Hardness (0-100). The softness of the tool's edge. The effect is strongest in the center of the brush and lighter at the edge. Increasing the value intensifies the effect at the edge of the brush.

Strength (1-100). The strength of the effect. The higher the value, the stronger the changes are.

Rate (0-100). Frequency of application of changes.

Click the **Default** button to reset all settings to their default values.

FX BRUSHES

AliveColors allows you to edit photographs, improve portraits, create unique picturesque images. The program provides a collection of impressive brushes for creative inspiration and implementation of your design ideas.

The FX brushes are presented as a collection of exciting drawing and painting tools for creating amazing effects.

In the Toolbar, a full set of the FX brushes is accessible by clicking on [FX icon]. You can switch between the special effects brushes in the drop-down list, in the tool options. Use these tools on raster layers.

FX Brushes:

Fluffy Brush
Hair Brush
Bristle Brush
Thread Brush
Veil Brush
Smoke Brush
FX Sparkle Brush
Energy Brush

FLUFFY BRUSH

Activate the **FX Brush** tool and choose the **Fluffy Brush** from the drop-down list.

The **Fluffy Brush** leaves a trace that looks like a bunch of thin curly stripes diverging from the center. A distinctive feature of this tool is its strong fluffiness. With this brush, you can draw any kinds of fuzzy and fluffy creatures. It is also helpful for creating objects with airy loose texture, wool, angora, dandelion florets, haze and mist effect, etc.

Choose the brush color in the **Color**, **Swatches**, or **Color Wheel** panel, or from the image with the **Eyedropper** tool. To pick a color sample, press and hold the I key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (2-100). The size of the base element of the brush (in pixels).

Line Length (0-100). The parameter sets the length of fluffy lines.
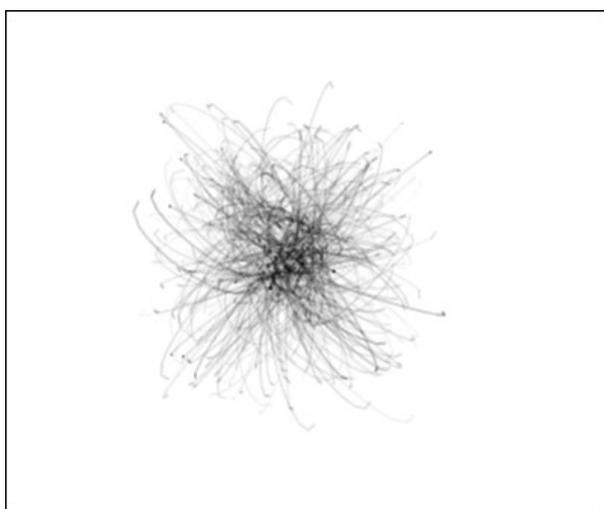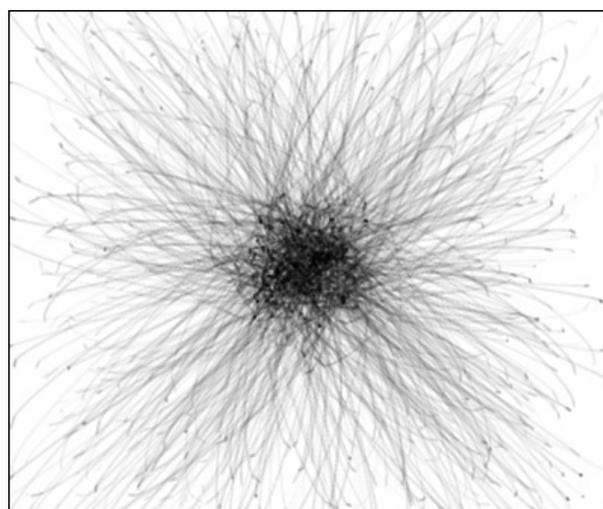
Line Length = 30   Line Length = 70

Line Width (1-100). The parameter sets the thickness of fluffy lines. At low values, the lines are thinner and harder, increasing the value makes them wider and softer.
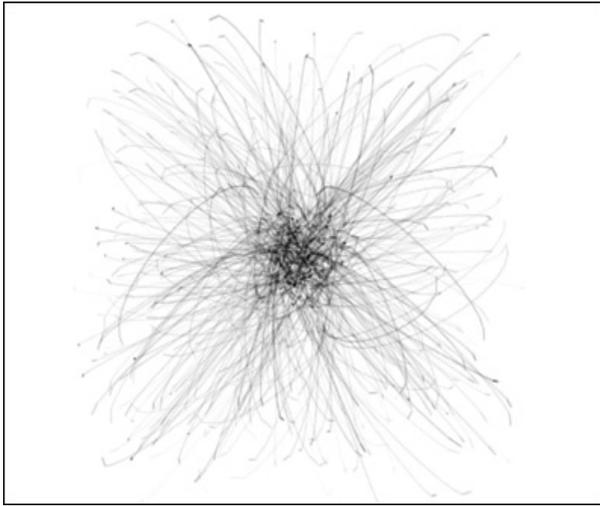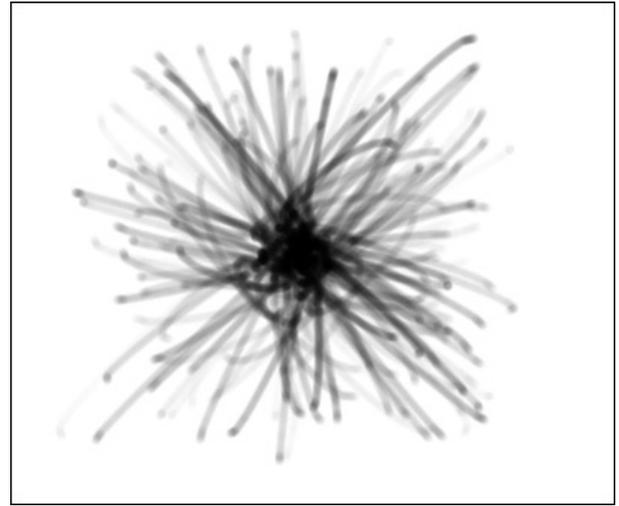
Line Width = 25   Line Width = 75

Density (1-100). The parameter sets the number of lines in a brush stroke.
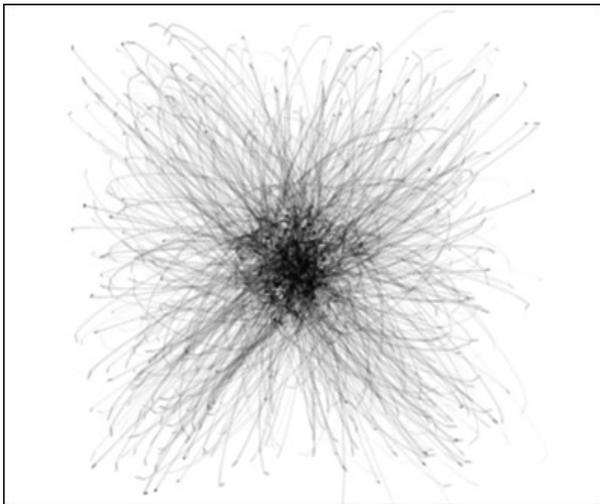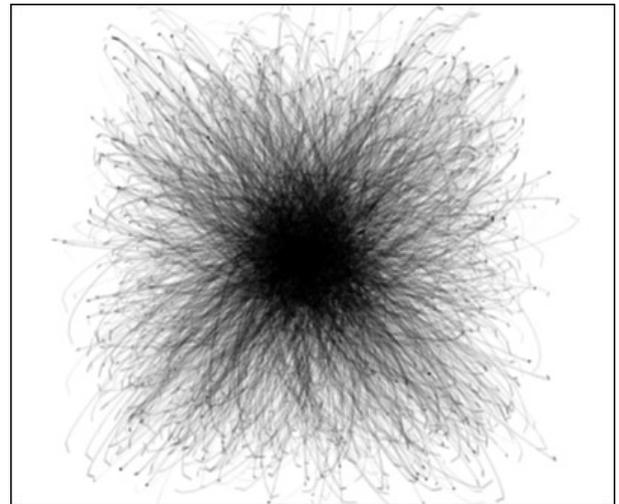

Density = 20   Density = 80

Strength (10-100). The parameter defines the stroke brightness. At low values, the lines are more transparent, increasing the value makes them brighter and denser.
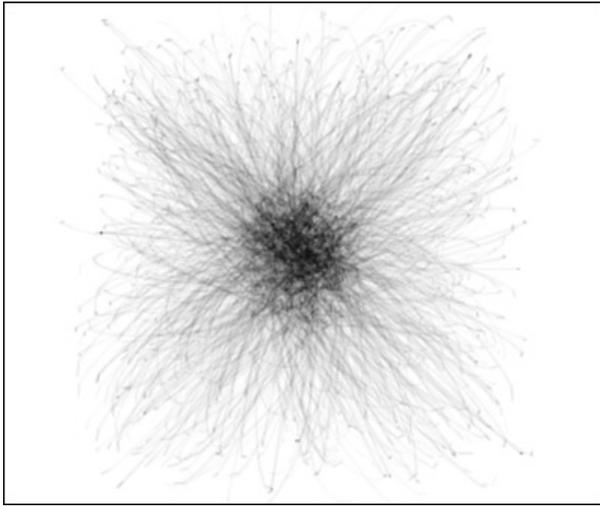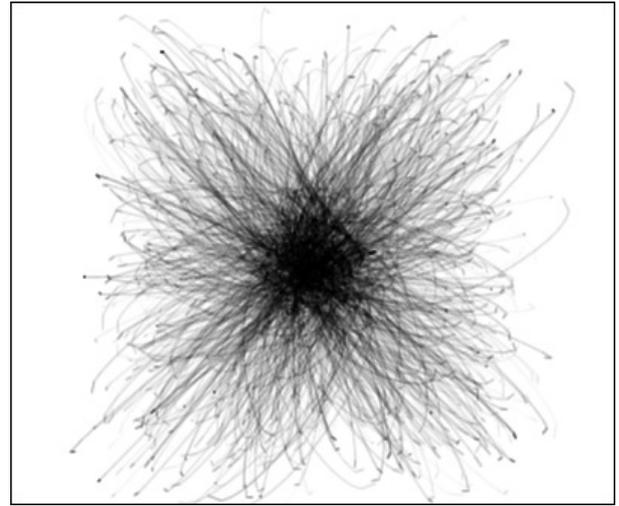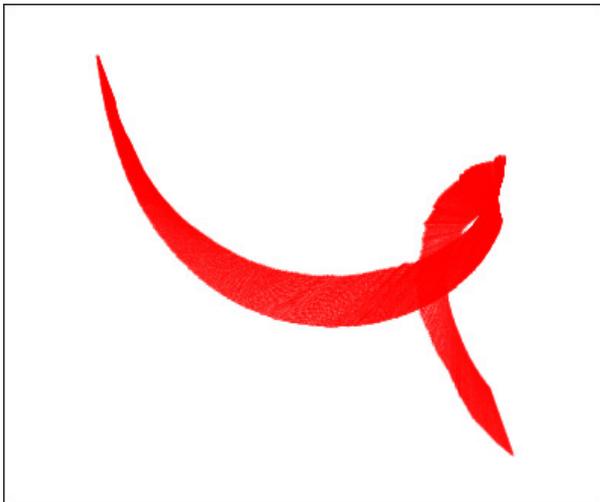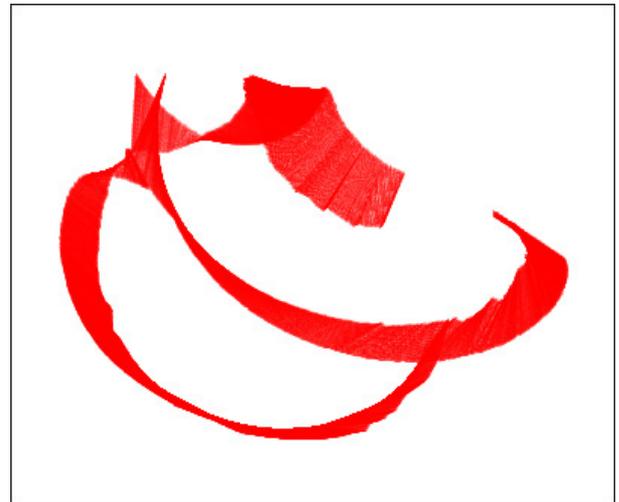
Strength = 25   Strength = 75

Click **Default** to reset all settings to their default values.

HAIR BRUSH

Activate the **FX Brush** tool and choose the **Hair Brush** from the drop-down list.

The **Hair Brush** leaves a trace that looks like a strand of thin long flowing lines starting from one point. Drawing realistic looking hair is essential when creating a portrait. The brush is also useful for making long-haired animals, drawing whiskers, grass, creating mesh and striped textures, and other thrilling effects.

Choose the brush color in the **Color**, **Swatches**, or **Color Wheel** panel, or from the image with the **Eyedropper** tool. To pick a color sample, press and hold the I key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (5-500). The size of the base element of the brush (in pixels).

Line Width (1-100). The parameter defines the thickness of lines in a brush stroke. At low values, the lines are thinner and harder, increasing the value makes them wider and softer.
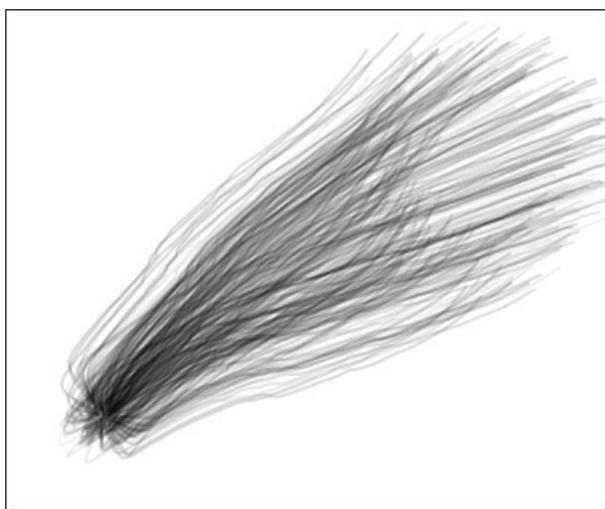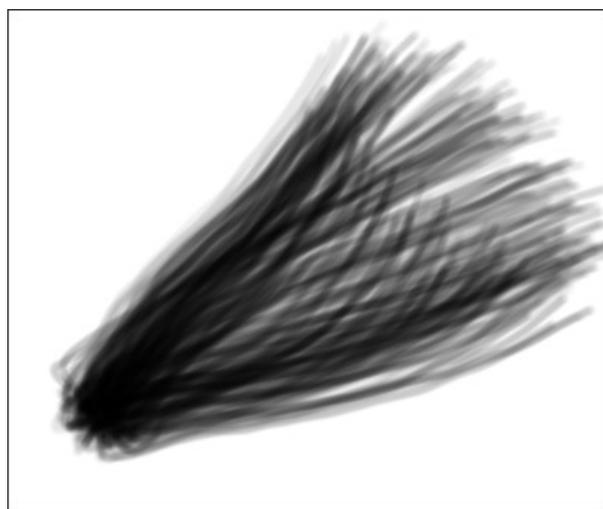

Line Width = 30   Line Width = 80

Density (1-100). The parameter sets the number of lines in a brush stroke.
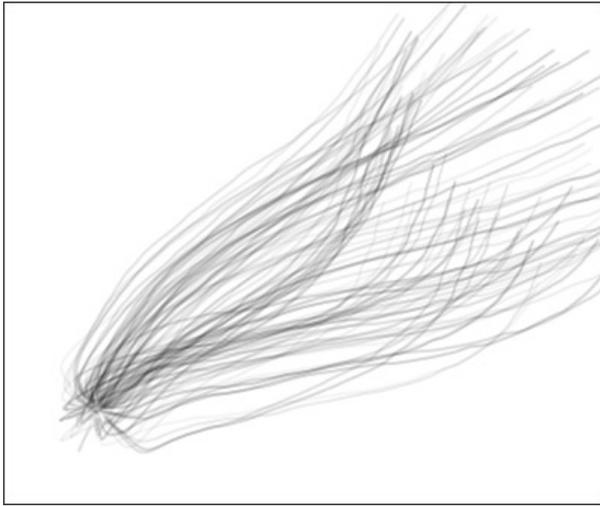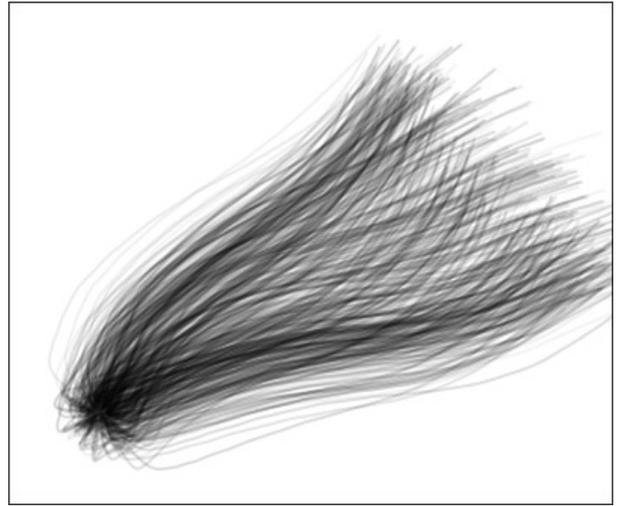
Density = 10   Density = 50

Strength (10-100). The parameter defines the stroke brightness. At low values, the lines are more transparent, increasing the value makes them brighter and denser.
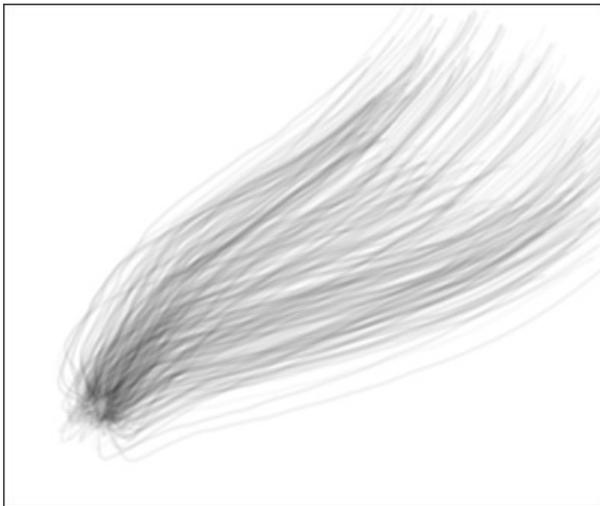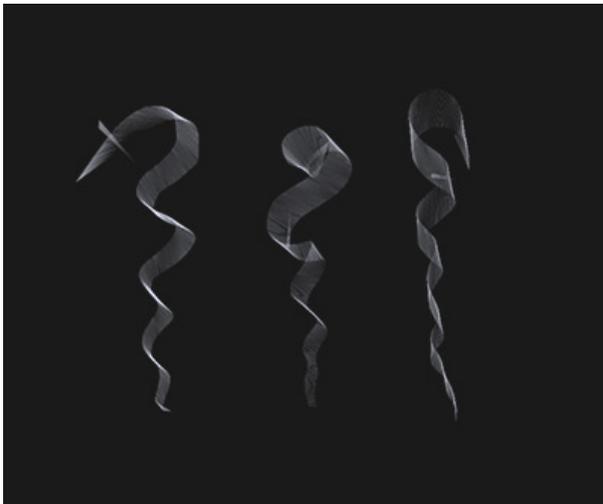

Strength = 25   Strength = 75

Click **Default** to reset all settings to their default values.

BRISTLE BRUSH

Activate the **FX Brush** tool and choose the **Bristle Brush** from the drop-down list.

The **Bristle Brush** produces a stroke consisting of multiple thin long parallel lines. The tool offers great creative opportunities and lets you draw everything that your imagination tells you.

Choose the brush color in the **Color**, **Swatches**, or **Color Wheel** panel, or from the image with the **Eyedropper** tool. To pick a color sample, press and hold the `I` key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the `F5` key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

> **Size** (10-400). The size of the base element of the brush (in pixels).
>
> **Line Width** (1-100). The parameter defines the thickness of lines in a brush stroke. At low values, the lines are thinner and harder, increasing the value makes them wider and softer.
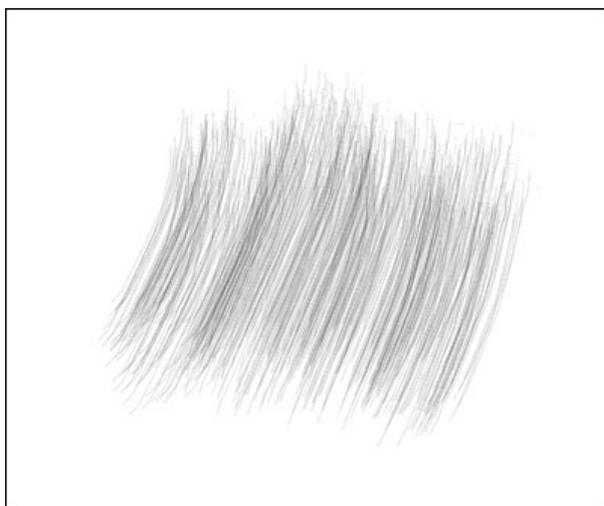
Line Width = 20	Line Width = 50

> **Density** (1-100). The parameter sets the number of lines in a brush stroke.
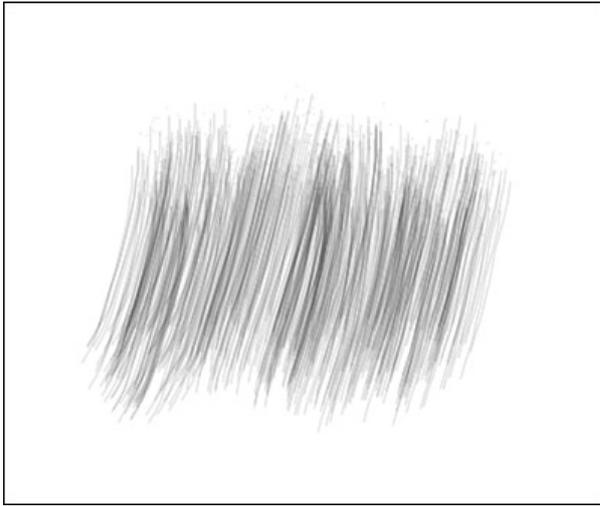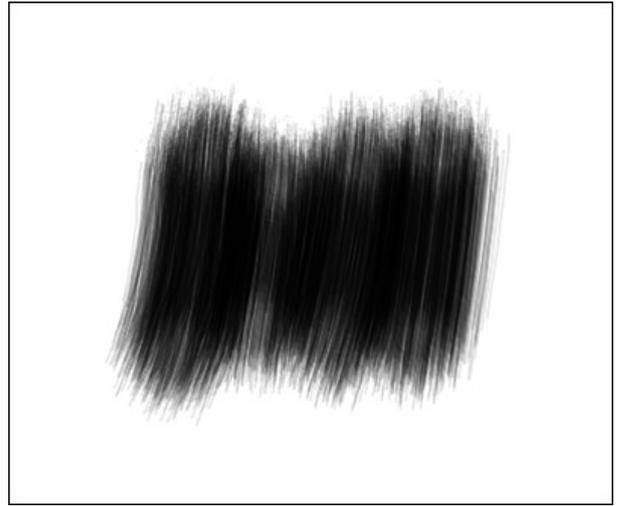
| Density = 5 | Density = 50 |

Strength (10-70). The parameter defines the stroke brightness. At low values, the lines are more transparent, increasing the value makes them brighter and denser.
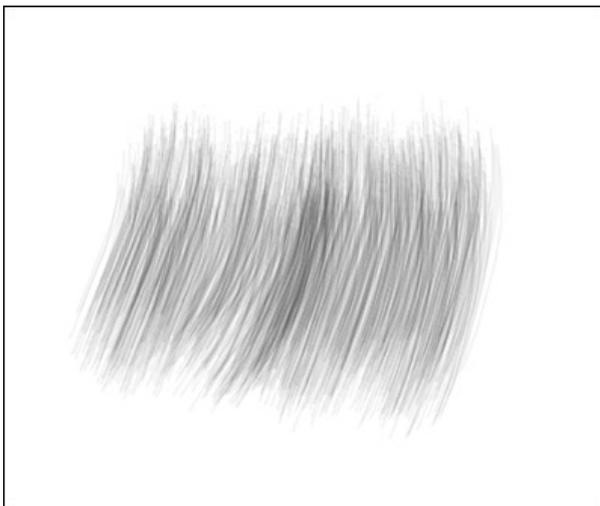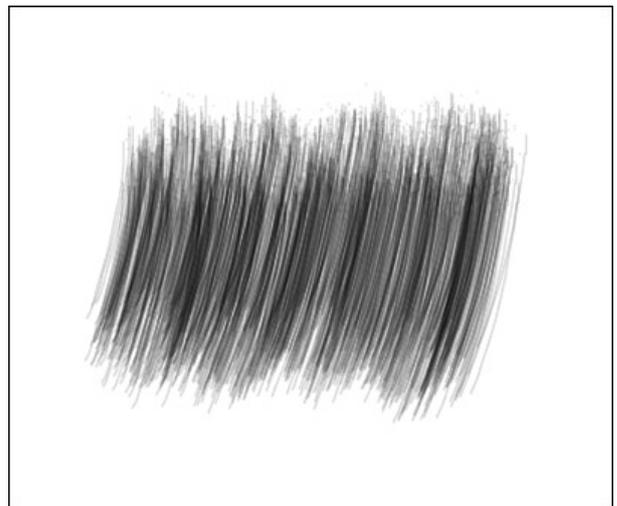
| Strength = 25 | Strength = 70 |

Click **Default** to reset all settings to their default values.

THREAD BRUSH

Activate the **FX Brush** tool and choose the **Thread Brush** from the drop-down list.

The **Thread Brush** creates strokes consisting of multiple thin interwoven lines and allows you to achieve a wide variety of decorative effects. It's useful when creating abstract backgrounds and eye-catching textures, scribble and doodle effects.

Choose the brush color in the **Color**, **Swatches**, or **Color Wheel** panel, or from the image with the **Eyedropper** tool. To pick a color sample, press and hold the I key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (5-200). The size of the base element of the brush (in pixels).

Line Width (1-100). The parameter defines the thickness of lines in a brush stroke. At low values, the lines are thinner and harder, increasing the value makes them wider and softer.
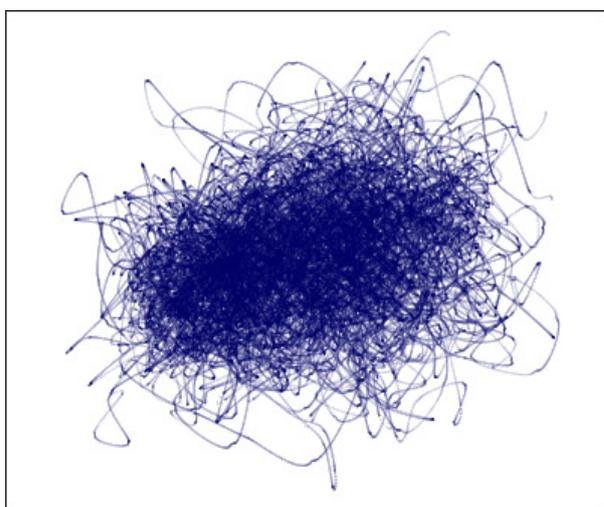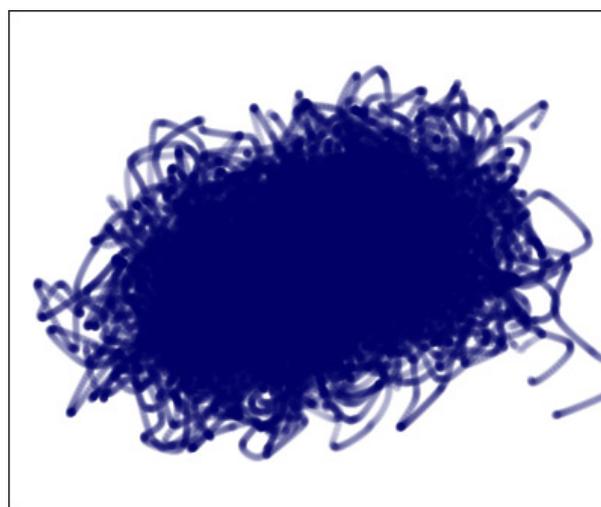
Line Width = 25   Line Width = 75

Density (1-100). The parameter sets the number of lines in a brush stroke.
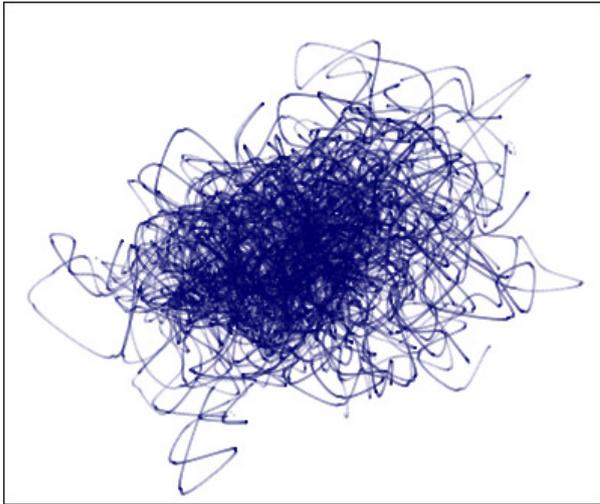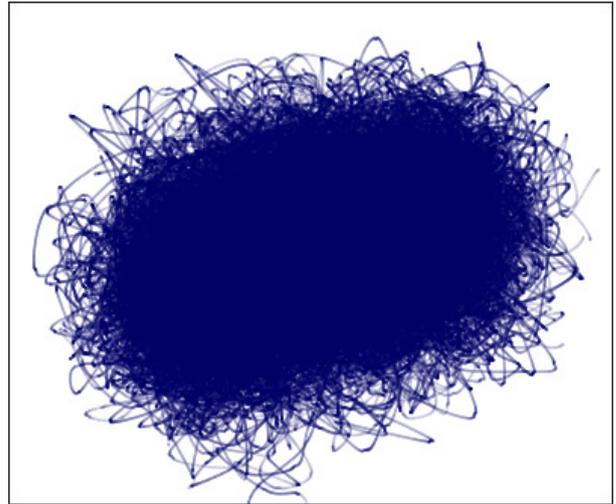
| Density = 5 | Density = 50 |

Strength (10-50). The parameter defines the stroke brightness. At low values, the lines are more transparent, increasing the value makes them brighter and denser.
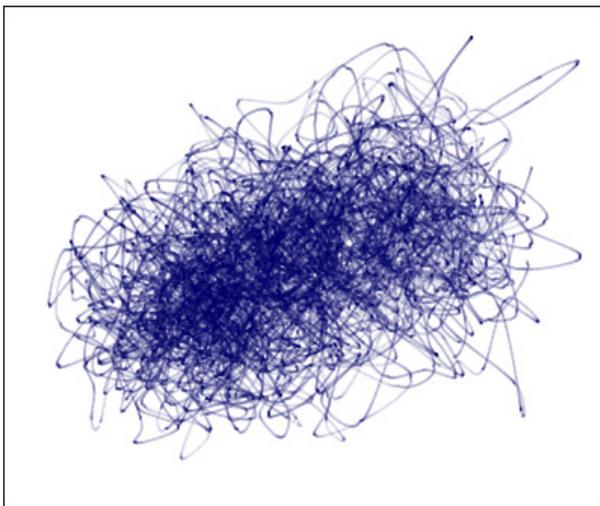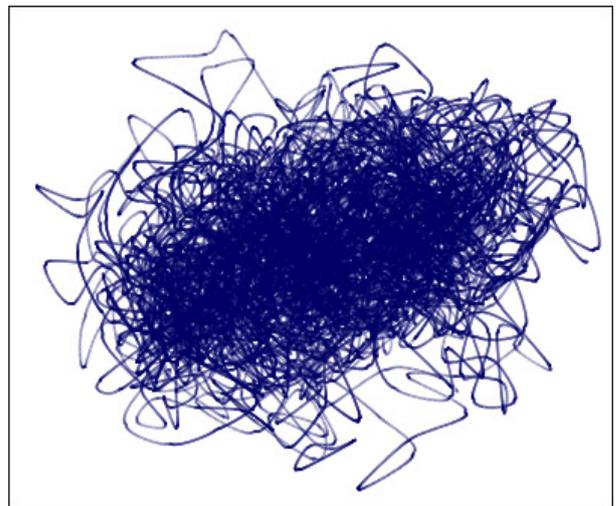
| Strength = 10 | Strength = 30 |

Spread (0-100). The parameter sets the distribution of the lines. At low values, the lines are located closer to the center of the cursor, increasing the value makes the expansion stronger.
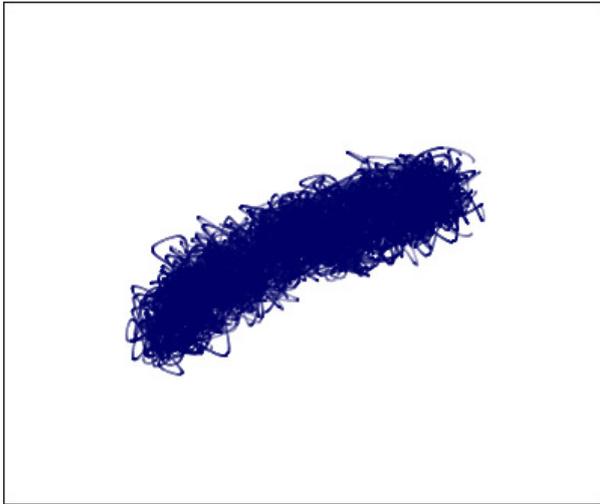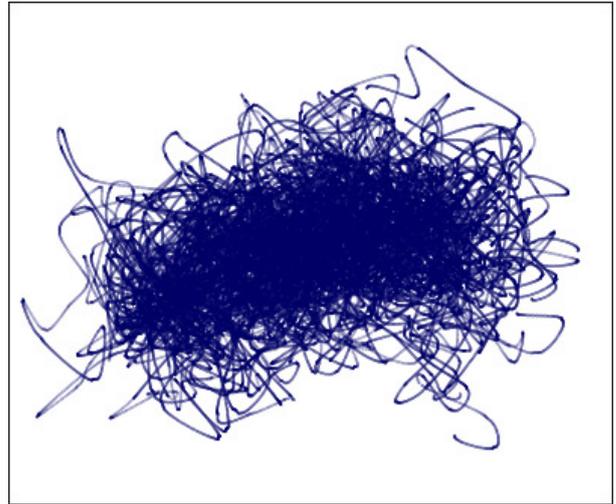
Spread = 30   Spread = 80

Curvature (10-100). The parameter adjusts the shivering and woolliness of the stroke. At low values, the lines are located denser and closer to the center, along the main stroke. Increasing the value makes them more curved and deviated from the main direction.
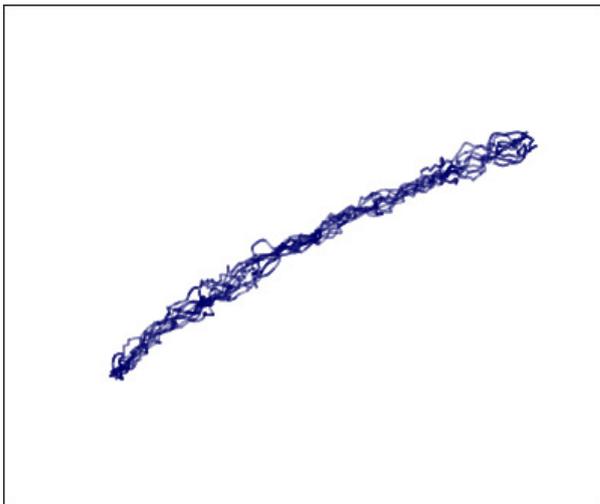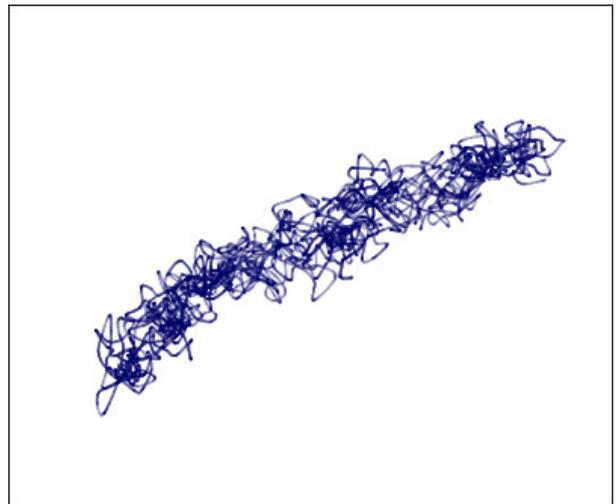
Curvature = 25   Curvature = 75

Click **Default** to reset all settings to their default values.

VEIL BRUSH

Activate the **FX Brush** tool and choose the **Veil Brush** from the drop-down list.

The **Veil Brush** creates strokes in the form of translucent ribbons smoothly bending like colorful waves. This spectacular tool will help you to create exciting illustrations and stunning backgrounds and textures. It will take your photos to the next level.

Choose the brush color in the **Color**, **Swatches**, or **Color Wheel** panel, or from the image with the **Eyedropper** tool. To pick a color sample, press and hold the `I` key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the `F5` key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (10-1500). The size of the base element of the brush (in pixels).

Line Width (1-100). The parameter defines the thickness of lines in a brush stroke. At low values, the lines are thinner and harder, increasing the value makes them wider and softer.
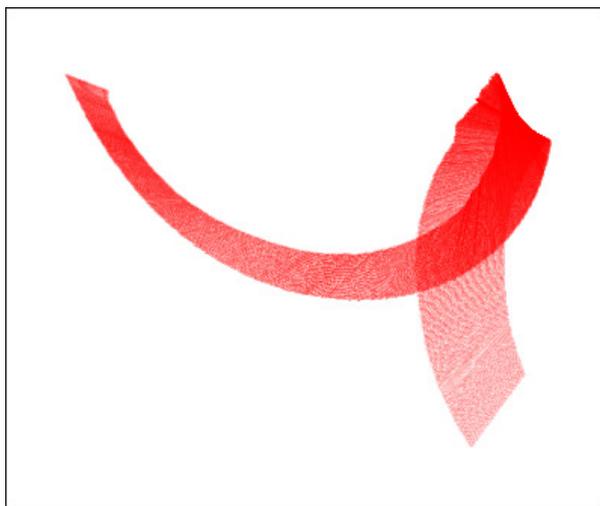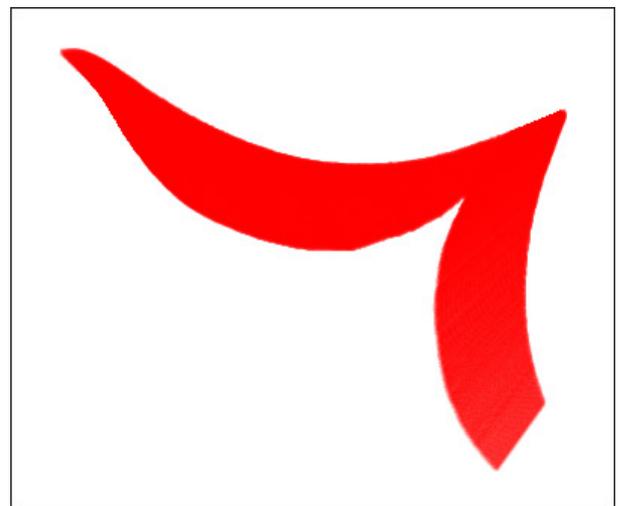
Line Width = 25   Line Width = 75

Strength (15-100). The parameter defines the stroke brightness. At low values, the lines are more transparent, increasing the value makes them brighter and denser.
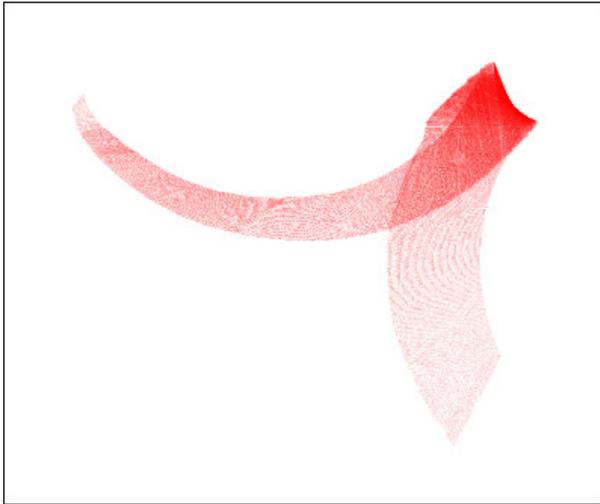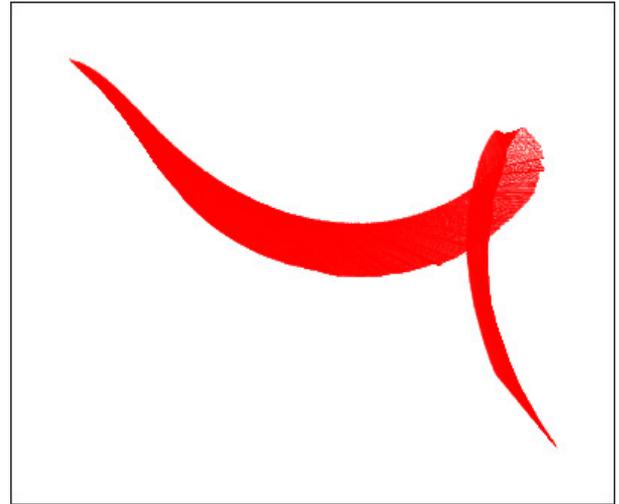
Strength = 25   Strength = 75

Count (1-8). The parameter sets the number of ribbons in a stroke.

Count = 1   Count = 3

Click **Default** to reset all settings to their default values.

SMOKE BRUSH

Activate the **FX Brush** tool and choose the **Smoke Brush** from the drop-down list.

The **Smoke Brush** draws strokes in the form of light translucent streams of smoke. The tool lets you easily add candle or cigarette smoke to your picture or create a mystical haze effect.

Choose the brush color in the **Color**, **Swatches**, or **Color Wheel** panel, or from the image with the **Eyedropper** tool. To pick a color sample, press and hold the I key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (1-500). The size of the base element of the brush (in pixels).

Line Width (1-100). The parameter defines the thickness of lines in a brush stroke. At low values, the lines are thinner and harder, increasing the value makes them wider and softer.

| Line Width = 25 | Line Width = 75 |

Strength (10-100). The parameter defines the stroke brightness. At low values, the lines are more transparent, increasing the value makes them brighter and denser.
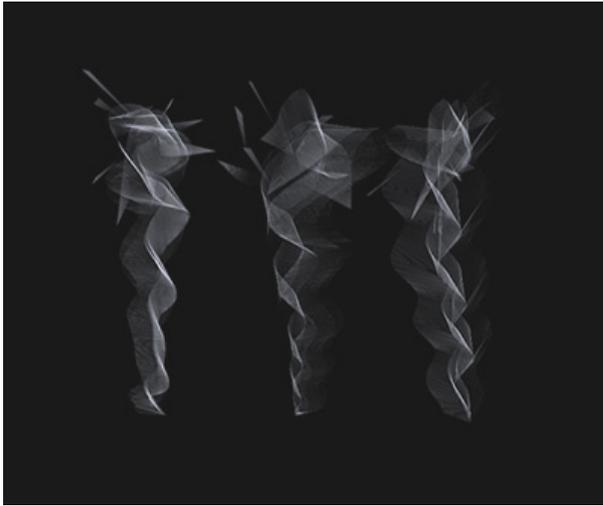
Strength = 30   Strength = 80

Count (1-6). The parameter sets the number of streams of smoke in a brush stroke.

Count = 1   Count = 3

Click **Default** to reset all settings to their default values.

FX SPARKLE BRUSH

Activate the **FX Brush** tool and choose the **FX Sparkle Brush** from the drop-down list.

The **FX Sparkle Brush** looks like a bundle of thin sharp rays radiating from the bright center. You can adjust the color of the rays, while the center of the sparkling element always remains white. With this tool, you can add stars, sparkles, and light flashes to your pictures, create eye-catching shining graphics.

Choose the brush color in the **Color**, **Swatches**, or **Color Wheel** panel, or from the image with the **Eyedropper** tool. To pick a color sample, press and hold the I key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (10-1000). The size of the base element of the brush (in pixels).

Density (1-100). The parameter sets the number of rays.
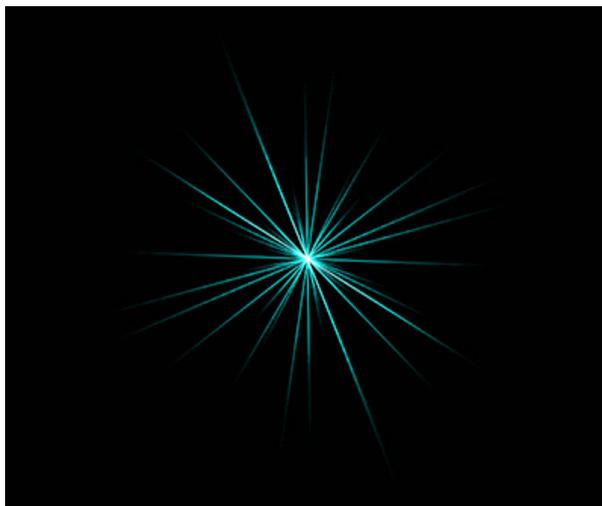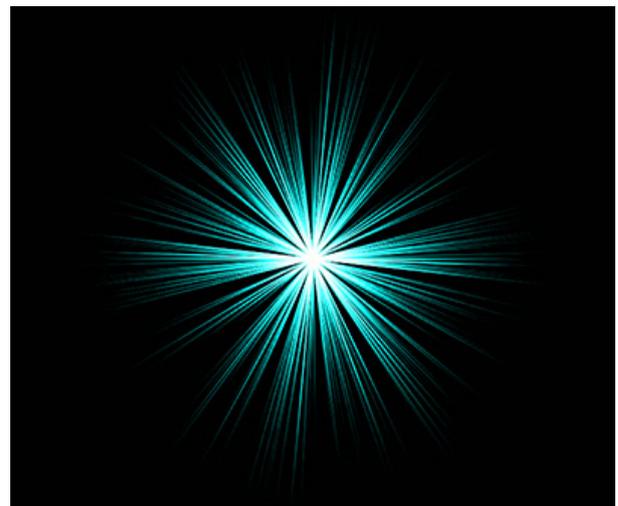
Density = 5	Density = 50

Line Width (1-100). The parameter defines the thickness of rays.
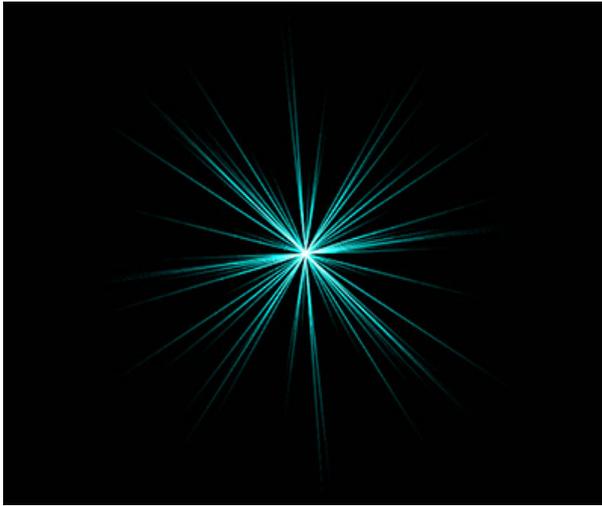
Line Width = 25   Line Width = 75
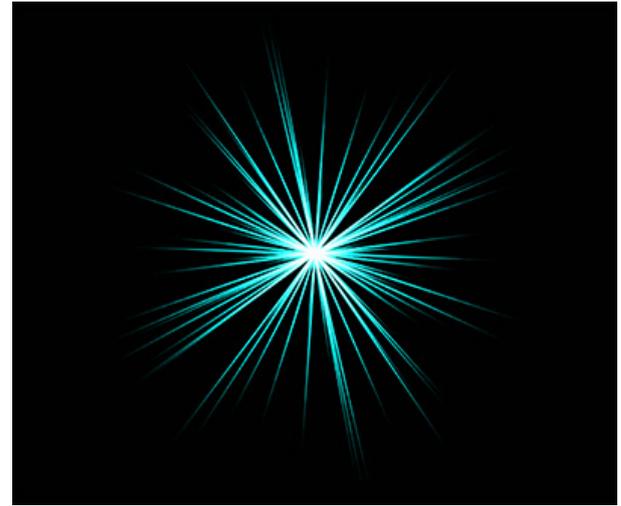
Strength (10-50). The parameter defines the stroke brightness. Increasing the parameter increases the amount of white in the center of the stroke.
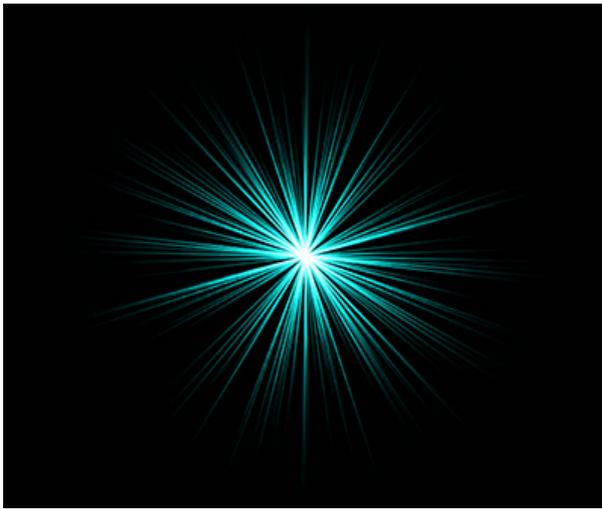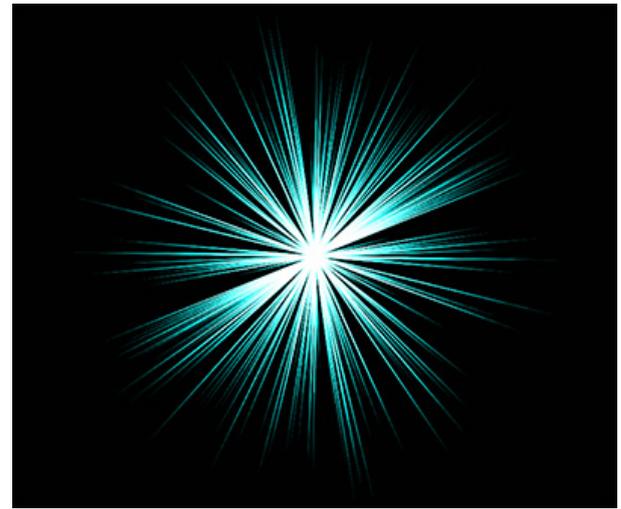
Strength = 10   Strength = 50

Click **Default** to reset all settings to their default values.

ENERGY BRUSH

Activate the **FX Brush** tool and choose the **Energy Brush** from the drop-down list.

The **Energy Brush** leaves a trace that looks like a ball of energy with a bright center surrounded by sparkling dust. You can adjust the color of the glowing contour, while the center always remains white.

Choose the brush color in the **Color**, **Swatches**, or **Color Wheel** panel, or from the image with the **Eyedropper** tool. To pick a color sample, press and hold the I key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window or by right-clicking on the image. To display the full list of parameters, press the tool icon in the **Tool Options** panel or use the F5 key. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (10-500). The size of the base element of the brush (in pixels).

Density (1-100). The parameter sets the number of glowing particles.
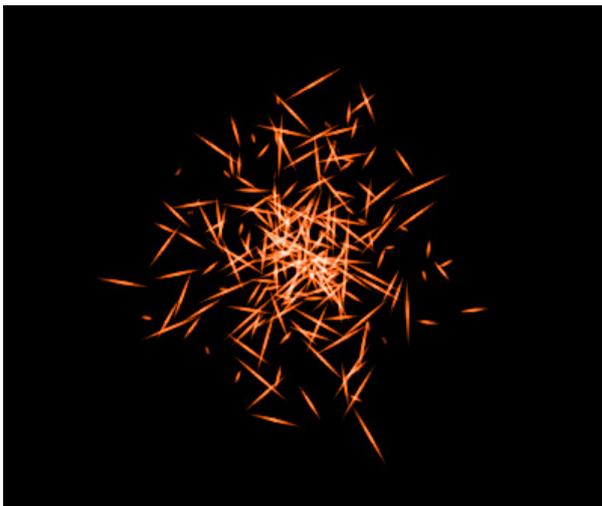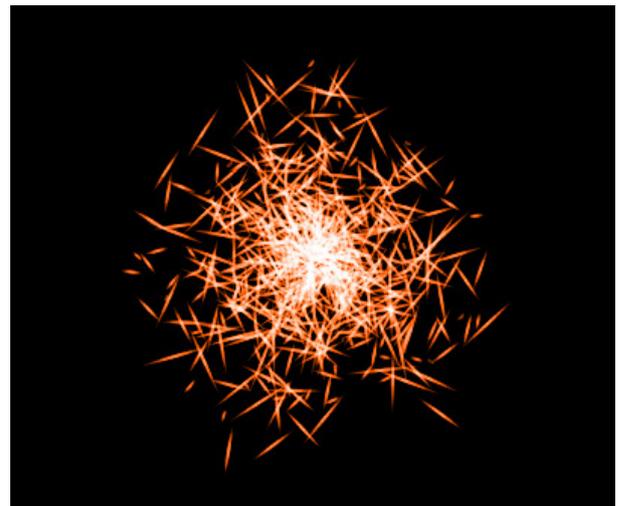
Density = 20   Density = 70

Line Width (1-100). The parameter defines the thickness of glowing particles.
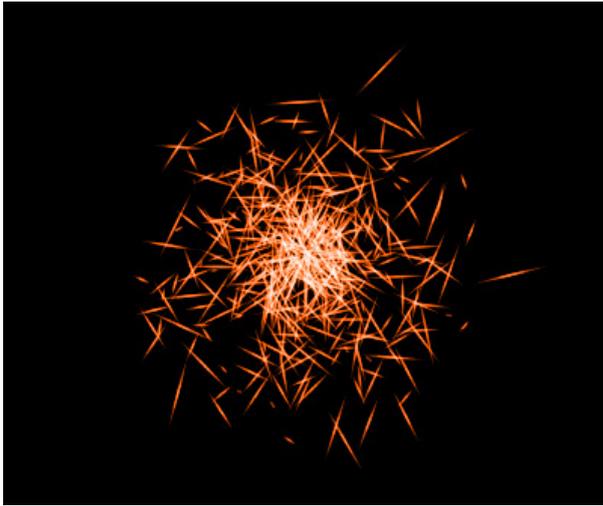
| Line Width = 25 | Line Width = 75 |
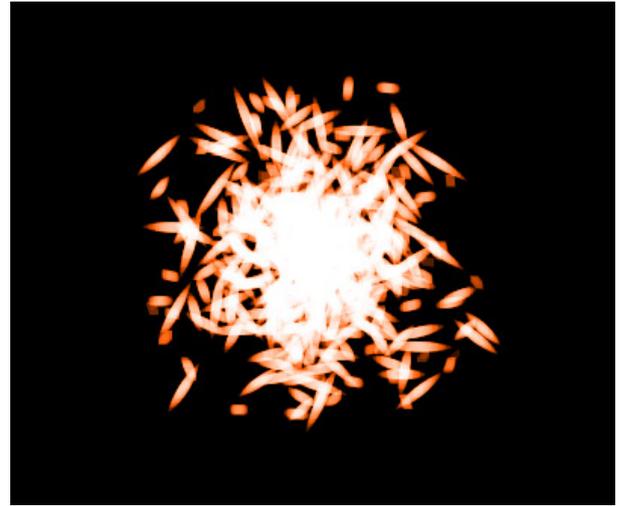
Strength (10-50). The parameter defines the stroke brightness. Increasing the parameter increases the amount of white.
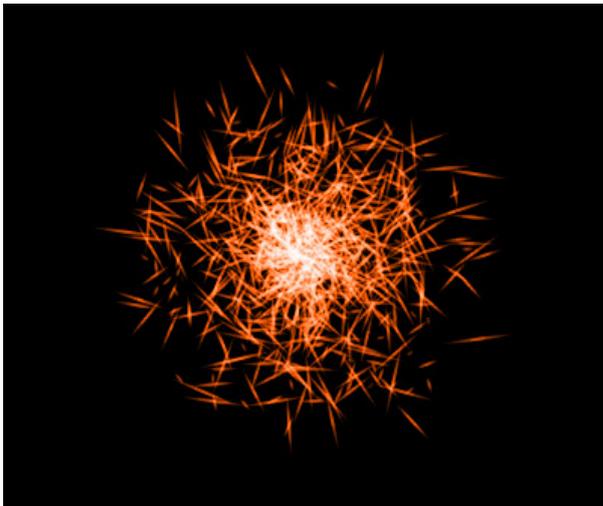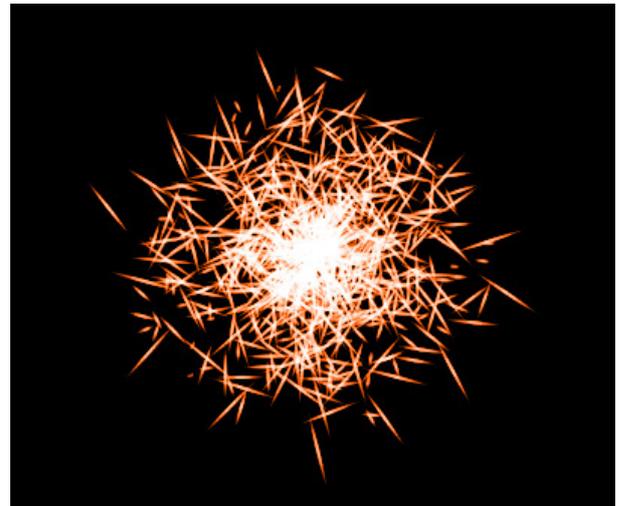
| Strength = 10 | Strength = 30 |

Click **Default** to reset all settings to their default values.

ARTISTIC BRUSHES

AliveColors lets you not only retouching photos, but also adding amazing artistic effects and creating outstanding hand-made artworks.

The program offers a wide range of **Artistic Brushes** which reliably simulate working with real painting and drawing tools (mixing colors, paint drying, etc.). Use them to decorate your photos and add some interesting detail, that will instantly give your images an edge! Paint a new oil or chalk masterpiece!

You will find the artistic brushes in the program's Toolbar. They can only be used on raster layers.

Artistic Brushes:

Oil Brush

Roller

Felt-Tip Marker

Chalk

Artistic Pencil

Artistic Spray

Artistic Smudge

OIL BRUSH

The **Oil Brush** was designed to imitate painting with an oil brush and paints strokes with a relief. The density of the stroke varies across the entire line.

You can change the brush color using the **Color** panel, **Swatches** panel, **Color Wheel** panel, or by clicking the image with the **Eyedropper** tool. To pick a color sample, press and hold the I key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or right-click the image. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (1-300). The maximum line width which can be obtained by the brush (in pixels).

Relief (0-100). The prominence of stroke details. As this parameter is increased, the pattern left by the brush's hairs in the paint is more pronounced and the relief of strokes is stronger.

| Relief = 20 | Relief = 70 |

Paint Reserve (0-100). The length of painted lines. When the paint runs out, the brush stops painting on the surface and leaves a raised, faded stroke of paint.

Paint Reserve = 5   Paint Reserve = 25

Color Mixing check-box. This defines the state of the paint in a brush stroke. When this check-box is activated, the strokes mix together as if the paint is wet. If the check-box is deactivated, the paint applies as if it is drying, and the strokes do not mix together.
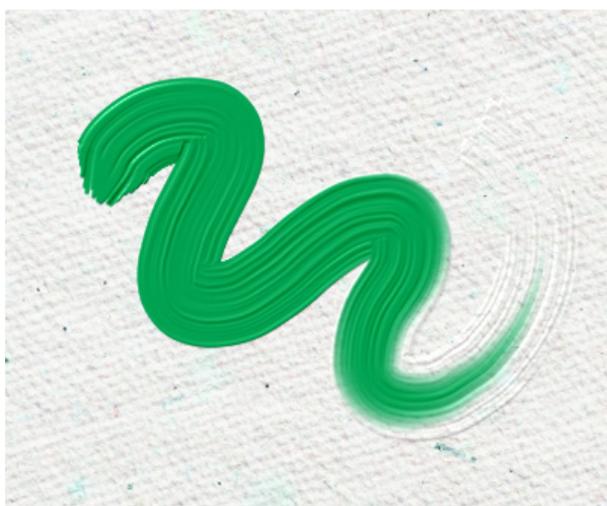
Color Mixing check-box is disabled   Color Mixing check-box is enabled

Flat Brush. The check-box changes the shape of the edges of the brush strokes. If it is enabled, the strokes look like drawn with a flat brush or a palette knife. When this option is disabled, the brush strokes look like created with a round brush or as if paint squeezed out of a tube.

Flat Brush is disabled	Flat Brush is enabled

Press the **Default** button to set all settings to their default values.

ROLLER

The **Roller** ⬚ simulates rolling paint on an image. The brush leaves flat, porous strokes. The paint's density varies along the line's length.

You can change the paint color using the **Color** panel, **Swatches** panel, **Color Wheel** panel, or by clicking the image with the Eyedropper tool. To pick a color sample, press and hold the ⍰I⍰ key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or right-click the image. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

> **Size** (10-300). The maximum width of a line made by the brush (in pixels).
>
> **Fill** (0-100). The paint's density in a single brush stroke. When strokes are painted over one another, the paint becomes denser. At lower values of this parameter, the color of applied strokes is weaker. When the parameter is set to 100%, the brush draws strokes in the full density of the chosen color.
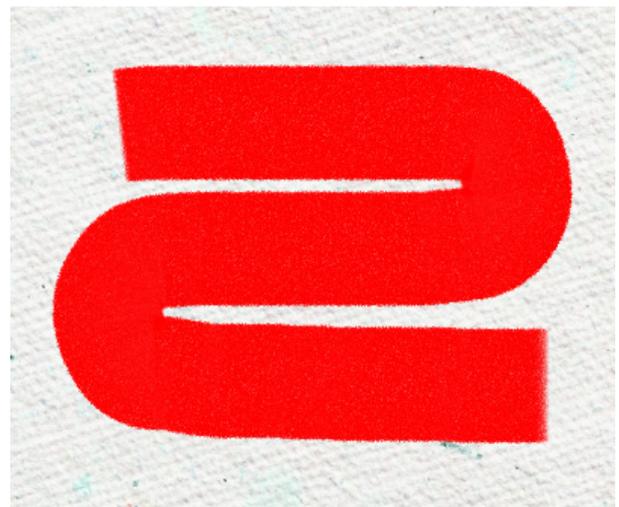
| Fill = 20 | Fill = 70 |

> **Paint Reserve** (0-100). Affects the brush strokes length. When the paint runs out, the brush stops painting on the surface and leaves behind a raised transparent trace of paint.
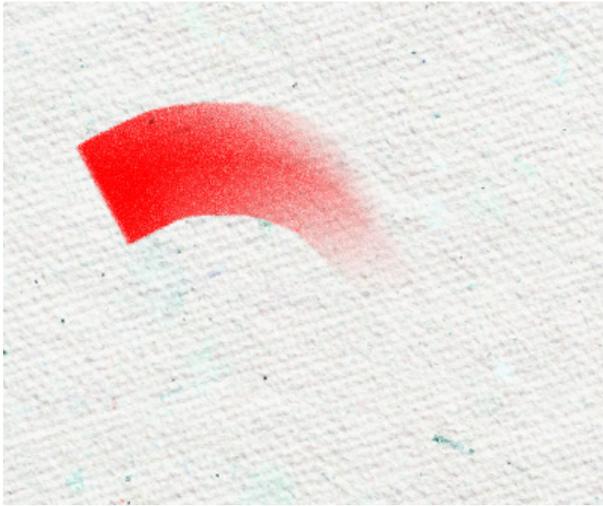
Paint Reserve = 1   Paint Reserve = 10

Color Mixing check-box. This defines the state of the paint in a brush stroke. When this check-box is activated, the strokes mix together as if the paint is wet. If the check-box is deactivated, the paint applies as if it is drying, and the strokes do not mix together.

Color Mixing check-box is disabled   Color Mixing check-box is enabled

Press the **Default** button to set all settings to their default values.

FELT-TIP MARKER

The **Felt-tip Marker** is a special tool with constantly flowing paint. It draws smooth, elegant, translucent lines.

You can change the paint color using the **Color** panel, **Swatches** panel, **Color Wheel** panel, or by clicking the image with the Eyedropper tool. To pick a color sample, press and hold the ⌶ key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or right-click the image. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

> **Size** (3-100). The maximum width of a line which the tool will draw (in pixels).
>
> **Fill** (0-100). The ink's density in a single brush stroke. When strokes are drawn over one another, the ink becomes denser. At lower values of this parameter, the color of applied strokes is weaker. When the parameter is set to 100%, the tool draws strokes in the full density of the chosen color.

Fill = 10	Fill = 100

> **Color Mixing** check-box. This defines the state of the paint in a brush stroke. When this check-box is activated, the strokes mix together as if the paint is wet. If the check-box is deactivated, the paint applies as if it is drying, and the strokes do not mix together.

| Color Mixing check-box is disabled | Color Mixing check-box is enabled |
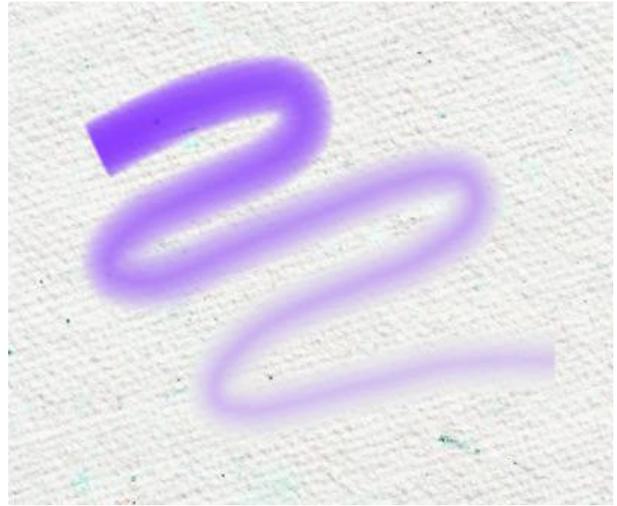
Press the **Default** button to set all settings to their default values.

CHALK

Chalk draws soft, textured lines with porous edges.

You can change the chalk's color using the **Color** panel, **Swatches** panel, **Color Wheel** panel, or by clicking the image with the Eyedropper tool. To pick a color sample, press and hold the ⓘ key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or right-click the image. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (3-200). The maximum width of a line drawn by the tool (in pixels).

Strength (0-100). The strength of the tool's influence on an image. At higher values, the line drawn by the chalk will be thicker and its edges will be sharper.

Strength = 10   Strength = 50

Press the **Default** button to set all settings to their default values.

ARTISTIC PENCIL

The **Artistic Pencil** draws lines with sharp boundaries and applies paint smoothly (without relief).

You can change the pencil's color using the **Color** panel, **Swatches** panel, **Color Wheel** panel, or by clicking the image with the Eyedropper tool. To pick a color sample, press and hold the I key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or right-click the image. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (3-100). The maximum width of a line drawn by the tool (in pixels).

Fill (0-100). The lead's density in a single pencil stroke. When strokes are drawn over one another, they becomes denser. At lower values of this parameter, the color of applied strokes is weaker. When the parameter is set to 100%, the pencil draws strokes in the full density of the chosen color.

| Fill = 10 | Fill = 80 |

Tilt (-100..100). Imitates a pencil's tilt: pressure on one edge of the line is weakened. The stronger the pencil's tilt, the greater the difference between edges.
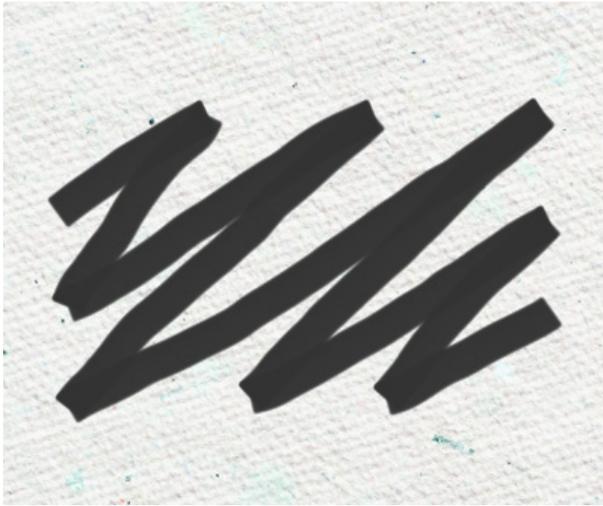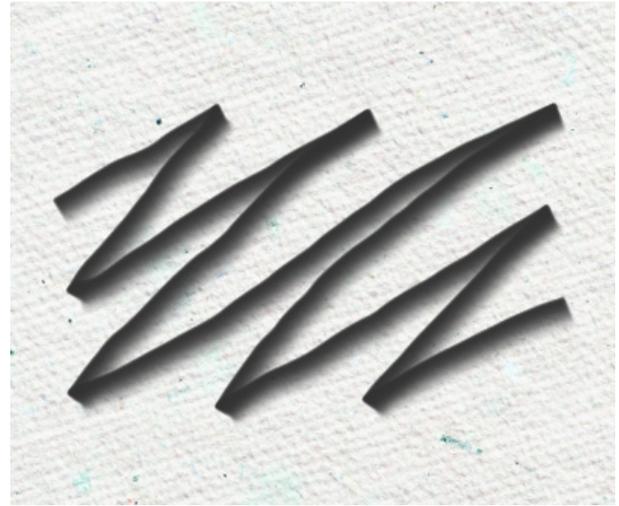
| Tilt = 10 | Tilt = 100 |

Grain (0-100). It adds noise to the pencil strokes, makes the lines less dense. The effect is visible at the low values of the **Fill** parameter.
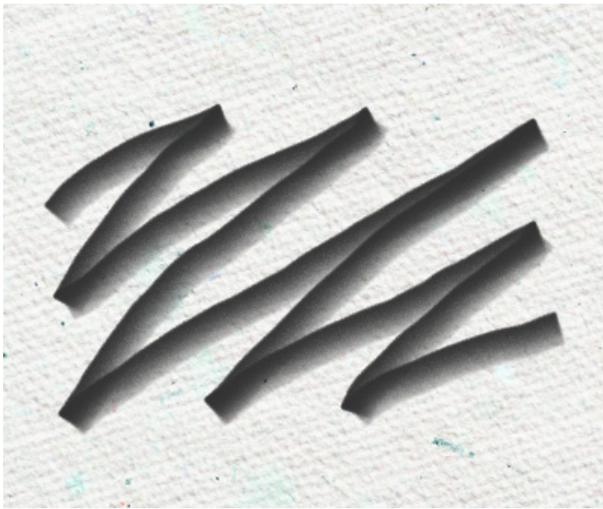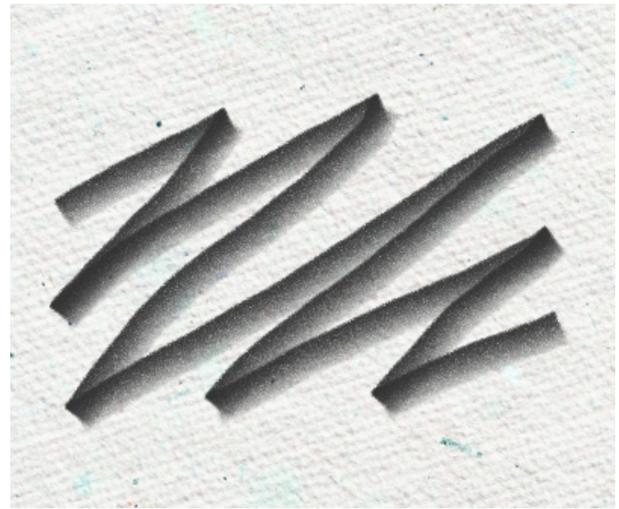
| Grain = 30 | Grain = 100 |

Press the **Default** button to set all settings to their default values.

ARTISTIC SPRAY

Artistic Spray simulates spray painting on an image. The brush does not apply paint in a continuous line, but rather in raised drops, scattered along the stroke.

You can change the paint color using the **Color** panel, **Swatches** panel, **Color Wheel** panel, or by clicking the image with the Eyedropper tool. To pick a color sample, press and hold the I key and then click the image with the Eyedropper tool. After the hotkey is released, the painting tool becomes active again.

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or right-click the image. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (10-300). The maximum width of a line applied by the brush (in pixels).

Drop Density (1-100). The density of drops in the total area of a stroke. At higher value more drops are applied in a stroke.

Drop Density = 25   Drop Density = 75

Drop Size (1-50). The diameter of individual dots. Larger dots will merge, forming strangely shaped line with irregular edges.
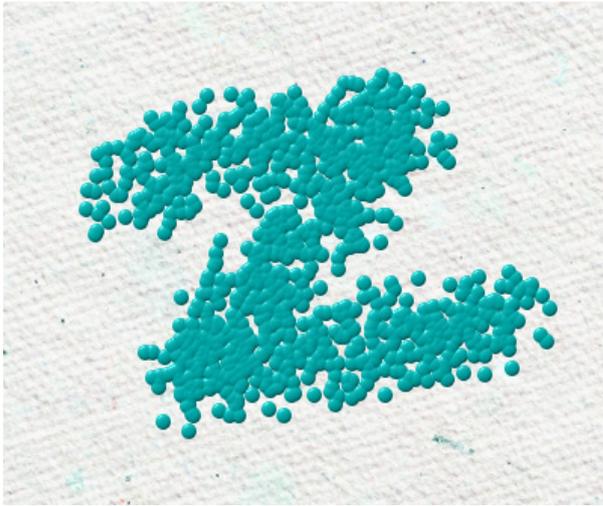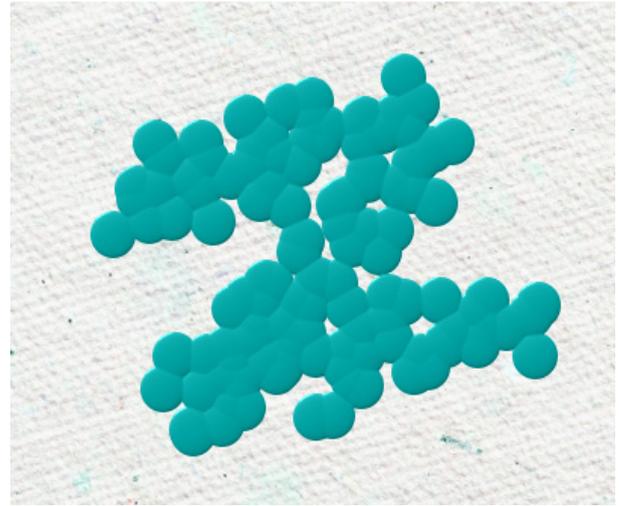
Drop Size = 10   Drop Size = 30

Press the **Default** button to set all settings to their default values.

ARTISTIC SMUDGE

The **Artistic Smudge** is designed for mixing different colors and changing the relief of painted strokes.

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or right-click the image. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Size (1-300). The maximum line width which can be obtained by the brush (in pixels).

Relief (0-100). The prominence of stroke details. As this parameter is increased, the pattern left by the brush's hairs in the paint is more pronounced and the relief of strokes is stronger.

Relief = 20

Relief = 70

Color Mixing (0-100). The parameter defines the state of the paint when drawing with the brush. At value = 0 the strokes do not mix together. The higher the value, the more strokes will be smeared and mix.

Color Mixing = 25

Color Mixing = 75

Flat Brush. The check-box changes the shape of the edges of the brush strokes. If it is enabled, the strokes look like drawn with a flat brush or a palette knife. When this option is disabled, the brush strokes look like created with a round brush or as if paint squeezed out of a tube.
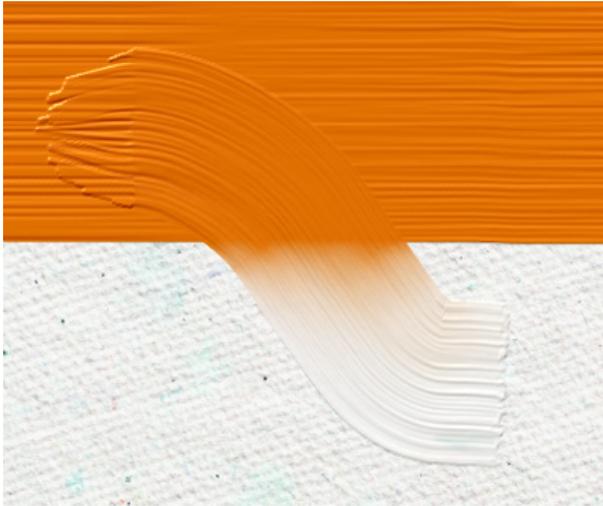
| Check-box is disabled | Check-box is enabled |

Press the **Default** button to set all settings to their default values.

TEXT TOOLS

The **AliveColors** image editor allows adding text to images. The text appears on text layers.

Learn more about the text tools:

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T **Text Tool**

      Wrap Text

Fit Text to Path

To select the text tools and quickly switch between them, use the **T** key.

TEXT TOOL

The **Text** tool $\boxed{\text{T}}$ allows you to add text to an image. The hotkey for the tool is $\boxed{\text{T}}$.

Drag the cursor while holding left mouse button - the bounding box will appear where you can enter text. You can change the size of the box by dragging the markers on the frame. Hold down $\boxed{\text{Shift}}$ to constrain the proportions. To move the block, place the cursor outside ⊹ and drag.

Alternatively, you can add text by clicking with the tool on an image, just start typing. In this case, text lines are not limited in length.
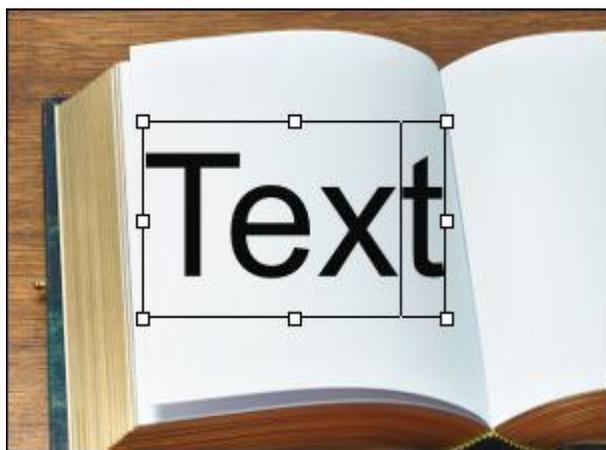
Adding a Text Block   Free Typing

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, click the tool's icon in the Tool Options (top) panel or use $\boxed{\text{F5}}$.
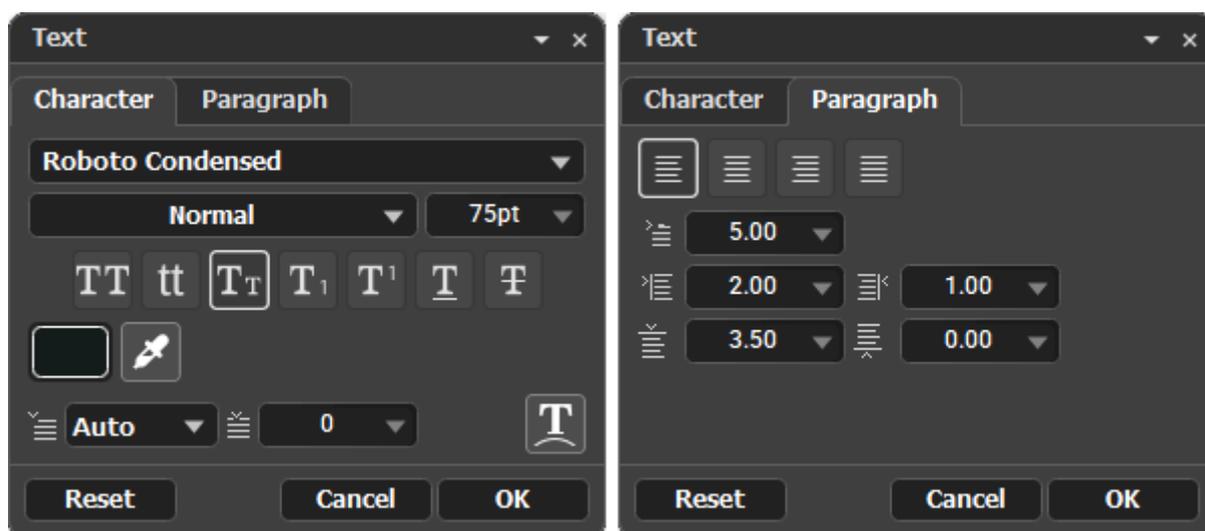
Text Parameters

Character Tab:

Font Family. The drop-down list contains a set of system fonts that can be used when typing.

Style. The list contains different variations of the chosen font.

Font Size (1-1500). The parameter sets the size of the characters (in points).

Text Settings:

| TT | - ALL UPPERCASE

| tt | - all lowercase

| Tᴛ | - Capitalize (All Initial Caps)

| T₁ | - Subscript

| T¹ | - Superscript

| T | - Underline

| T | - Strikethrough

Color. The current text color is shown on the color plate. Click the color plate to open the **Select Color** dialog box where you can specify the color of the text. You can sample color directly from the image with the **Eyedropper** tool. Also, the color of the text can be set using the **Color**, **Swatches**, or **Color Wheel** panels.

Intervals:

- Tracking (Letter Spacing). It's the distance between characters within a word.

- Leading (Line Height). It's the distance between lines of text.

The button | T | calls up the Wrap Text parameters.

Paragraph Tab:

Alignment Options:

| ≡ | - Align Left

| ≡ | - Align Center

| ≡ | - Align Right

▤ - Justify
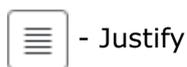
Margin Options. You can adjust the indent width in pixels in the input fields.

≡ - Indent First Line

≣ - Left Margin

≣ - Right Margin

≣ - Space Before Paragraph

≣ - Space After Paragraph

Note: You can open the text formatting options panel by double-clicking the thumbnail of the text layer in the **Layers** panel.

The text automatically appears on a special **text layer**. You can convert this layer to a raster one with the **Rasterize Layer** command.

You can make a **vector path** from a text layer using the **Create Path from Text** command (the context menu of the **Layers** panel). Each character will become a separate shape segment.

The text layer can also be converted to the **shape layer** using the **Convert to Vector Shape** command. After vectorization, each character will be represented as a separate vector shape.

If the vector symbol consists of several separate parts, you can select and move each part with the **Path Selection Tool** ◤ .

After rasterization/vectorization of text, you couldn't change or re-format it.

Right-click text to open a context menu with standard commands:
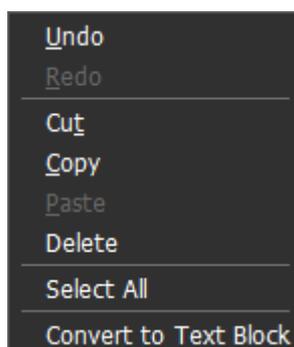
| Undo |
| Redo |
| Cut |
| Copy |
| Paste |
| Delete |
| Select All |
| Convert to Text Block |

Undo. The command lets you undo a last change. The hotkey is `Ctrl`+`Z`.

Redo. The command lets you reapply a previously undone change. The hotkey is `Ctrl`+`Y`.

Cut. The command removes the selected fragment while taking it to a clipboard. The hotkey is `Ctrl`+`X`.

Copy. The command duplicates the selected fragment to the clipboard. The hotkey is `Ctrl`+`C`.

Paste. The command lets inserting data from the clipboard. The hotkey is `Ctrl`+`V`.

Delete. The command removes the selected fragment without saving it to the clipboard. The hotkey is `Delete`.

Select All. The command selects entire text on this layer. The hotkey is `Ctrl`+`A`.

Convert to Text Block/Convert to Free Text. The command changes the type of text.

You can transform the text block using the **Move** tool ![Move tool icon]. The transformation parameters will appear in the **Settings Panel** if you click the frame.

It's also possible to transform text with the pressed `Ctrl`-key. It is important to distinguish this mode from simple changing of the bounding box.

Transforming Text Block

To apply text press **OK** in the Settings Panel or select another tool in the Toolbar. To cancel click **Cancel** or use `Esc`.

WARP TEXT

The **Warp Text** feature ⊤ allows you to add deformation effects to the selected text layer.

Warp Text Effect

Parameters:
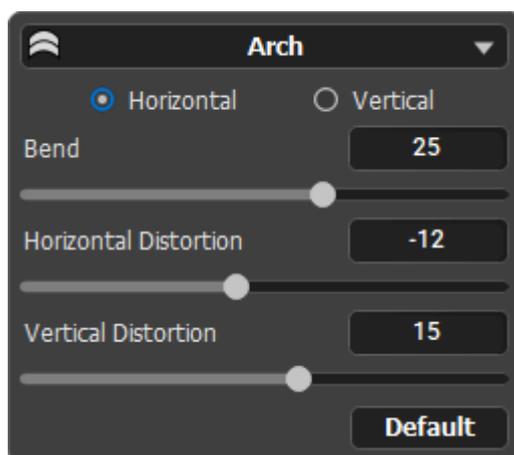
Warp Text Options

In the drop-down list, select the type of text warping: Arc, Arch, Flag, Fish, etc.

Direction. Changes the orientation of the warp - **Horizontal** or **Vertical**.

Bend (-100..100). Determines the degree of deformation.

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Horizontal Distortion (-100..100). Changes the horizontal perspective.

Vertical Distortion (-100..100). Changes the vertical perspective.

Click the **Default** button to reset the settings to their original values.

FIT TEXT TO PATH TOOL

The **Fit Text to Path** tool is designed for adding an inscription along the outline of the selected vector object.

To enter text, left-click a path. A marker in the form of a cross will appear at the selected location, marking the beginning of the text, and a marker in the form of a circle - at the end. Both markers can be moved along the contour with the mouse, defining the text input area.

Fit Text to Path

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, click the tool's icon in the Tool Options (top) panel or use F5.
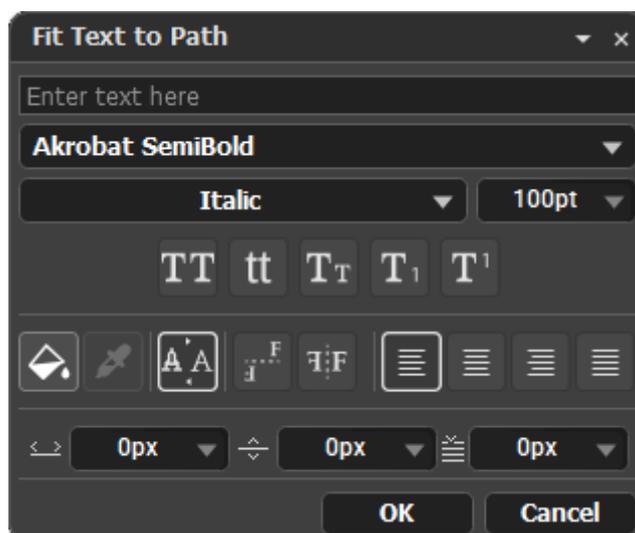

Tool Parameters

**Text Field**. Here, you can enter text that will be applied along the selected vector path.

Font Family. The drop-down list contains a set of system fonts that can be used when typing.

Style. The list contains different variations of the chosen font.

Font Size (1-1500). The parameter sets the size of the characters (in points).

Text Settings:

TT - ALL UPPERCASE

tt - all lowercase

Tᴛ - Capitalize (All Initial Caps)

T₁ - Subscript

T¹ - Superscript

Text Color. Click on ⬦ to open a dialog box with two tabs. In the **Fill** tab, you can adjust the text color. In the **Stroke** tab, you can add and customize the text outline.

Click on 🖉 to sample color directly from the image. Also, the color of the text can be changed using the **Color**, **Swatches**, or **Color Wheel** panels.

Text Reflection Options:

- Reverse Text

- Mirror Text

Alignment Options:

- Align Left

- Align Center

- Align Right

- Justify

Shift Options:

- Shift Left/Right

- Shift Up/Down

- Letter Spacing

Note: You can open the tool's options panel by double-clicking on the thumbnail of the text layer in the **Layers** panel.

The text automatically appears on a special **text layer**. You can convert this layer to a raster one with the **Rasterize Layer** command.

You can make a **vector path** from a text layer using the **Create Path from Text** command (the context menu of the **Layers** panel). Each character will become a separate shape segment.

The text layer can also be converted to the **shape layer** using the **Convert to Vector Shape** command. After vectorization, each character will be represented as a separate vector shape.

If the vector symbol consists of several separate parts, you can select and move each part with the **Path Selection Tool** ◀.

After rasterization/vectorization of text, you couldn't change or re-format it.

Right-clicking on text opens a menu of standard commands.

Undo. The command lets you undo a last change. The hotkey is `Ctrl`+`Z`.

Redo. The command lets you reapply a previously undone change. The hotkey is `Ctrl`+`Y`.

Cut. The command removes the selected fragment while taking it to a clipboard. The hotkey is `Ctrl`+`X`.

Copy. The command duplicates the selected fragment to the clipboard. The hotkey is `Ctrl`+`C`.

Paste. The command lets inserting data from the clipboard. The hotkey is `Ctrl`+`V`.

Delete. The command removes the selected fragment without saving it to the clipboard. The hotkey is `Delete`.

Select All. The command selects entire text on this layer. The hotkey is `Ctrl`+`A`.

To apply text, press **OK**. To cancel click on **Cancel** or use `Esc`.

SHAPE TOOLS

AliveColors provides a wide range of possibilities for creating images, illustrations, and other graphics.

In addition to retouching and painting brushes, the program offers **Shape Tools** that let you create and edit vector shapes.

Learn more about the shape tools:

Pen Tool

Freeform Pen Tool

Rectangle Tool

Rounded Rectangle Tool

Ellipse Tool

Pie Tool

Triangle Tool

Polygon Tool

Star Tool

Line Tool

Add Anchor Point Tool

Delete Anchor Point Tool

Convert Point Tool

Path Selection Tool

**Direct Selection Tool**

Fill Shape

Stroke Shape

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or use the F5 -key.

General parameters of shape tools (may vary for different tools):

Mode. In the drop-down list, select what the tool will create:

Shape. Shapes are created on a separate shape layer, designated by △.

Path. Paths are displayed in the **Paths** panel. A path can contain multiple subpaths (components).

Pixels. A shape filled with the foreground color will be drawn on the active raster layer.

Fill. Click the color plate in the Options Panel to open a dialog box where you can select a fill type. Fill options are also available in the **Fill** tab in the full tool options panel (F5) or by clicking the △ icon to the right of the name of the selected vector layer.

Stroke. Click the color plate in the Options Panel to bring up a dialog box where you can select the outline color. The outline options are also available in the **Stroke** tab in the full tool options panel (F5) or by clicking the △ icon to the right of the name of the selected vector layer.

In the **Path** mode is, you can make a **Selection**, **Mask**, or **Shape** from the path by pressing one of the buttons.

In the **Pixels** mode, you can change the blend method and the opacity of the shape:

Blend Mode. Choose how to blend the fill color pixels with the active layer pixels. Learn more about the blend modes.

Opacity (0-100). Set the transparency of the fill color.

Operations. Choose an operation that defines the result of the interaction of the created shapes or paths:

⬚ - New (Each new shape is created on a separate layer.)

⬚ - Add (A new component is added to the existing ones.)

⬚ - Subtract (A new component is excluded from the existing ones.)

⬚ - Intersect (Only the overlapping area of the components is displayed.)

> **Note:** All operations except the first one (New Layer) work with components of a single path.

Order. Change the order of the components:

⇕ - Bring to Front

⇕ - Bring Forward

⇕ - Send Backward

⇕ - Send to Back

Alignment of multiple selected components relative to each other:

⬚ - Align Top Edges

⬚ - Align Vertical Centers

⬚ - Align Bottom Edges

- Align Left Edges

- Align Horizontal Centers

- Align Right Edges

Transformation parameters will become unavailable when changing the shape:

Using the **Width** and **Height** parameters, you can change the size of the shape.

Using the **X** and **Y** parameters, you can adjust the position of the shape on the canvas. Changing the **X** parameter will shift horizontally, **Y** - vertically.

The **Rotation** parameter allows you to rotate the shape.

The **Flip Horizontal** and **Flip Vertical** buttons allow you to flip the shape horizontally or vertically.

Also, you can transform a path using transformation commands (**Edit -> Transform** and **Free Transform**).

PEN TOOL

The **Pen Tool** is designed to create vector paths and shapes by adding anchor points with the mouse.
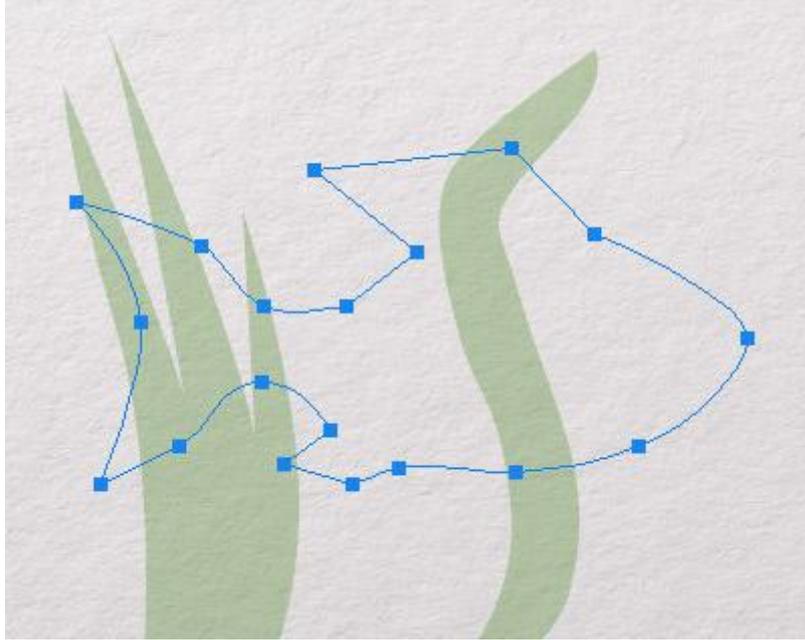
Click to create a breakpoint. Continue clicking to create a path made of straight line segments.

Click holding down the mouse button while moving the cursor to create a smooth point (curve).

Hold down `Alt` to change the direction of the curve. Hold down `Shift` to constrain the angle of the segment to a multiple of 45°.

To remove the last added point, press the `← Backspace` key.

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or use the `F5`-key.

You can find general parameters of vector shapes here.

In addition, the following options are available:

    Rubber Band. The check-box enables display of the added curve segment. Holding down the `Shift` key will change the direction of the segment in 45° increments.
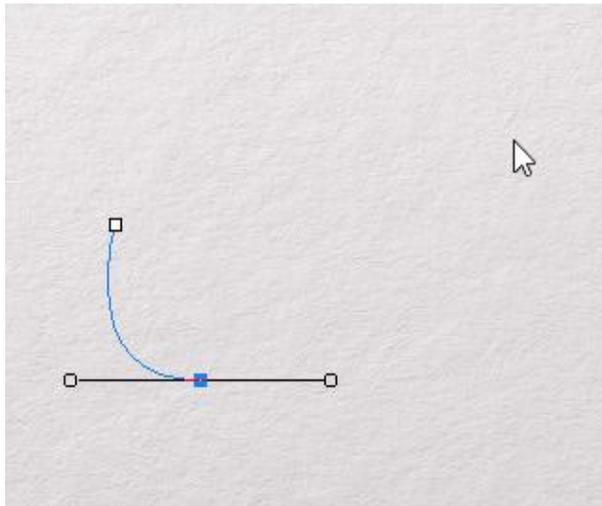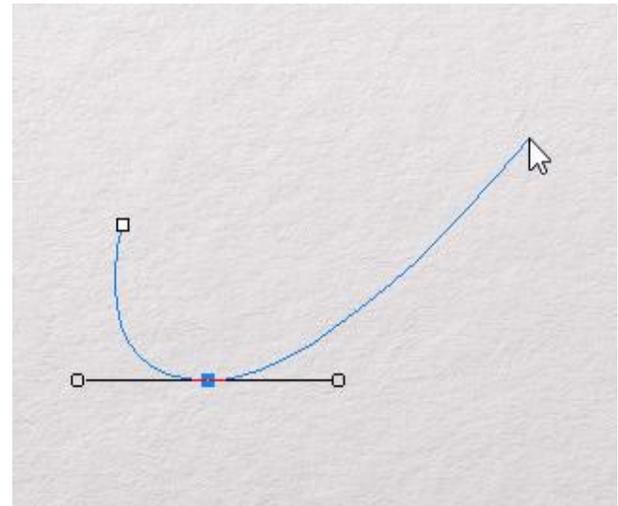
Check-Box Disabled   Check-Box Enabled

   Auto Add/Delete. When the check-box is enabled, the tool can add/remove curve nodes.

To close the path, combine the start and end points of the curve. To finish creating the path at the current stage, press the `Esc` key.

By holding down the `Ctrl` key, you can move the entire component or individual nodes and segments with the mouse. By holding down the `Shift` key, you can select multiple components or nodes.

You can also use **shape editing tools** to change the shape and position of the created path.

FREEFORM PEN TOOL

The **Freeform Pen Tool** allows you to create an arbitrary line, which, when the mouse button is released, will be transformed into a vector path that exactly repeats the drawn line. Using this tool, you can easily create smooth, freehand shapes.
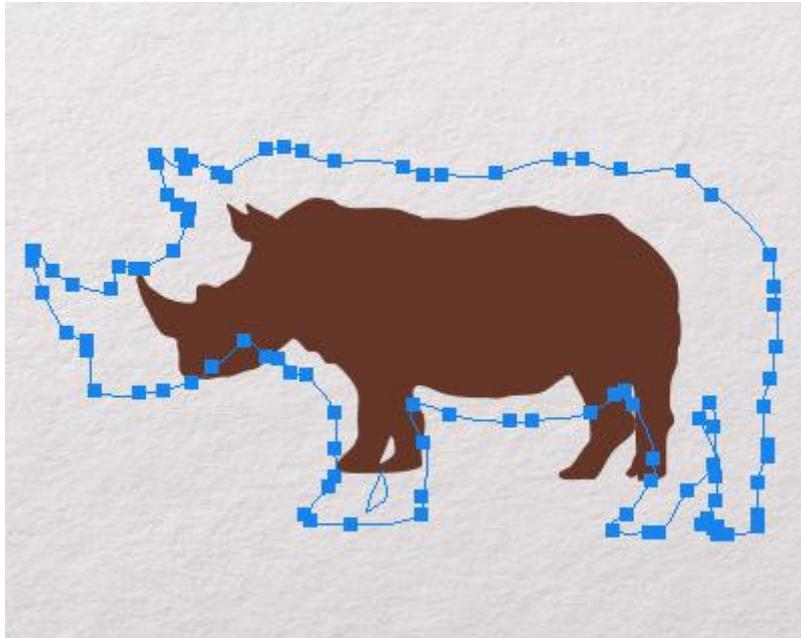
The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or use the F5-key.

You can find general parameters of vector shapes here.

In addition, the following options are available:

Smoothness (0-200). The parameter specifies the degree of smoothing of the line. As the parameter increases, the number of points decreases and the curves become smoother.
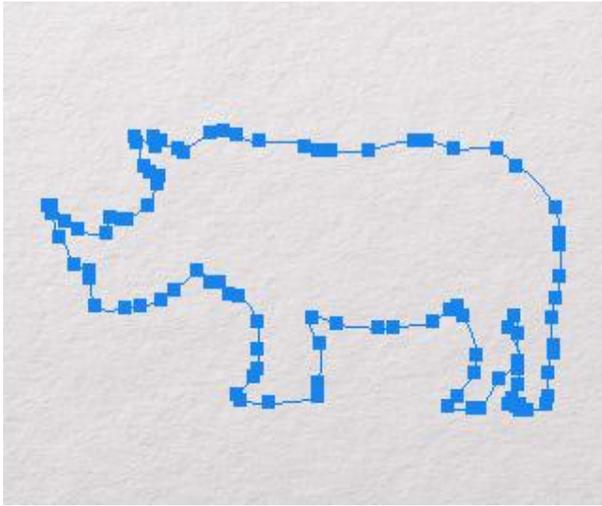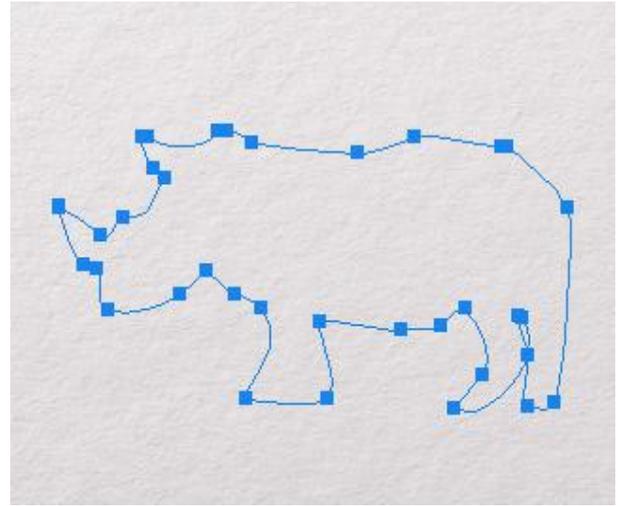
Smoothness = 10   Smoothness = 100

To close the path, combine the start and end points of the curve or click the **Close** button in the tool options.

By holding down the `Ctrl` key, you can move the entire component or individual nodes and segments with the mouse. By holding down the `Shift` key, you can select multiple components or nodes.

You can also use **shape editing tools** to change the shape and position of the created path.

RECTANGLE TOOL

The **Rectangle Tool** ⬜ allows you to create rectangle and square vector shapes.

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or use the F5 -key.

You can find general parameters of vector shapes here.

In addition, the following options are available:

Style. The drop-down list allows you to specify the method for creating the shape.

> **Unconstrained**. The shape is drawn by moving the cursor.
>
> **Square**. Allows you to create a square. You can enable/disable this mode by holding down the Shift key.
>
> **Fixed Ratio**. Allows you to create a shape with a given width-to-height ratio.
>
> **Fixed Size**. Allows you to create a shape with given width and height (in pixels).
>
> **Rotation**. Allows you to rotate the shape when creating it.

From Center. If the check-box is enabled, the shape appears when moving from the center outward. If the check-box is disabled, the shape is created by moving from one corner to another.

The dialog with parameters will also appear when you left-click on the image. Specify the parameter values and click the **OK** button to add the shape with the specified parameters. When you click the **Cancel** button, the dialog will close without creating the shape.

By holding down the `Ctrl` key, you can move the shape with the mouse. By holding down the `Shift` key, you can select multiple shapes.

You can also use **shape editing tools**.

ROUNDED RECTANGLE TOOL

The **Rounded Rectangle Tool** ▢ allows you to create rectangle vector shapes with rounded corners.
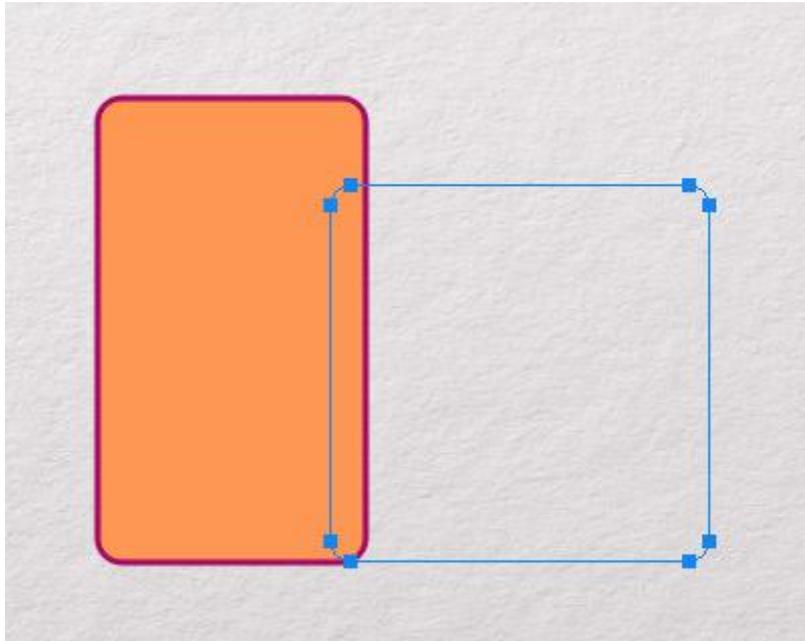
The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or use the F5-key.

You can find general parameters of vector shapes here.

In addition, the following options are available:

Radius (1-100). The parameter specifies the radius of rounding of the corners of the rectangle.
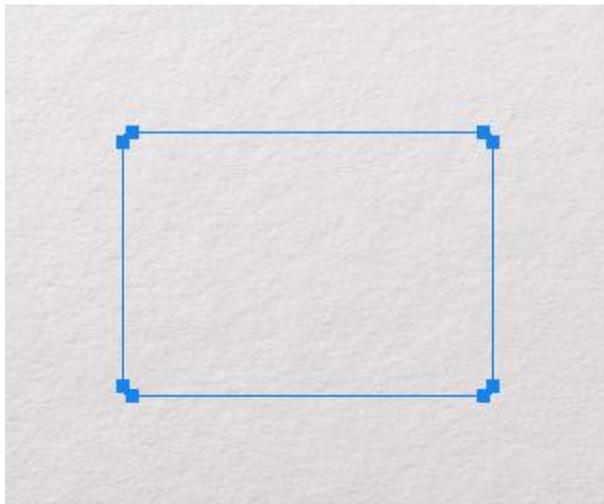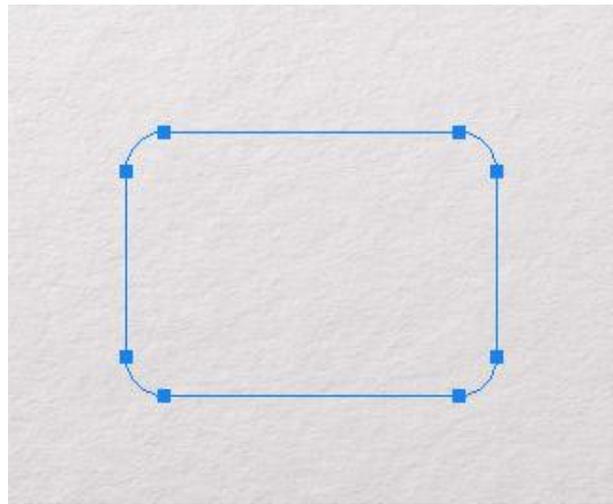
Radius = 5   Radius = 20

Style. The drop-down list allows you to specify the method for creating the shape.

> **Unconstrained**. The shape is drawn by moving the cursor.
>
> **Square**. Allows you to create a square. You can enable/disable this mode by holding down the `Shift` key.
>
> **Fixed Ratio**. Allows you to create a shape with a given width-to-height ratio.
>
> **Fixed Size**. Allows you to create a shape with given width and height (in pixels).
>
> **Rotation**. Allows you to rotate the shape when creating it.

From Center. If the check-box is enabled, the shape appears when moving from the center outward. If the check-box is disabled, the shape is created by moving from one corner to another.

The dialog with parameters will also appear when you left-click on the image. Specify the parameter values and click the **OK** button to add the shape with the specified parameters. When you click the **Cancel** button, the dialog will close without creating the shape.

By holding down the `Ctrl` key, you can move the shape with the mouse. By holding down the `Shift` key, you can select multiple shapes.

You can also use **shape editing tools**.

ELLIPSE TOOL

The **Ellipse Tool** ⬤ allows you to create ellipse and circle vector shapes.

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or use the F5 -key.

You can find general parameters of vector shapes here.

In addition, the following options are available:

Style. The drop-down list allows you to specify the method for creating the shape.

Unconstrained. The shape is drawn by moving the cursor.

Circle. Allows you to create a circle. You can enable/disable this mode by holding down the Shift key.

Fixed Ratio. Allows you to create a shape with a given width-to-height ratio.

Fixed Size. Allows you to create a shape with given width and height (in pixels).

Rotation. Allows you to rotate the shape when creating it.

From Center. If the check-box is enabled, the shape appears when moving from the center outward. If the check-box is disabled, the shape is created by moving from one corner to another.

The dialog with parameters will also appear when you left-click on the image. Specify the parameter values and click the **OK** button to add the shape with the specified parameters. When you click the **Cancel** button, the dialog will close without creating the shape.

By holding down the `Ctrl` key, you can move the shape with the mouse. By holding down the `Shift` key, you can select multiple shapes.

You can also use **shape editing tools**.

PIE TOOL

The **Pie Tool** allows you to create a sector shape, in the form of an incomplete ellipse, bounded by an arc of a circle and two radii.
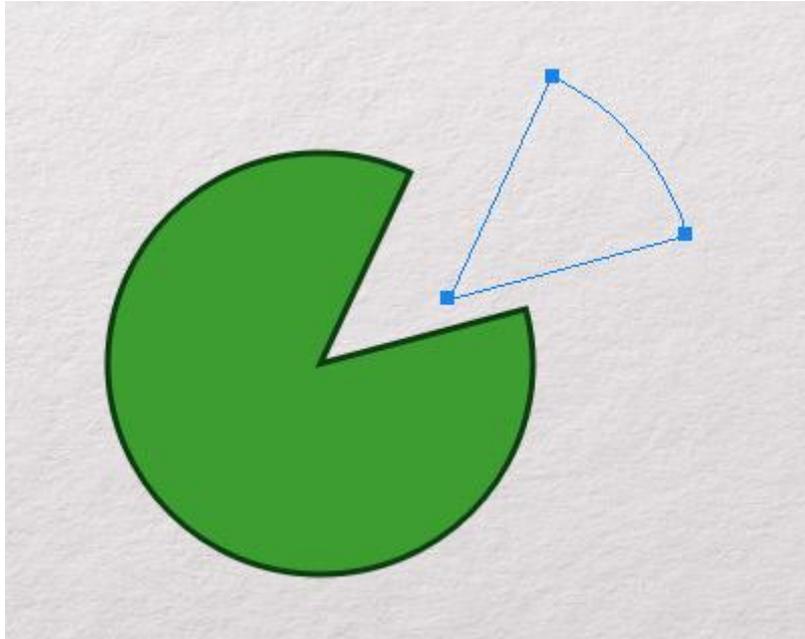

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or use the F5 -key.

You can find general parameters of vector shapes here.

In addition, the following options are available:

Start Angle (-180..180). Specifies the angle from which the sector is drawn.

End Angle (-180..180). Specifies the angle at which the sector stops drawing.
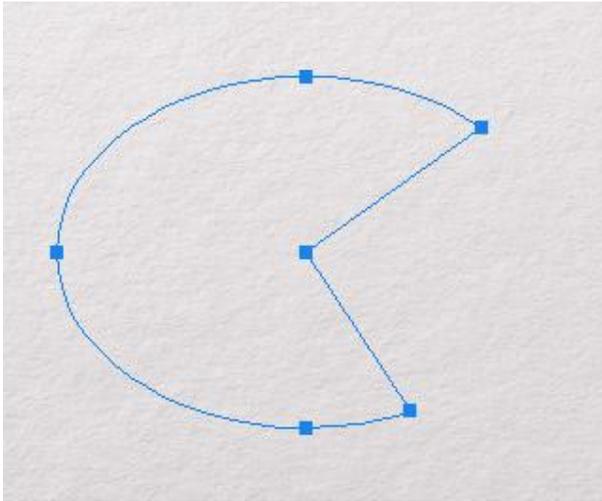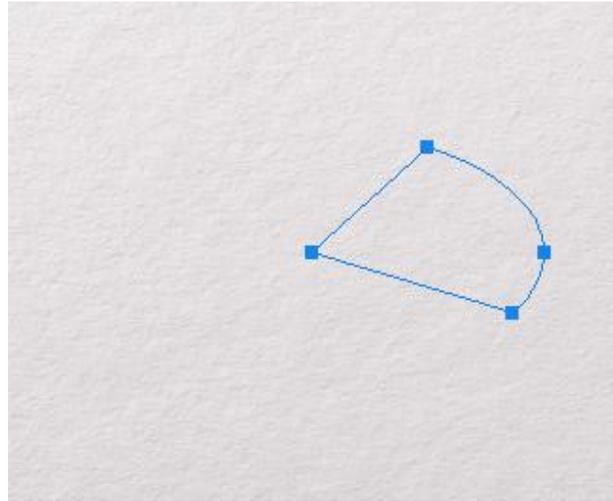
| Start Angle = -45, | Start Angle = 30, |
| End Angle = 65 | End Angle = -60 |

Style. The drop-down list allows you to specify the method for creating the shape.

Unconstrained. The shape is drawn by moving the cursor.

Circle. Allows you to create a circle. You can enable/disable this mode by holding down the `Shift` key.

Fixed Ratio. Allows you to create a shape with a given width-to-height ratio.

Fixed Size. Allows you to create a shape with given width and height (in pixels).

Rotation. Allows you to rotate the shape when creating it.

From Center. If the check-box is enabled, the shape appears when moving from the center outward. If the check-box is disabled, the shape is created by moving from one corner to another.

The dialog with parameters will also appear when you left-click on the image. Specify the parameter values and click the **OK** button to add the shape with the specified parameters. When you click the **Cancel** button, the dialog will close without creating the shape.

By holding down the `Ctrl` key, you can move the shape with the mouse. By holding down the `Shift` key, you can select multiple shapes.

You can also use **shape editing tools**.

TRIANGLE TOOL

The **Triangle Tool** allows you to create triangle vector shapes.
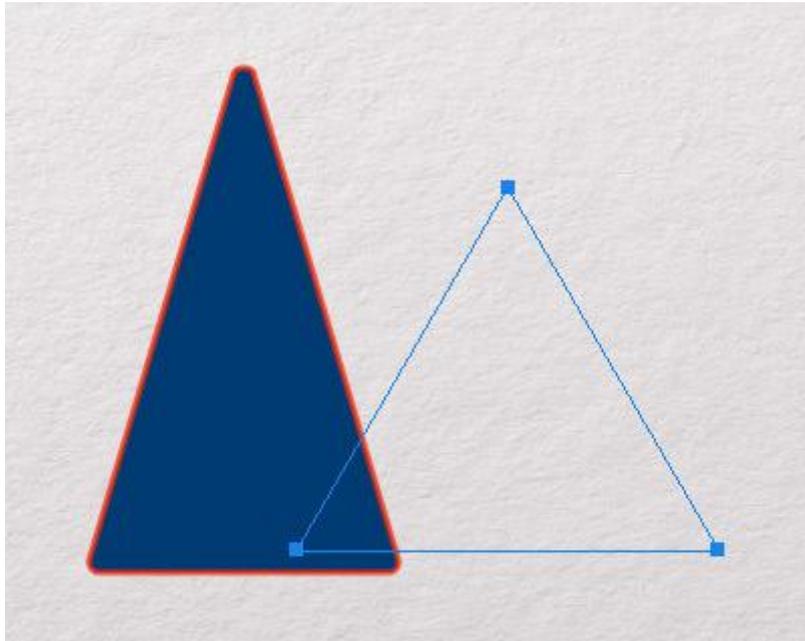
The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or use the F5 -key.

You can find general parameters of vector shapes here.

In addition, the following options are available:

Equilateral. When the check-box is enabled, an equilateral shape is created.
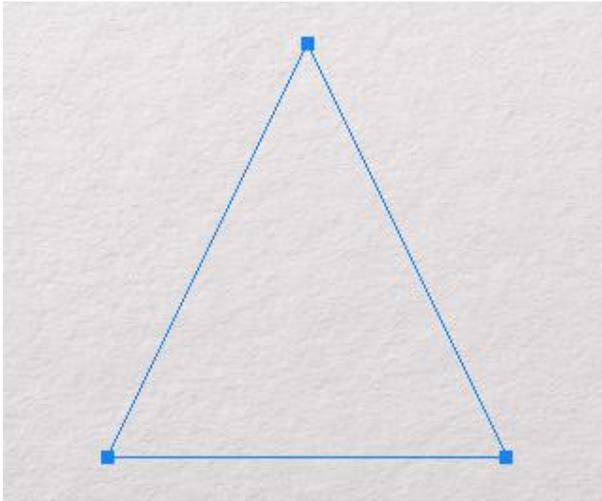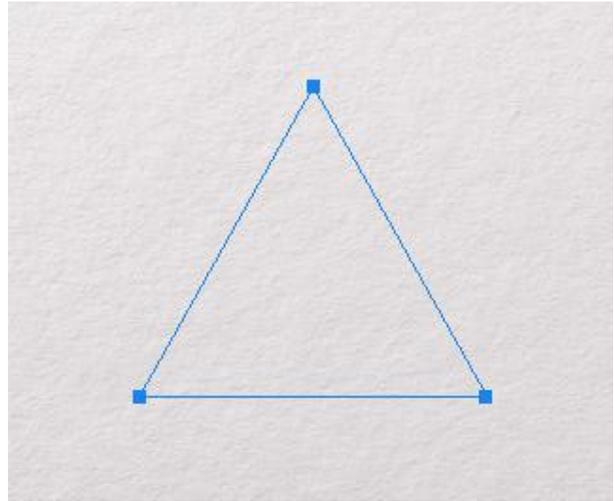
| Check-Box Disabled | Check-Box Enabled |

Radius (1-100). The parameter specifies the radius of rounding of the corners of the triangle.
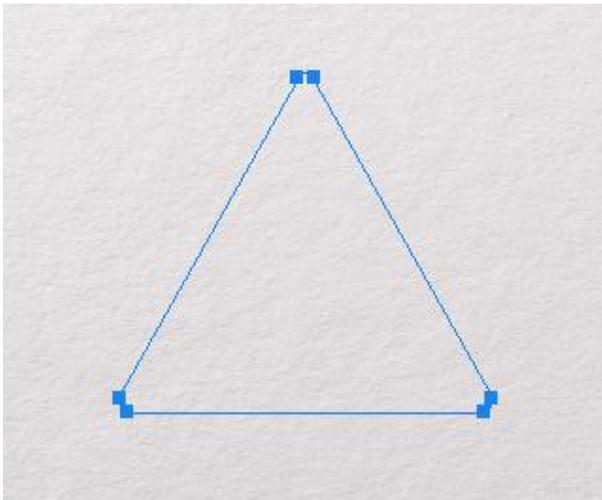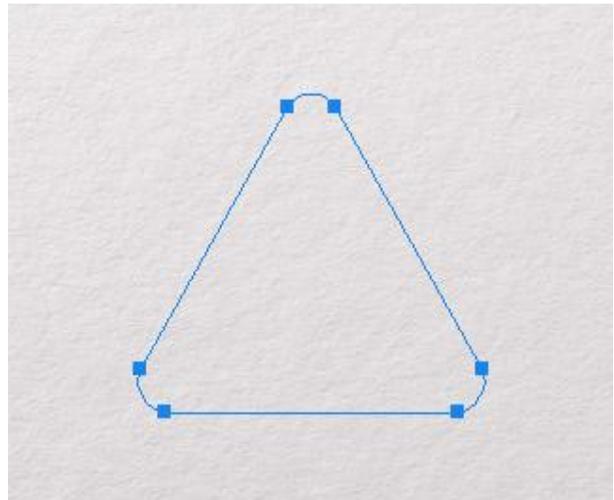
| Radius = 5 | Radius = 15 |

Style. The drop-down list allows you to specify the method for creating the shape.

Unconstrained. The shape is drawn by moving the cursor.

Equilateral. Allows you to create a regular equilateral shape. You can enable/disable this mode by holding down the `Shift` key.

Fixed Ratio. Allows you to create a shape with a given width-to-height ratio.

Fixed Size. Allows you to create a shape with given width and height (in pixels).

Rotation. Allows you to rotate the shape when creating it.

From Center. If the check-box is enabled, the shape appears when moving from the center outward. If the check-box is disabled, the shape is created by moving from one corner to another.

The dialog with parameters will also appear when you left-click on the image. Specify the parameter values and click the **OK** button to add the shape with the specified parameters. When you click the **Cancel** button, the dialog will close without creating the shape.

By holding down the Ctrl key, you can move the shape with the mouse. By holding down the Shift key, you can select multiple shapes.

You can also use **shape editing tools**.

POLYGON TOOL

The **Polygon Tool** is designed to create polygons vector shapes.
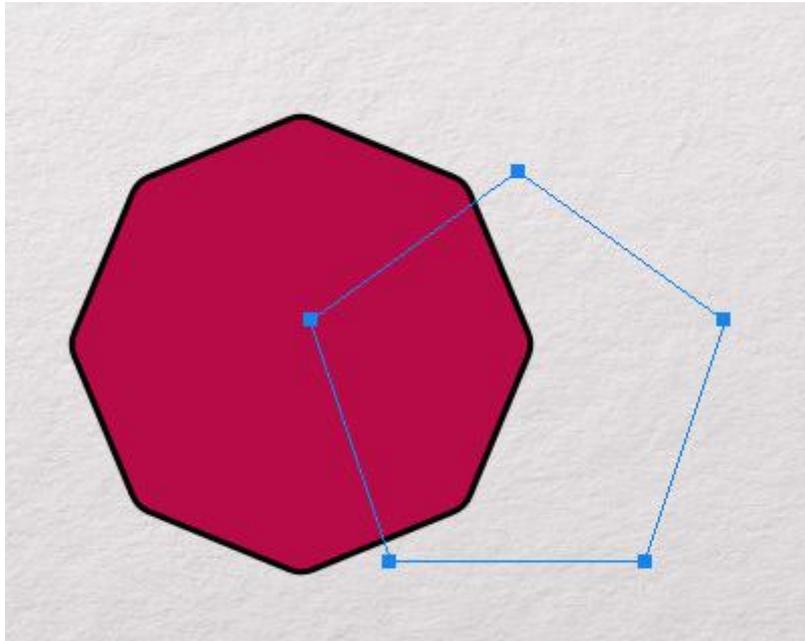

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or use the F5 -key.

You can find general parameters of vector shapes here.

In addition, the following options are available:

Equilateral. When the check-box is enabled, an equilateral shape is created.
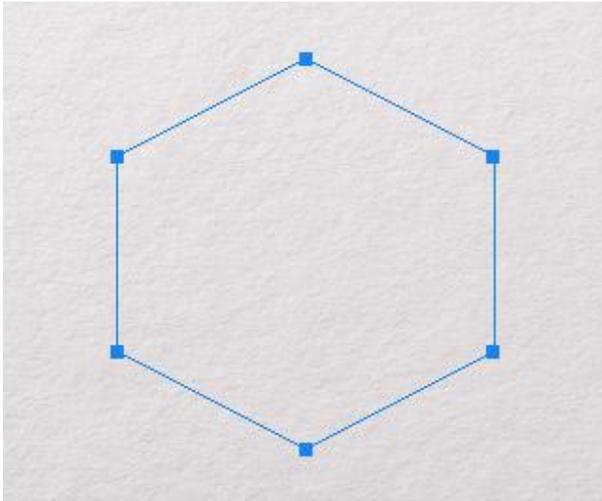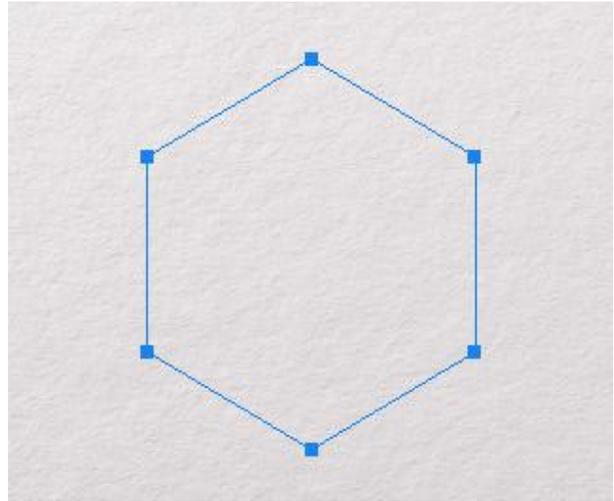
| Check-Box Disabled | Check-Box Enabled |

Sides (3-100). The parameter specifies the number of corners of the polygon.
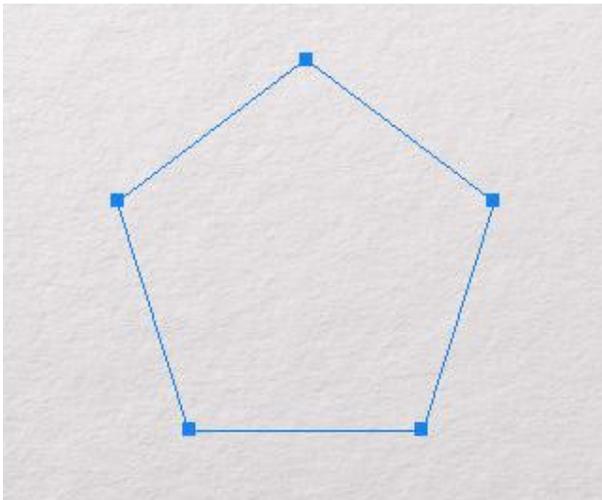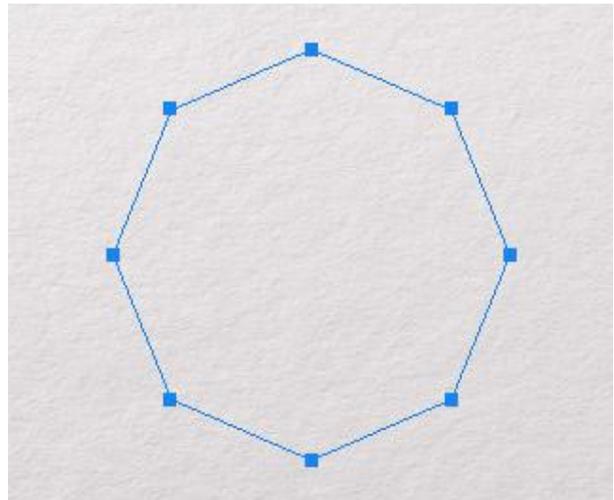
| Sides = 5 | Sides = 8 |

Radius (1-100). The parameter specifies the radius of rounding of the corners of the polygon.
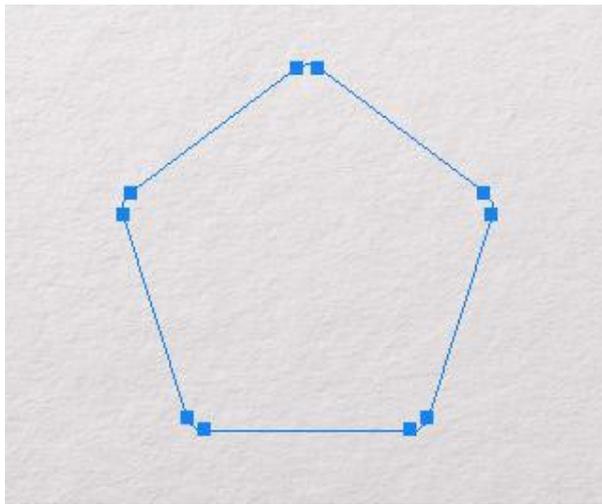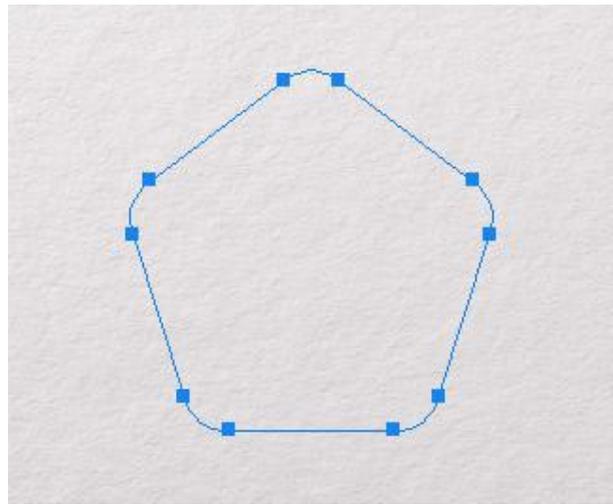
Radius = 10	Radius = 25

Style. The drop-down list allows you to specify the method for creating the shape.

    Unconstrained. The shape is drawn by moving the cursor.

    Equilateral. Allows you to create a regular equilateral shape. You can enable/disable this mode by holding down the `Shift` key.

    Fixed Ratio. Allows you to create a shape with a given width-to-height ratio.

    Fixed Size. Allows you to create a shape with given width and height (in pixels).

    Rotation. Allows you to rotate the shape when creating it.

From Center. If the check-box is enabled, the shape appears when moving from the center outward. If the check-box is disabled, the shape is created by moving from one corner to another.

The dialog with parameters will also appear when you left-click on the image. Specify the parameter values and click the **OK** button to add the shape with the specified parameters. When you click the **Cancel** button, the dialog will close without creating the shape.

By holding down the `Ctrl` key, you can move the shape with the mouse. By holding down the `Shift` key, you can select multiple shapes.

You can also use **shape editing tools**.

STAR TOOL

The **Star Tool** allows you to create star vector shapes.
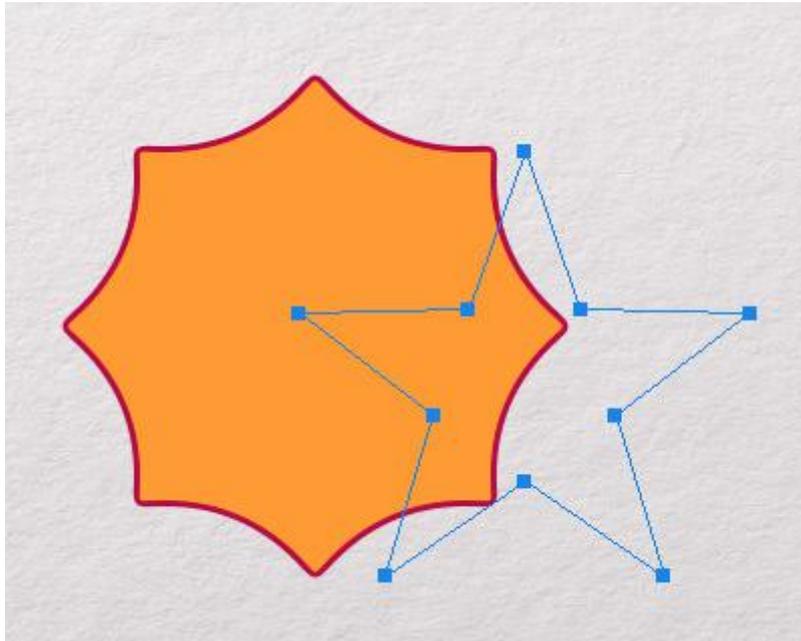
The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or use the F5 -key.

You can find general parameters of vector shapes here.

In addition, the following options are available:

Equilateral. When the check-box is enabled, an equilateral shape is created. Otherwise, the star will be elongated.
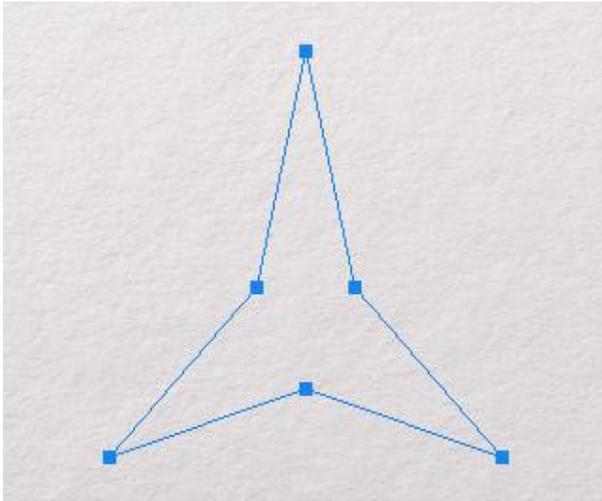
| Check-Box Disabled | Check-Box Enabled |
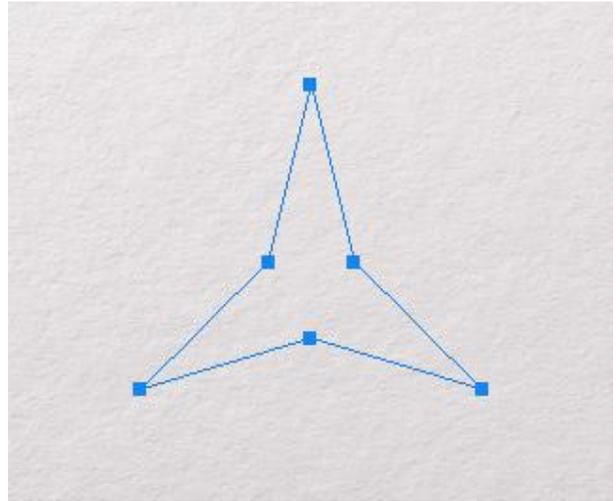
Sides (3-100). The parameter specifies the number of star rays.
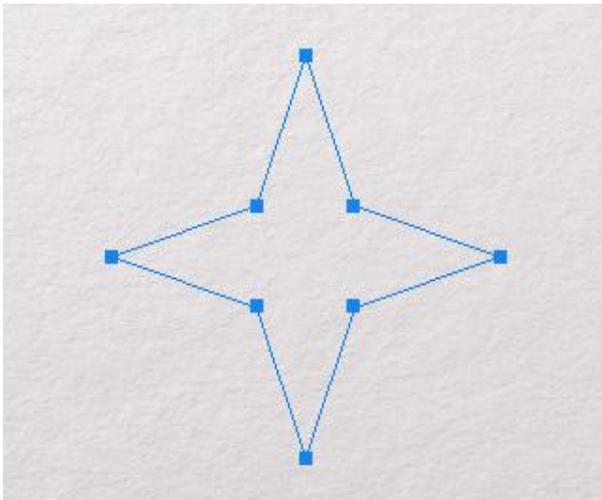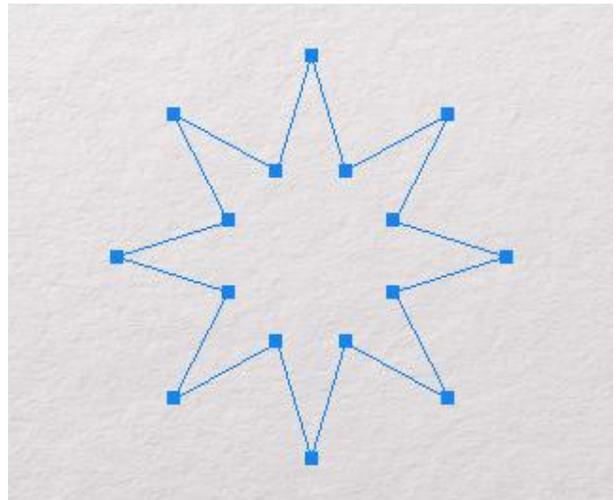
| Sides = 4 | Sides = 8 |

Star Ratio (1-100). As the parameter decreases, the inner angles of the star are drawn toward its center.
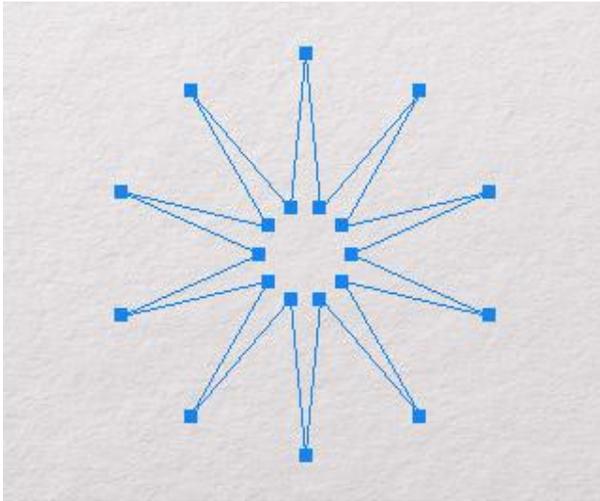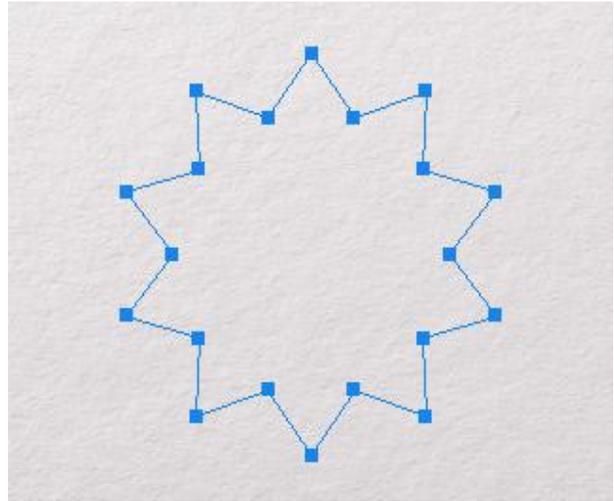
Star Ratio = 25   Star Ratio = 75

Radius (1-100). The parameter specifies the radius of rounding of the tips of rays.
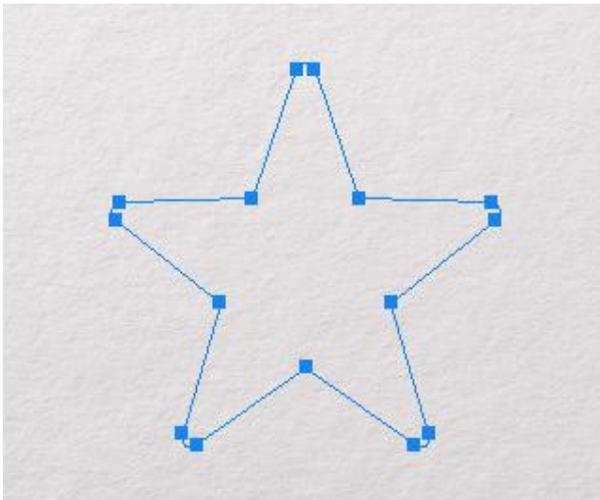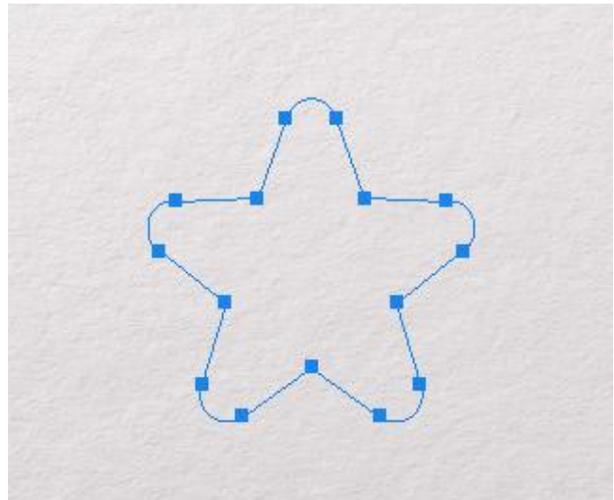
Radius = 5   Radius = 15

Smooth Indents. When the check-box is enabled, the inner corners of the star are rounded.
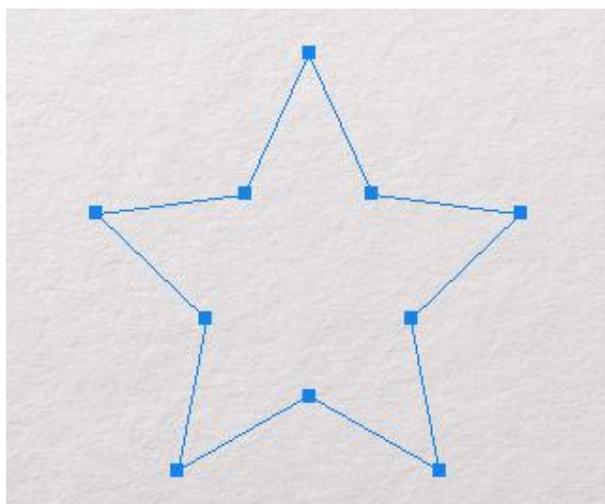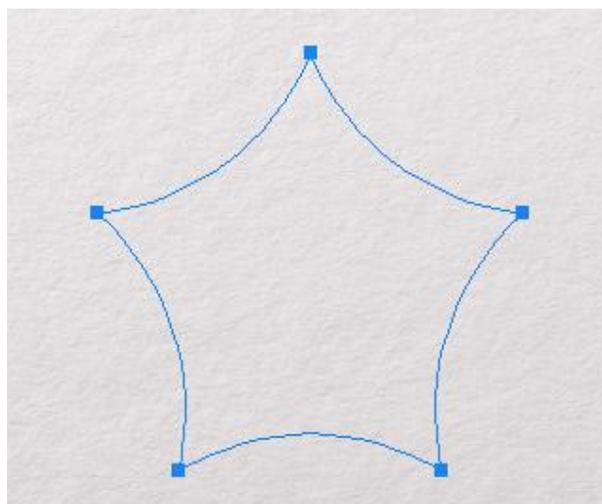
Check-Box Disabled   Check-Box Enabled

Style. The drop-down list allows you to specify the method for creating the shape.

Unconstrained. The shape is drawn by moving the cursor.

Equilateral. Allows you to create a regular equilateral shape. You can enable/disable this mode by holding down the `Shift` key.

Fixed Ratio. Allows you to create a shape with a given width-to-height ratio.

Fixed Size. Allows you to create a shape with given width and height (in pixels).

Rotation. Allows you to rotate the shape when creating it.

From Center. If the check-box is enabled, the shape appears when moving from the center outward. If the check-box is disabled, the shape is created by moving from one corner to another.

The dialog with parameters will also appear when you left-click on the image. Specify the parameter values and click the **OK** button to add the shape with the specified parameters. When you click the **Cancel** button, the dialog will close without creating the shape.

By holding down the `Ctrl` key, you can move the shape with the mouse. By holding down the `Shift` key, you can select multiple shapes.

You can also use **shape editing tools**.

LINE TOOL

The **Line Tool** allows you to create vector shapes in the form of lines and arrows.
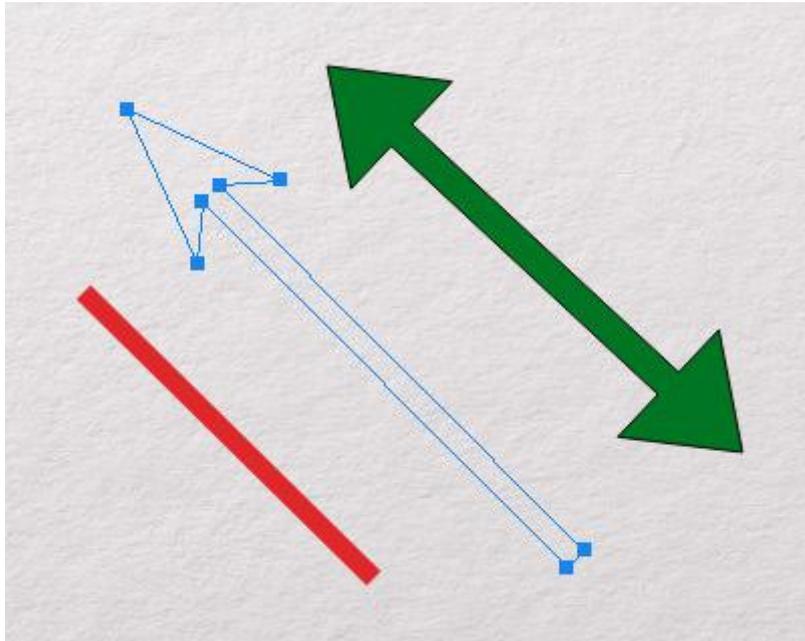
The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon in the Tool Options panel, or use the F5-key.

You can find general parameters of vector shapes here.

In addition, the following options are available:

Weight (3-100). The parameter specifies the line width.
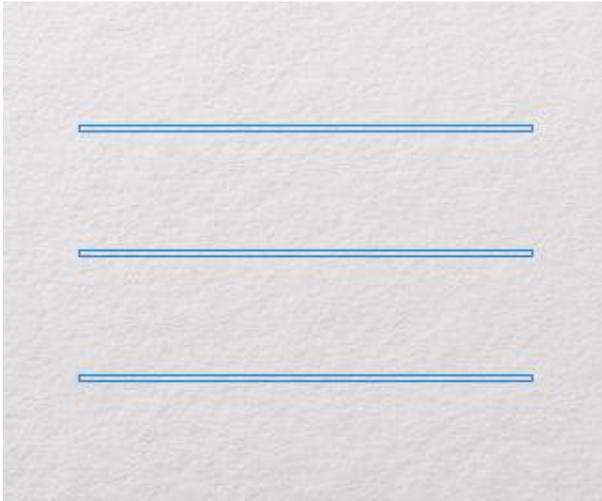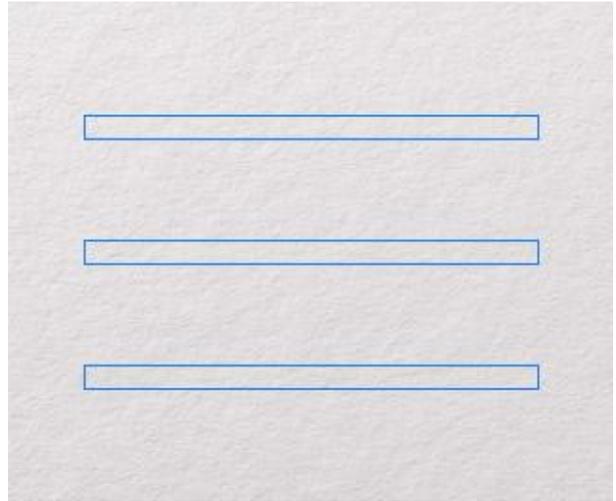
Weight = 3   Weight = 12

Arrowheads. Select where the arrows will be located on the line: at the start, at the end.
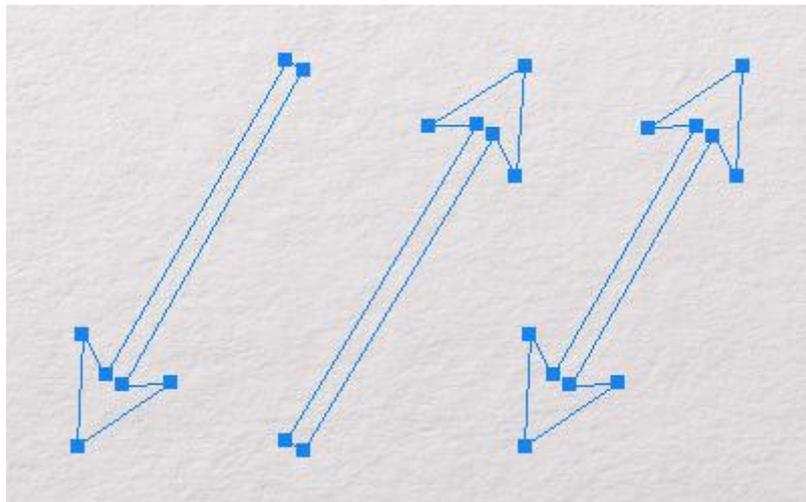
Arrows

Arrow Width (3-100). The parameter specifies the width of the arrow.
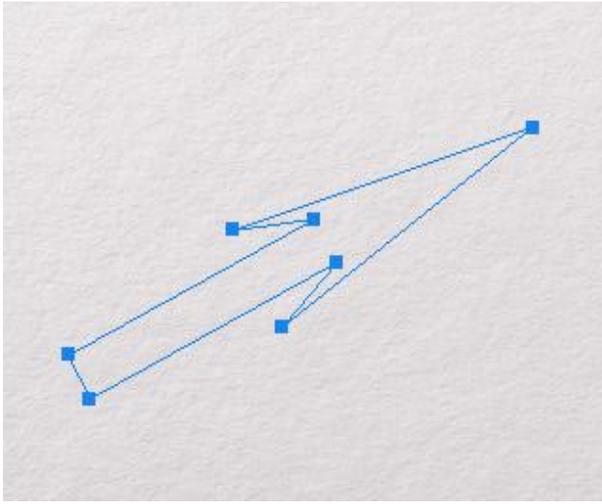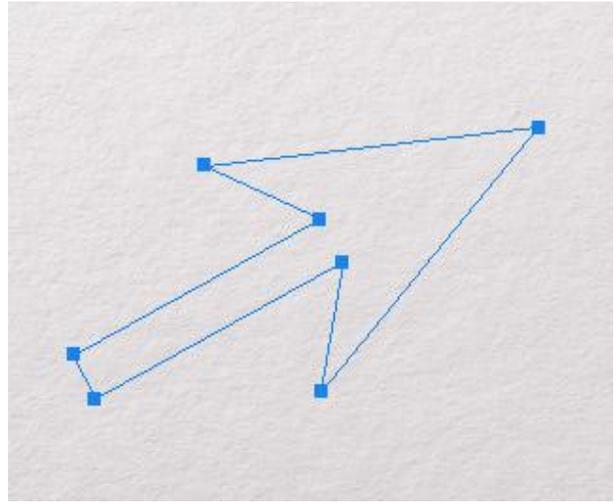
| Arrow Width = 225 | Arrow Width = 525 |

Arrow Length (3-100). The parameter specifies the length of the arrow.
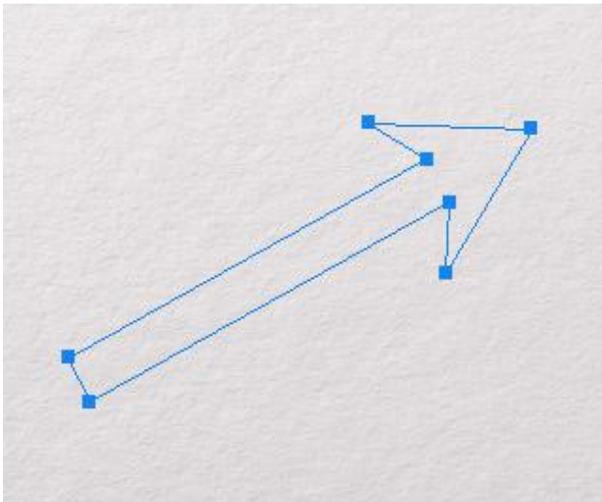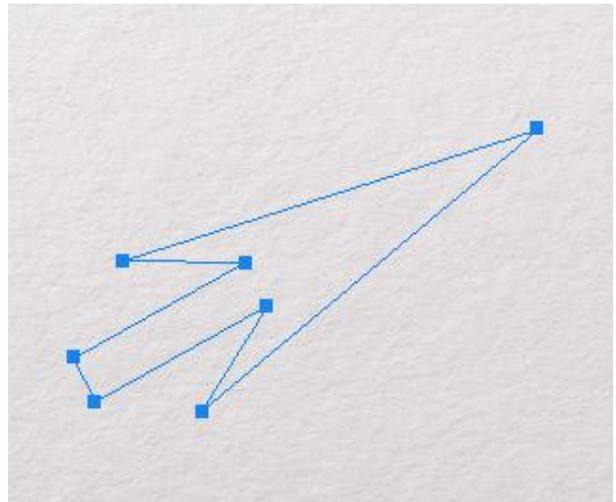
| Arrow Length = 300 | Arrow Length = 900 |

Concavity (-50..50). The parameter specifies the curvature of the arrowheads.
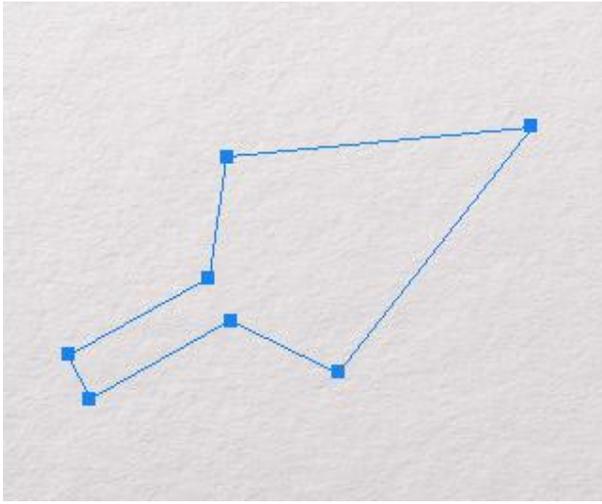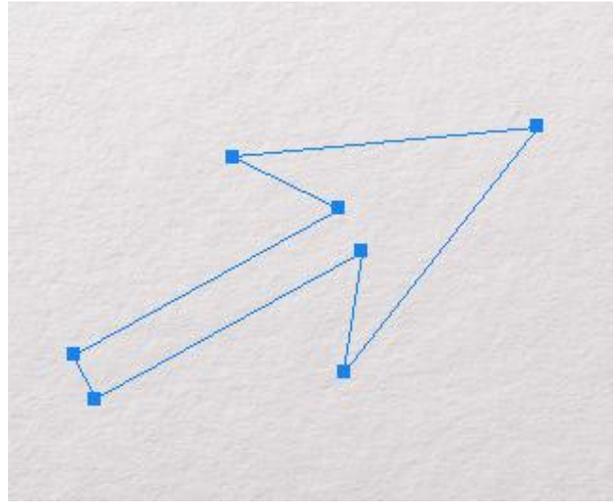
Concavity = -25   Concavity = 25

By holding down the `Ctrl` key, you can move the shape with the mouse. By holding down the `Shift` key, you can select multiple shapes.

You can also use **shape editing tools**.

EDIT SHAPES & PATHS

Shape Tools are designed to create and edit vector shapes and paths that are displayed in the **Paths** panel.

You can edit shapes using the following tools:

Add Anchor Point Tool [icon]. Click to add a new anchor point along the path.

Delete Anchor Point Tool [icon]. Click an anchor point to remove it. You can also use the `Delete` key (or the `Ctrl`+`X` combination) to remove the selected anchor point and the curve segments adjacent to it.

Convert Point Tool [icon]. Click a smooth anchor point to convert it into an angled anchor point and vice versa.

Path Selection Tool [icon]. Click to select a path or a segment. You can move it by dragging.

Direct Selection Tool [icon]. The tool allows you to edit **anchor points** of the selected shape. You can select one or more points with a click or with a frame. You can also change the shape by dragging its **segments**.
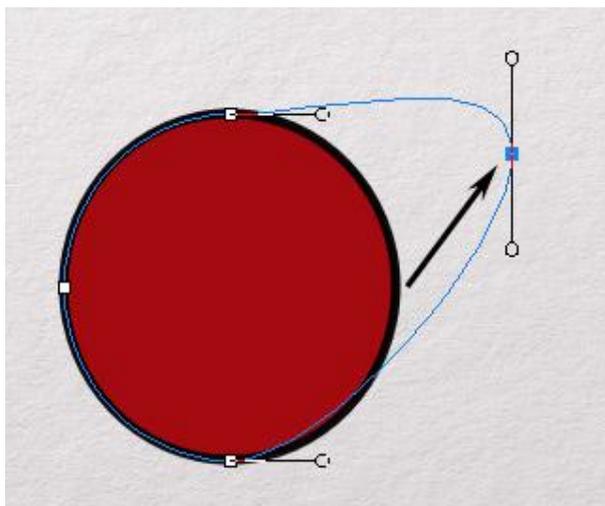
Moving an Anchor Point   Moving a Segment
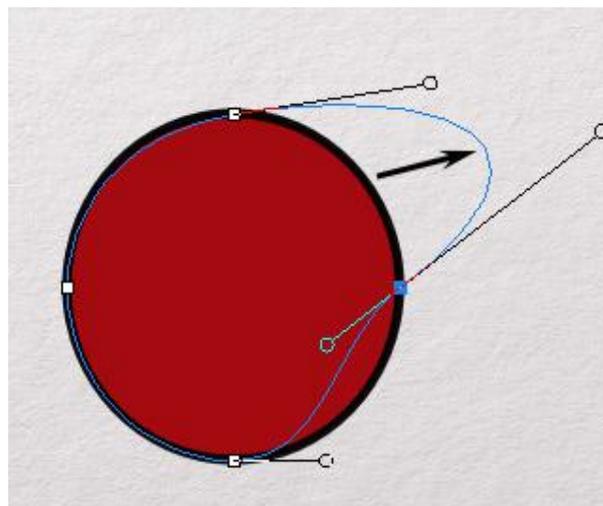
The selected anchor points are highlighted with color, they can be moved or deleted. You can select multiple anchor points using the mouse, holding down the `Shift` key or by selecting them with a frame. You can also move the selected points using the arrow keys in 1-pixel increments, or by holding down the `Shift` key - in 10-pixel increments.

Anchor points can be of two types: smooth point and angled; and they are edited differently.
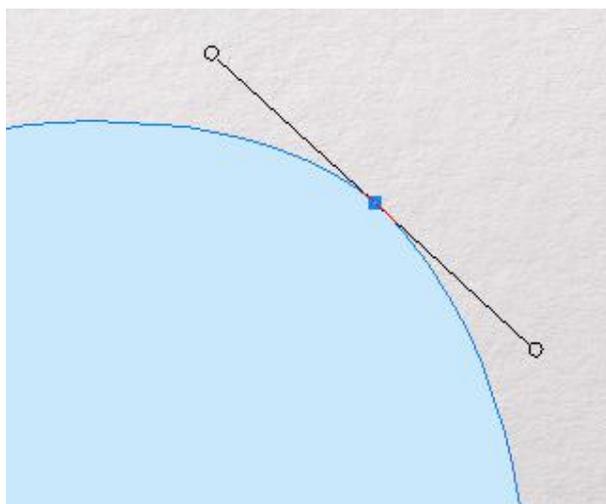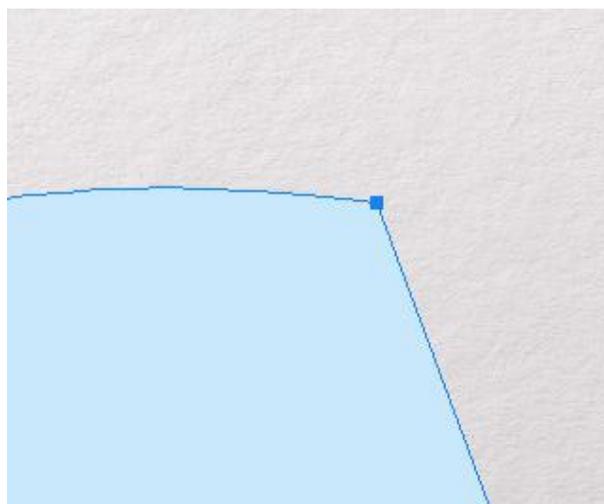
<div align="center">Smooth Anchor Point   Angled Anchor Point</div>

You can move angled anchor points with the mouse cursor. When moving smooth anchor points, you can not only drag them with the cursor, but also change adjacent segments using two direction lines. To change the length and direction of the direction lines, adjust round marks located on their ends. Increasing the length of the direction line increases the curvature of the adjacent curve.

The direction of both vectors of the selected smooth point changes simultaneously. Hold down the `Shift` key to edit the direction in multiples of 45°. Hold down the `Alt` key to change the direction and size of each vector line separately.
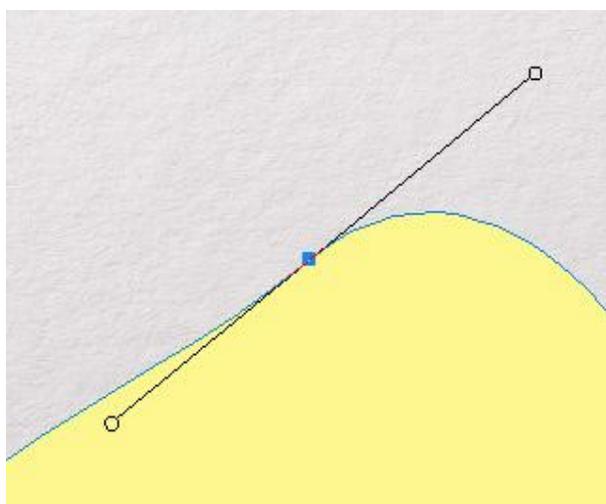
<div align="center">Simultaneous Adjustment   Separate Adjustment</div>
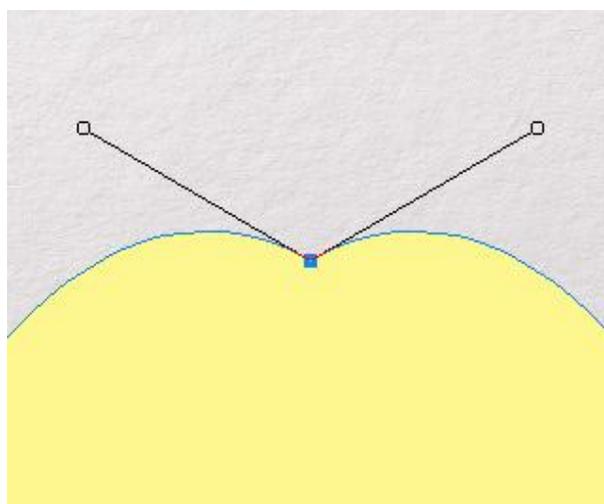
Editing Options:

Auto Select. The check-box activates the mode of automatic switching to the vector layer by clicking a shape.

Convert to Smooth Point ⌒. Click to convert the selected angled points to smooth ones.

Convert to Angled Point ⋀. Click to convert the selected smooth points to angled ones.
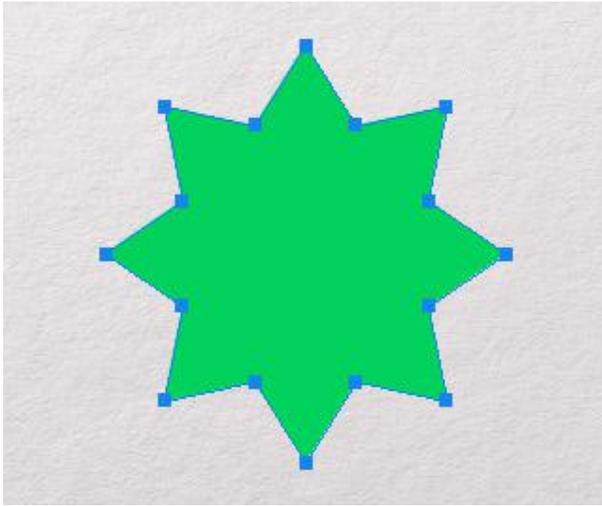
Sharp Angles
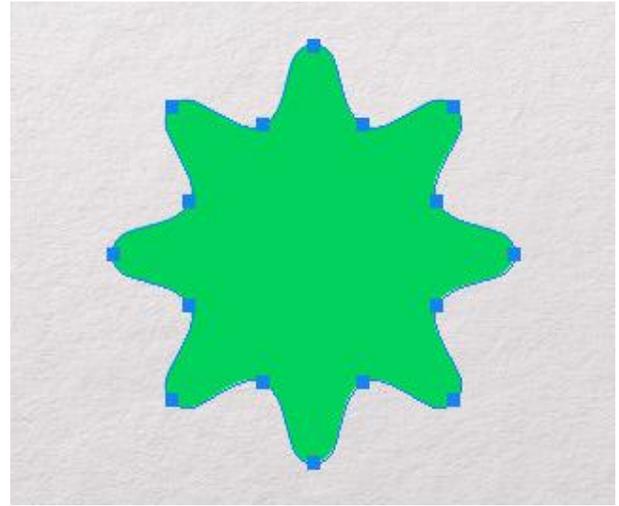
Smoothed Angles

FILL SHAPE

You can fill shapes as well as text along a path with a color or gradient. The settings affect all the vector objects within the selected shape layer.
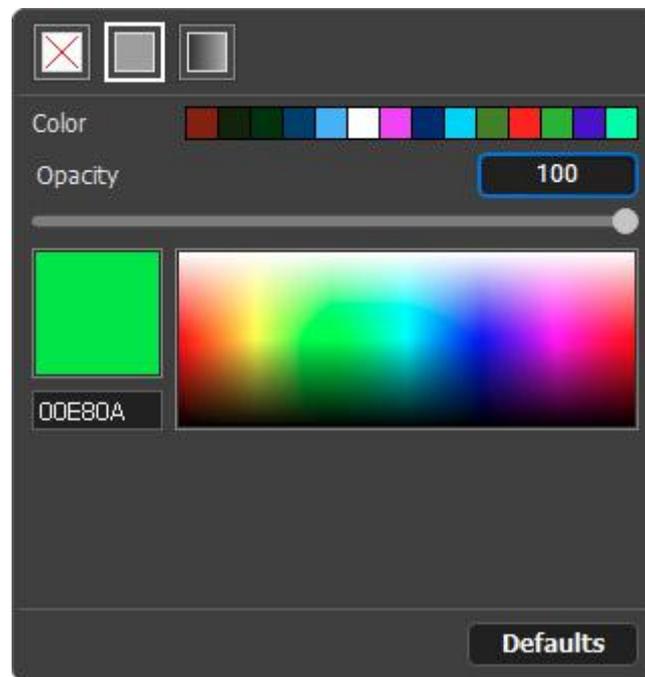
Fill Settings

The fill settings can be accessed by clicking the **Fill** color field in the Tool Options Panel or in the **Fill** tab in the full shape tool options bar, or by clicking the icon △ to the right of the selected shape layer's name.

Fill Types:

No Fill ☒. The created shape will be transparent.
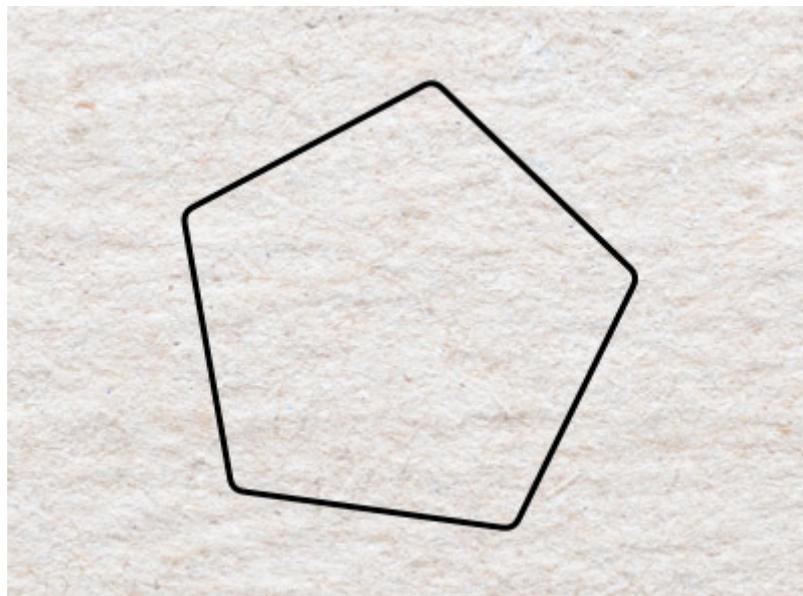
No Fill

Color Fill ▣ . The created shape will be filled with one color.
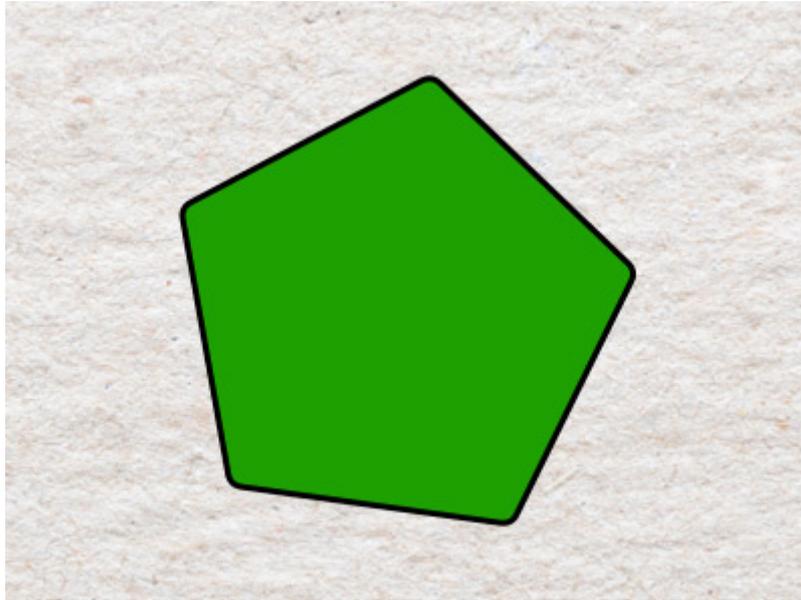
Color Fill

Bring the cursor over the color field (the cursor takes the form of an eyedropper) and select the desired color.

The big square indicates the selected color. You can click it to open the color selection dialog. The most recently selected colors are shown in the small square boxes.

Gradient Fill ▮ . The created shape will be filled with the selected gradient.
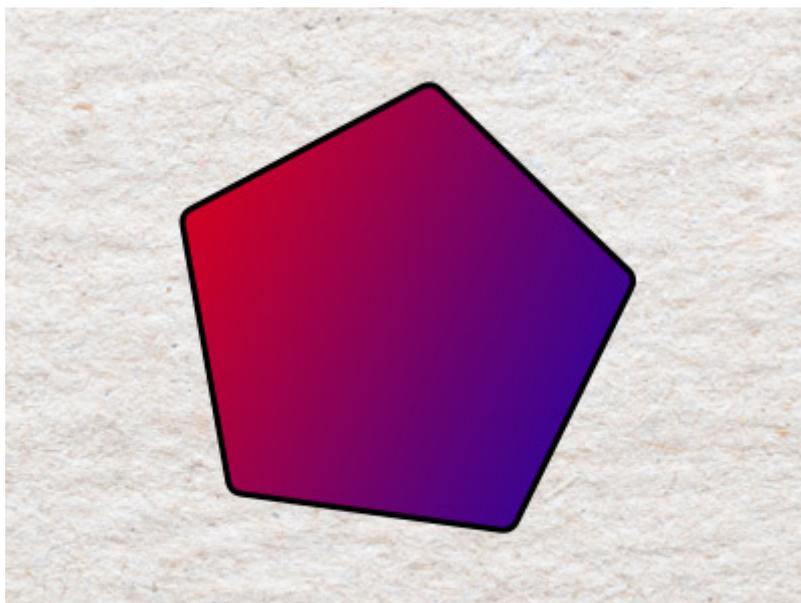
Gradient Fill

You can specify gradient colors using the gradient line. Click here to create a color point. Adjust the color and opacity of any point by double-clicking on it.

Also, you can fill the shape with a gradient using the **Gradient Fill** ▣ tool. Select the tool from the **Toolbar** and apply it to the shape layer. The settings can be adjusted using the Gradient tool parameters or using the Fill Shape parameters.

Gradient Settings:

Gradient Type:

▪ - Linear,

▪ - Radial,

▪ - Angular,

▪ - Reflected,

▪ - Diamond.

Reverse ▬. The button reverses the order of colors in the gradient fill.

Original Sequence   Reverse Sequence

Dithering check-box. Activate the check-box to make the gradient smoother and reduce the number of stripes.

| Check-box is disabled | Check-box is enabled |
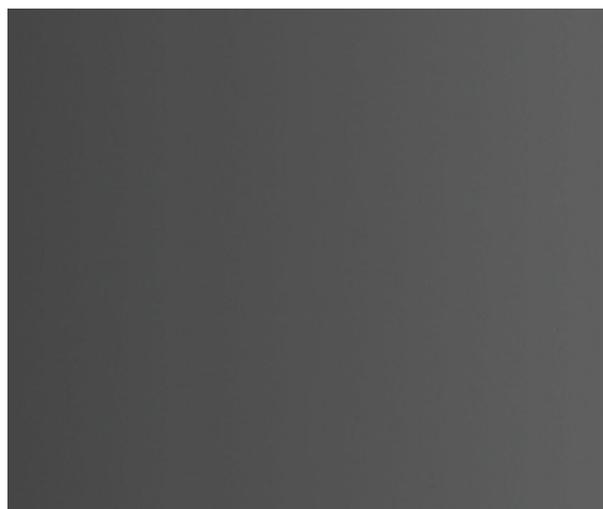
Aligned check-box. If the check-box is enabled, the gradient is aligned to the shape and moves appropriately with it. If the check-box is disabled, the gradient is aligned to the document and doesn't move when dragging the shape. You can scale the gradient by turning the check-box on/off.
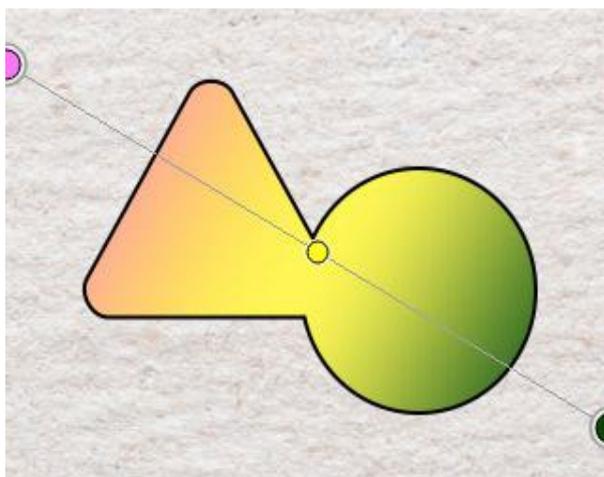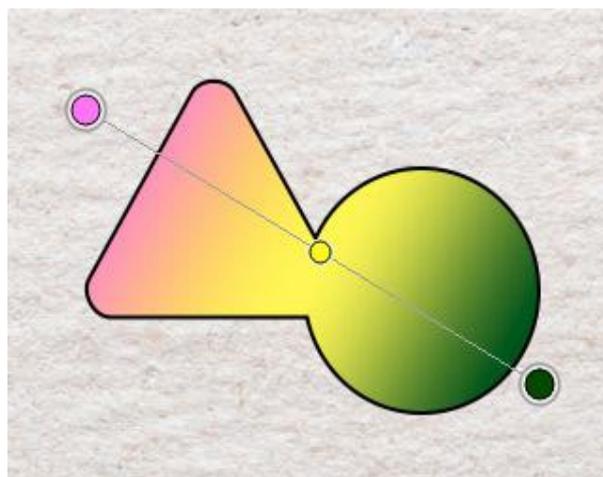
| Check-box is disabled | Check-box is enabled |

Scale (10-150%). The parameter sets the distance between the extreme points of the gradient. The default value is 100% and matches the size of the shape.
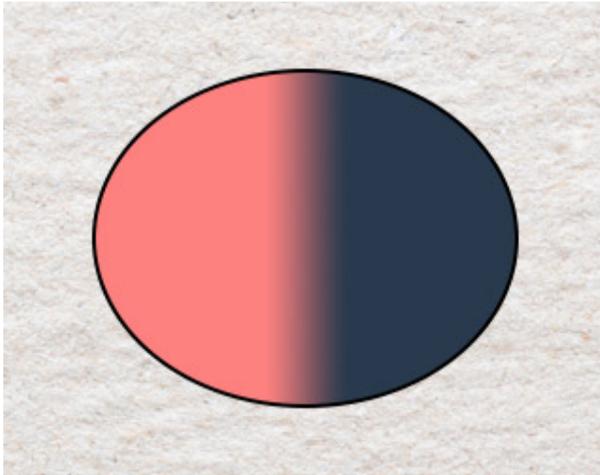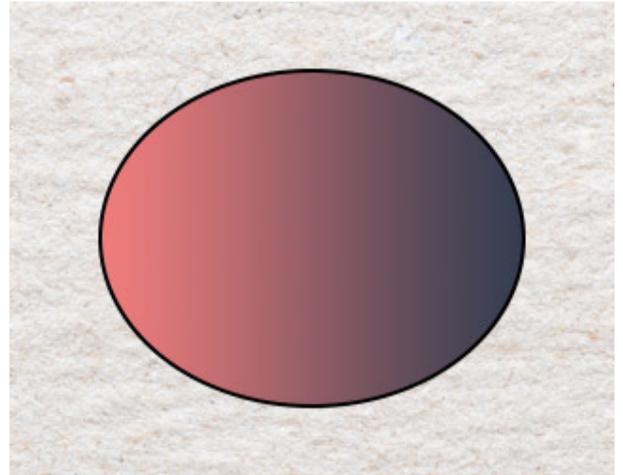
Scale = 20   Scale = 120

Angle (-180..180). The parameter allows you to rotate the gradient.
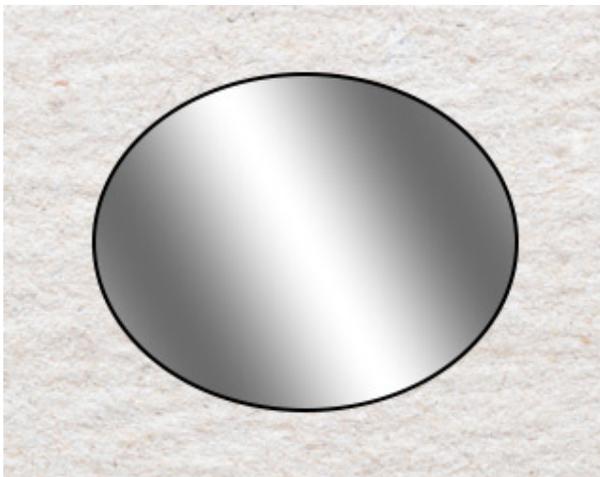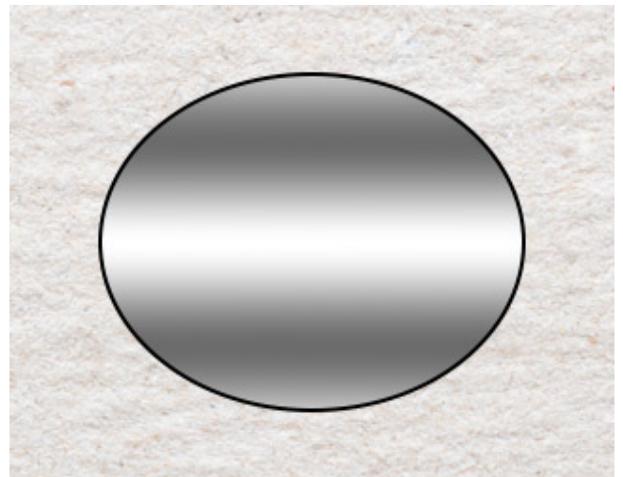
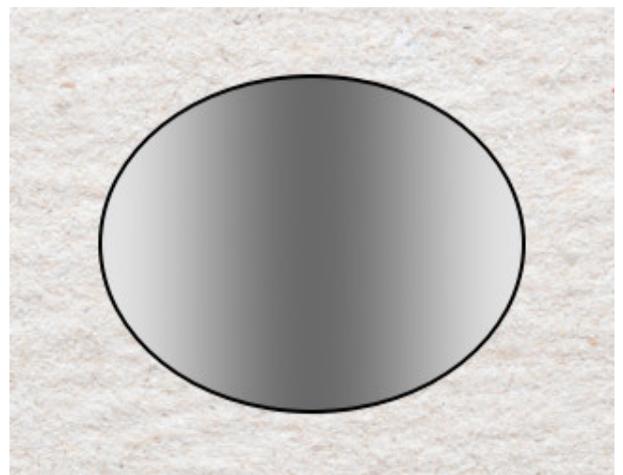Angle = 30   Angle = 90

Smoothing (0-100). The parameter makes the gradient smoother by smoothing the transitions between the individual colors and shades of colors.
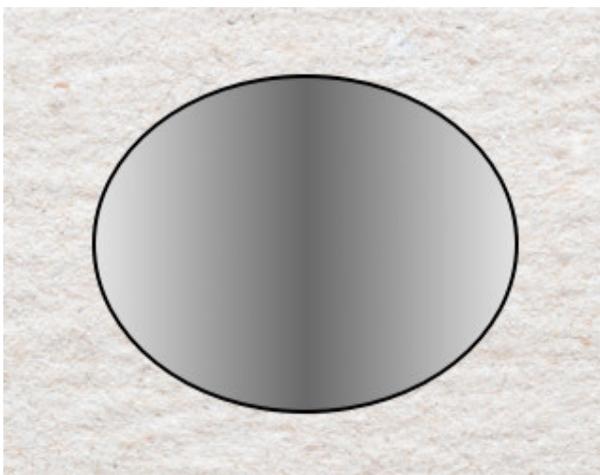
Smoothing = 10   Smoothing = 100

Opacity (0-100). The parameter is common to both fill types and sets the overall fill opacity: the lower the value, the more pale and transparent the shapes are on the selected layer.

Opacity = 40	Opacity = 90

To outline the selected shape, configure the settings in the **Stroke** tab.

STROKE SHAPE

You can add color borders to vector shapes as well as to text along a path. The color outline will be added to all the vector objects within the selected shape layer.
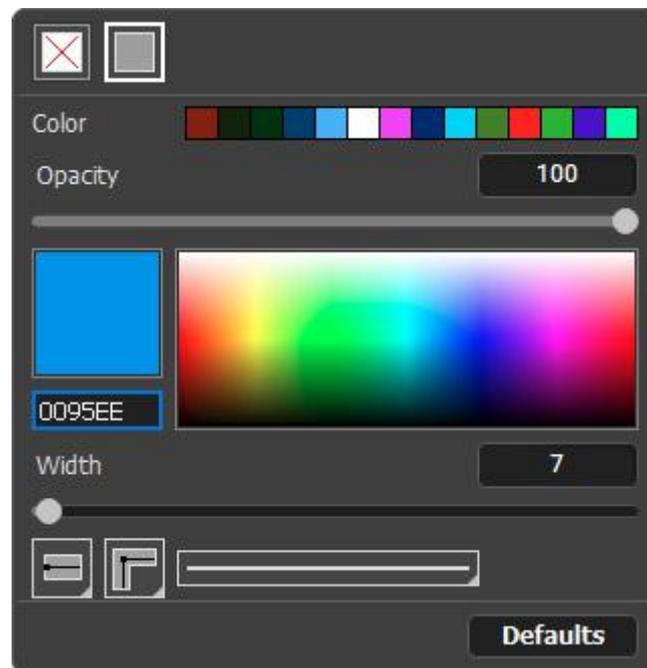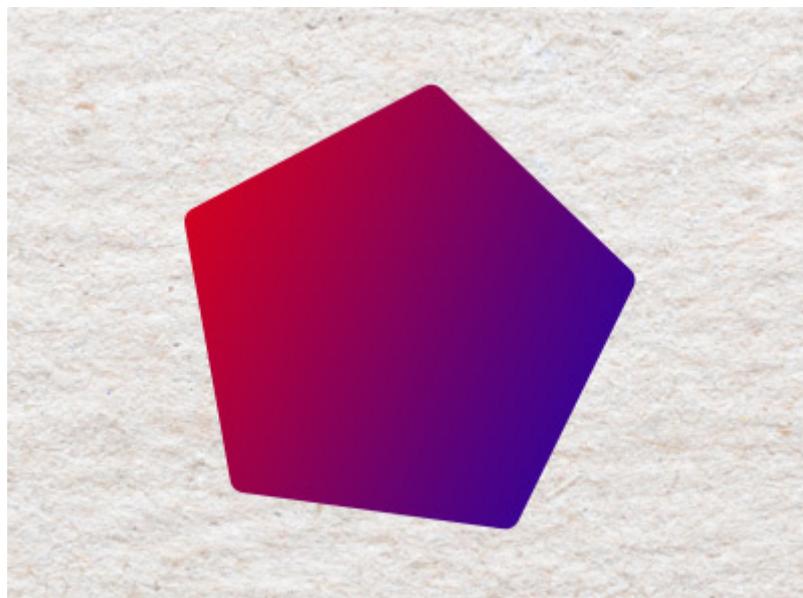

Stroke Settings

The stroke settings can be accessed by clicking the **Stroke** color field in the Tool Options Panel or in the **Stroke** tab in the full shape tool options bar, or by clicking the icon ⟁ to the right of the selected shape layer's name.
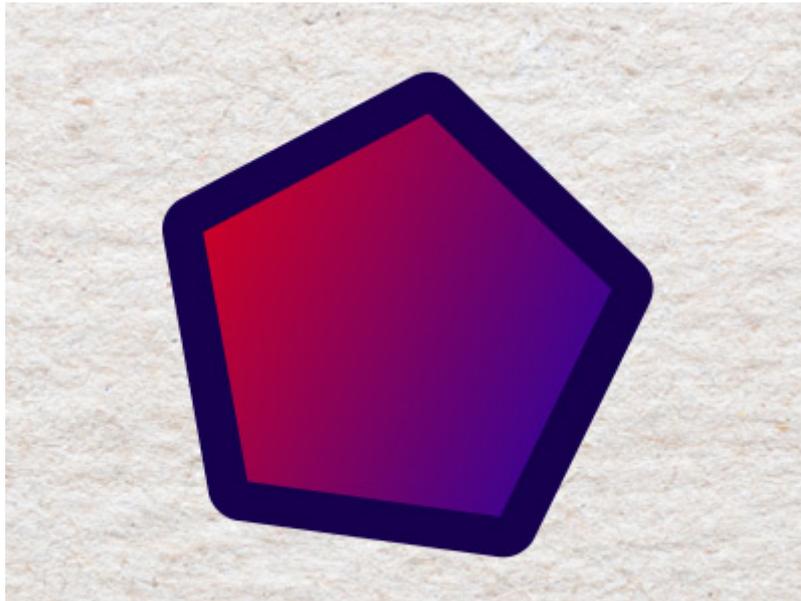
Stroke Types:

No Stroke ☒ . There is no outline.

No Stroke

Color Stroke ▣. The border of the selected shape is highlighted with the desired color.
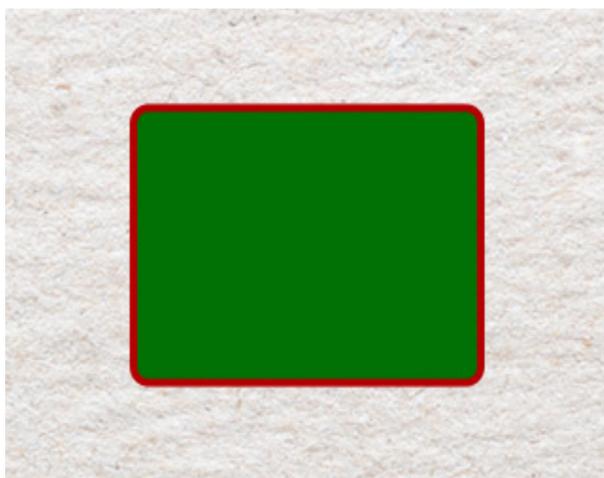

Color Stroke

Bring the cursor over the color field (the cursor takes the form of an eyedropper) and select the desired color for the outline.
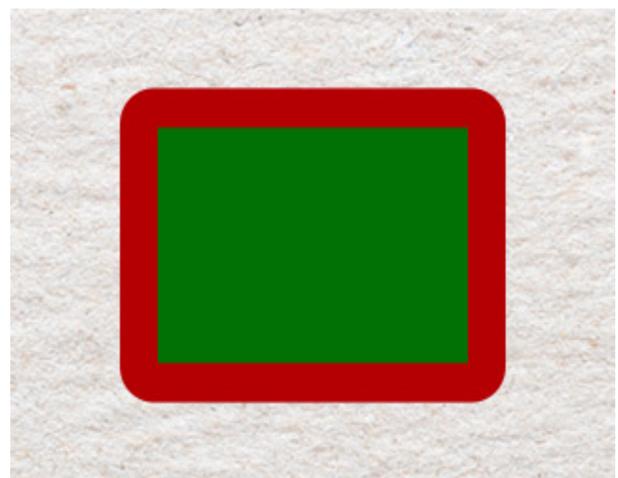
The big square indicates the selected color. You can click it to open the color selection dialog. The most recently selected colors are shown in the small square boxes.

Stroke Parameters:

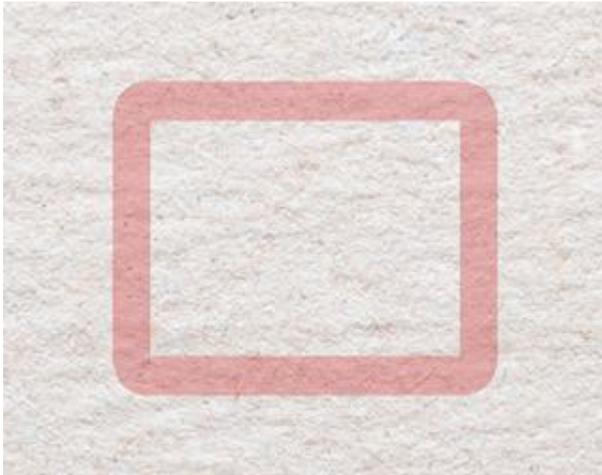**Width** (1-100). The parameter defines the thickness of the color stroke.
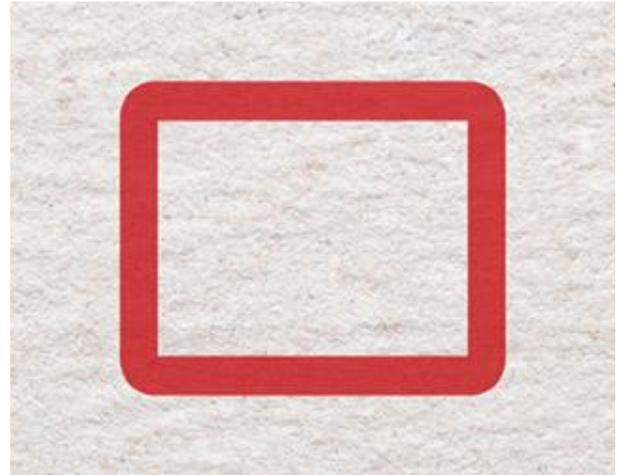

Width = 5	Width = 25

Opacity (0-100). The parameter changes the transparency of the outline: the lower its value, the paler and more transparent the color is.

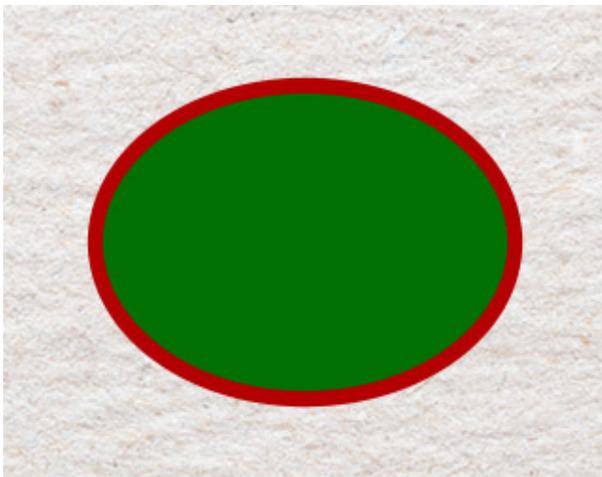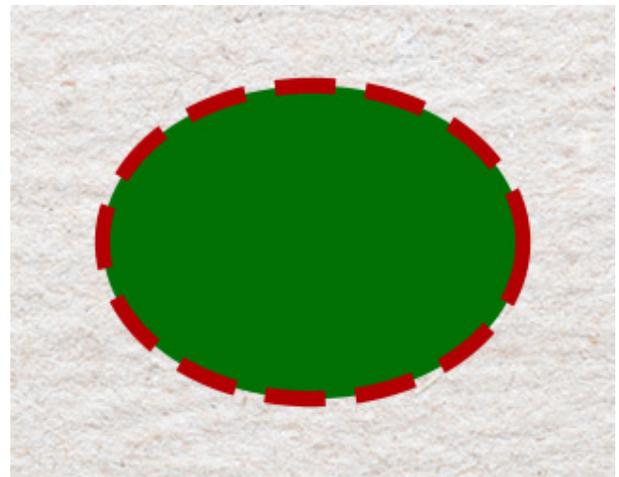Opacity = 25   Opacity = 75

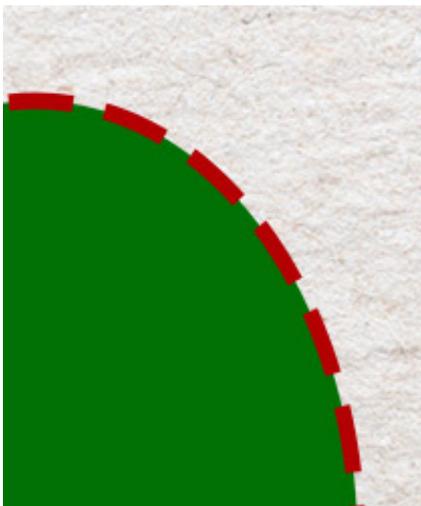**Line**. Choose a line type for the stroke from the drop-down list.

Solid Line   Dashed Line

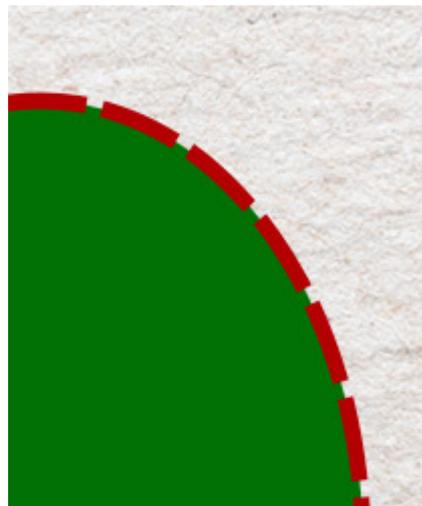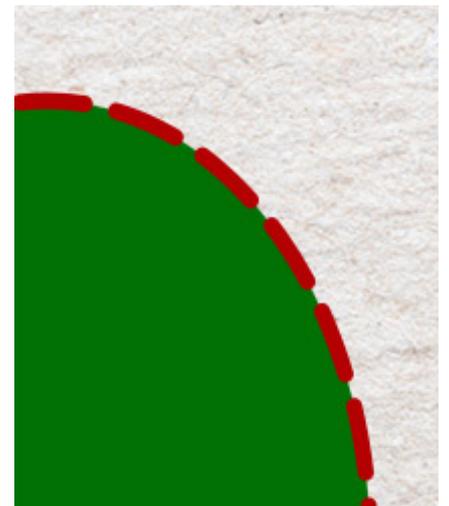**Edges**. Select an edge view of the dashed line in the drop-down list.

Short Strokes   Long Strokes   Rounded Strokes

Corners. Select the appearance of the outline at the corners of the shape in the drop-down list.
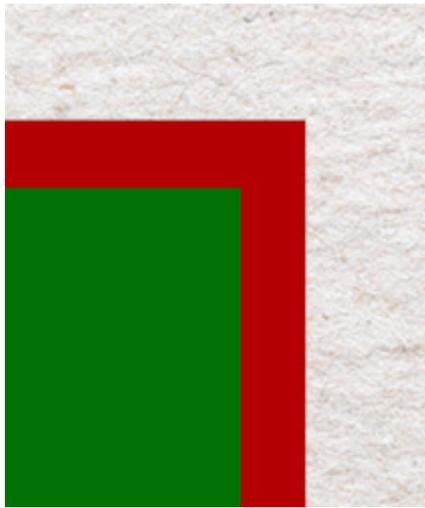
Sharp Corner
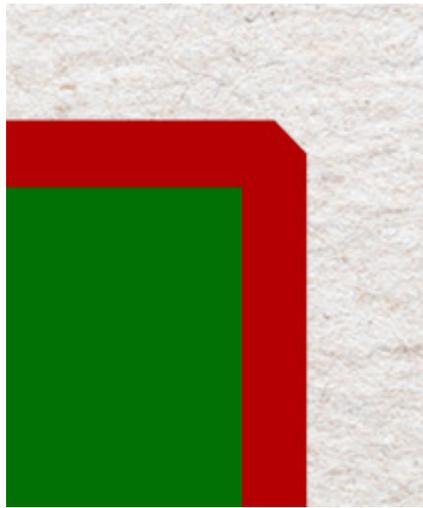
Chamfered Corner
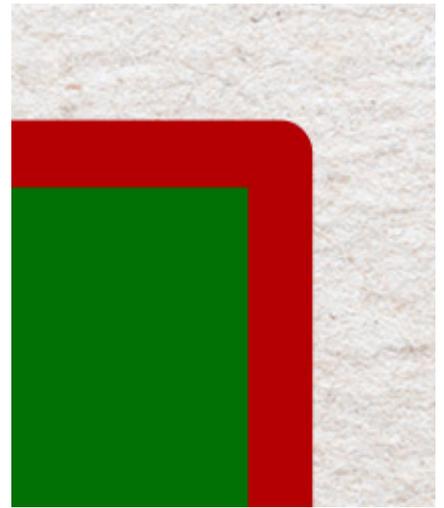
Rounded Corner

To change the color of a shape, adjust the settings in the **Fill** tab.

COMMON TOOLS

AliveColors provides a wide range of features for editing and retouching photos.

In addition to its retouching and artistic brushes, the program has also a set of auxiliary tools that help to edit images.

Follow the links below to learn more about these tools:

Alignment Tools (Rulers, Guidelines, Grid)

Move

Crop

Perspective Crop

Transform (Free Transform, Transform)

Eyedropper

Hand

Zoom

ALIGNMENT TOOLS

To make it easier to move and align objects (layers) and selected areas, use rulers and a grid with guidelines. The alignment lines are displayed only on the screen; you can turn them off at any time.

Alignment Tools

To adjust the alignment settings, use the **Workspace** menu in the Control Panel:

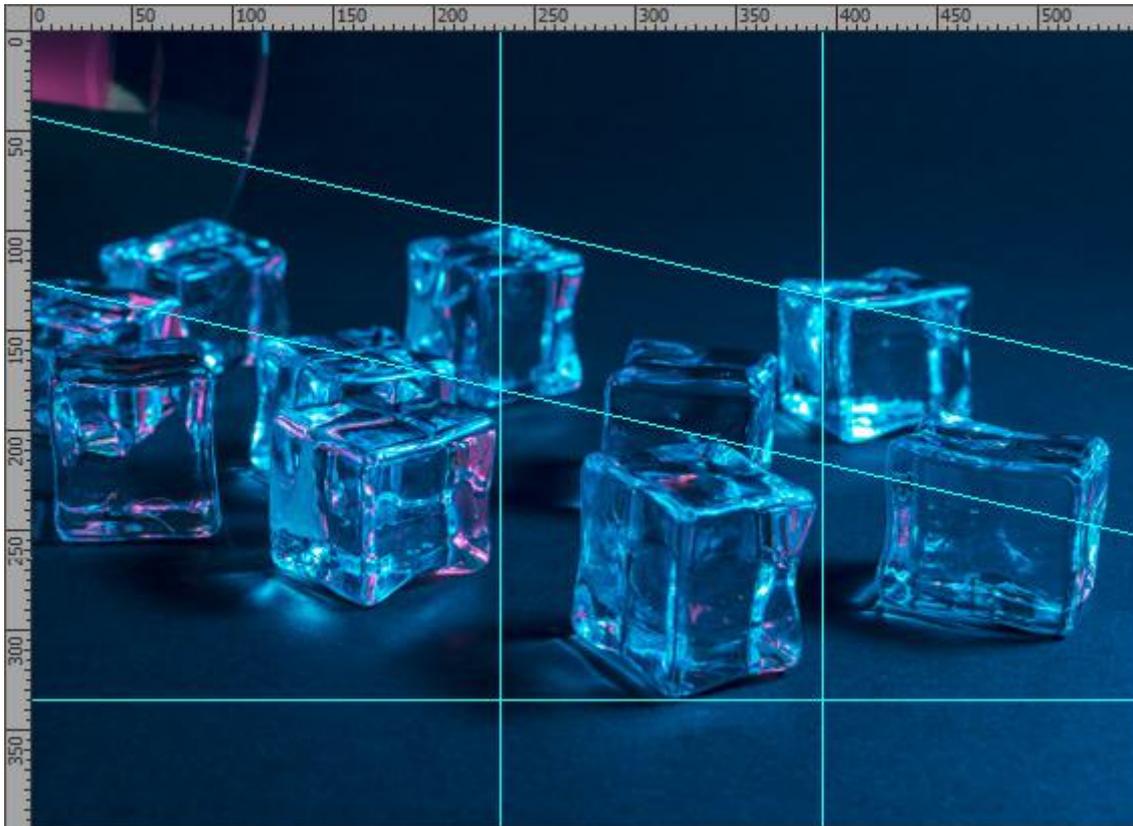**Rulers**. When this option is enabled, you can see the rulers along the edges of the Image Window. Right mouse clicking on a ruler lets you select the units of measurement (pixels, inches, centimeters, etc.).

Marks on the rulers indicate the position of the cursor.

To change the origin (zero), place the cursor over the intersection of the rulers in the upper left corner of the Image Window and drag diagonally to the desired point in the image. To restore the default origin, double-click this corner.

Grid. When this option is checked, the grid appears over the image. The grid's point of origin depends on the rulers origin.

Pixel Grid. If this menu item is checked, a light grid outline is putted around each pixel once beyond 600% zoom level.

Guidelines... The command opens a dialog in which you can create, move, and delete guidelines.

Show Guidelines. If this menu item is checked, all guidelines will be shown in the image; otherwise, the lines are hidden. Hiding guidelines disables them and makes it impossible to align objects with them.

Lock Guidelines. This option prevents any accidental movement of guidelines.

Clear Guidelines. This command removes all guidelines.

Snap. This feature helps to precisely position the object which "clings", when moving, to the edge of a selected element. You can move objects within 5 pixels of the anchor point by rotating the mouse wheel while holding the left mouse button.

Snap to... In the drop-down list, specify elements to which to snap:

- Grid;
- Guidelines;
- Selection;
- Layers;
- Document.

Working with Guidelines:

To create a horizontal or vertical guideline, place a cursor over a corresponding ruler, and holding the left mouse button, drag a blue line.

You can also create a guideline in the **Guidelines** dialog box. Call the dialog by selecting **Workspace - > Guidelines...** or by pressing the button ▦ in the **Move** tool's options.

In the **X** and **Y** fields, specify the position of the center of rotation of the guideline, and in the **Angle** field - the rotation angle. With an angle value of $= 0^o$ a horizontal guideline will be created, with a value of 90° a vertical guideline will be created. Click the **Add** button to add a guideline to the image.
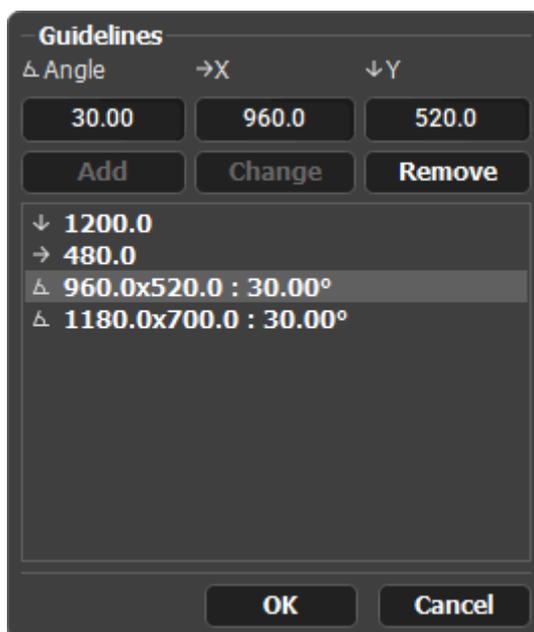
List of Guidelines

You can move the guidelines with the **Move** tool . When you hover over a guideline, these controls appear:

> *Round markers* are used to rotate the guideline. When you hover over them, the cursor will change to . If you hold down the left mouse button and move the cursor, the guideline will rotate around the center. You can move the center of rotation along the guideline using the mouse.

> *Square markers* at the ends of the line allow you to adjust the tilt of the guideline. When you hover over them, the cursor will change to ↔. Hold down the left mouse button and move the cursor to change the tilt angle of the guideline.

When you hover over a line, the cursor will appear and the guideline can be moved. When you hold down the `Ctrl` key, the guideline will move in 10 pixel increments.

To create a copy of a guideline, hold down the `Shift`+`Alt` keys while moving it.

You can also change the position of the guideline in the **Guidelines** dialog box. Select the line in the list, set new values in the **X**, **Y**, and **Angle** fields, and click the **Change** button.

To remove a guideline, drag it outside the Image Window or select it from the list and click the **Delete** button.

Click in the upper right corner of the program window or select **File - Preferences...** to open the Preferences dialog box. Switch to the **Guides & Grid** tab to adjust rulers, guidelines, and grids.

Preferences

General | Profile | Filters & Plugins | **Guides & Grid** | HotKeys

Rulers Color [ ] Background [ ] Divisions [ ] Cursor Marker

Unit [pixels ▼]

Guidelines Color [ ] Style [Solid Lines ▼]

Grid Color [ ]

Step [100.00] [pixels ▼] Base Lines [Dashed Lines ▼]

Subdivisions [4] Auxiliary Lines [Dots ▼]

Restore Defaults OK Cancel
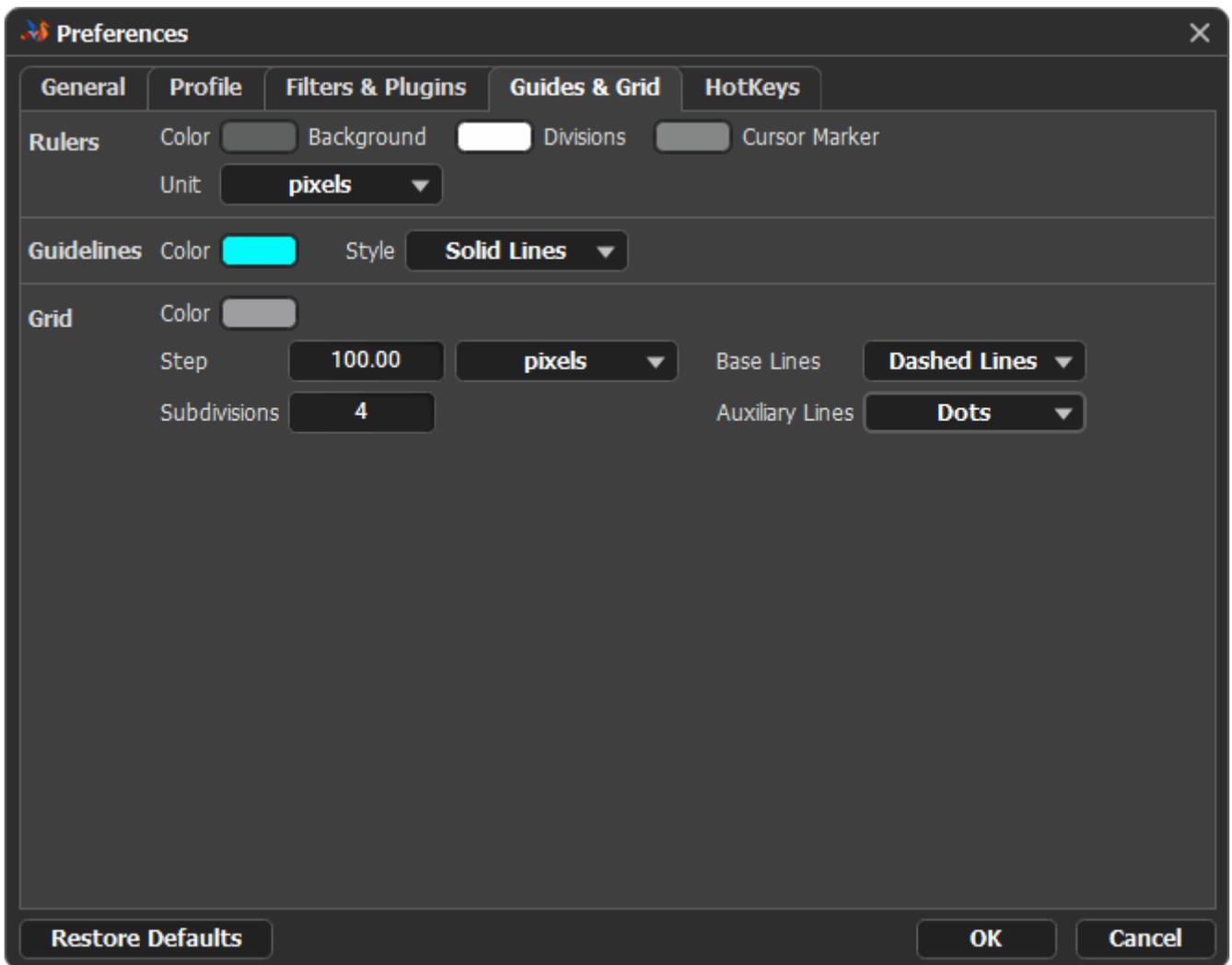
MOVE TOOL

The **Move** tool ![icon] lets you drag an object (layer) by holding the left mouse button.

Using the arrow keys with the enabled tool, you can move the active layer or the selected fragment in the chosen direction in increments of one pixel or with the `Ctrl` key in increments of 10 pixels.

Hold the `Shift`+`Alt` keys while moving a layer/object to create and move its copy.
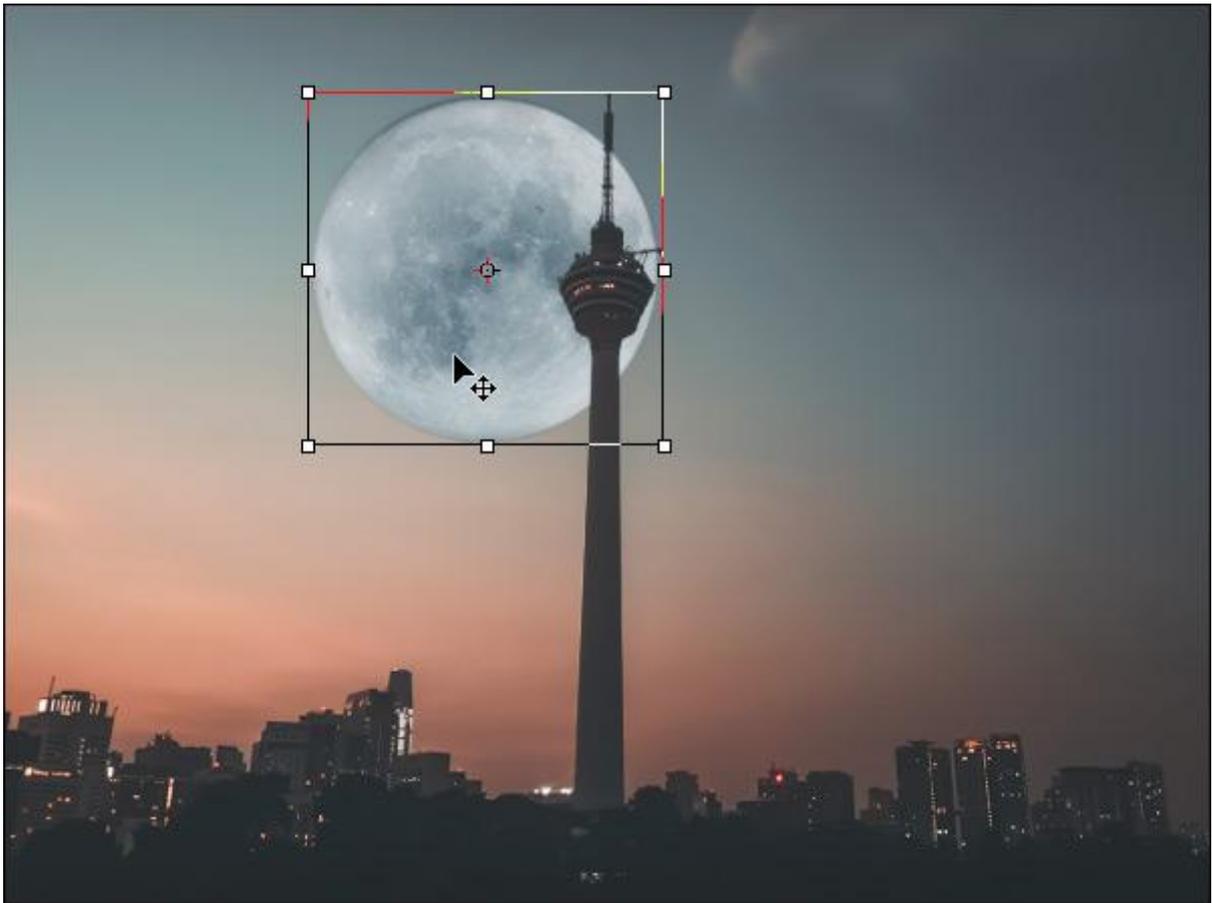
Moving Objects

The tool's parameters will be displayed in the **Tool Options** panel above the Image Window and by right-clicking within the image.

Auto Select check-box. Enable this mode to automatically select a single layer or layer groups with the mouse click. Use this feature when working with a multilayer document.

Double-clicking on a vector shape or text will activate the Edit Shape tool, the Text tool, or the Fit Text to Path tool, respectively, to edit the selected element.

Show Bounds check-box. This option lets you show/hide a bounding box of the moving object.

Show Bounds   Hide Bounds

Note. If you enable the check-box and drag one of the square markers, the **Free Transform** tool is activated. The transformation parameters are displayed in the Settings Panel.

Use the following buttons to align the selected layer relative to the canvas or multiple selected layers to each other:

 - align top edges,

 - align vertical centers,

 - align bottom edges,

 - align left edges,

 - align horizontal centers,

 - align right edges.

Top Edges Aligned   Horizontal Centers Aligned

Click the **Default** button to reset the settings.

CROP TOOL

The **Crop** tool [icon] allows cutting off an image that helps to remove unwanted areas, to improve focus, or to make a square from a rectangular or contrariwise. To quickly access the tool use `C`.

You can also activate the **Crop** tool using the command **Image -> Crop...**

The **Image -> Crop by Selection** command allows you to quickly remove parts of an image surrounding the selection.

Activating the tool creates a crop frame that encloses the entire image. Select an area you want to keep by dragging the cursor while holding left mouse button.
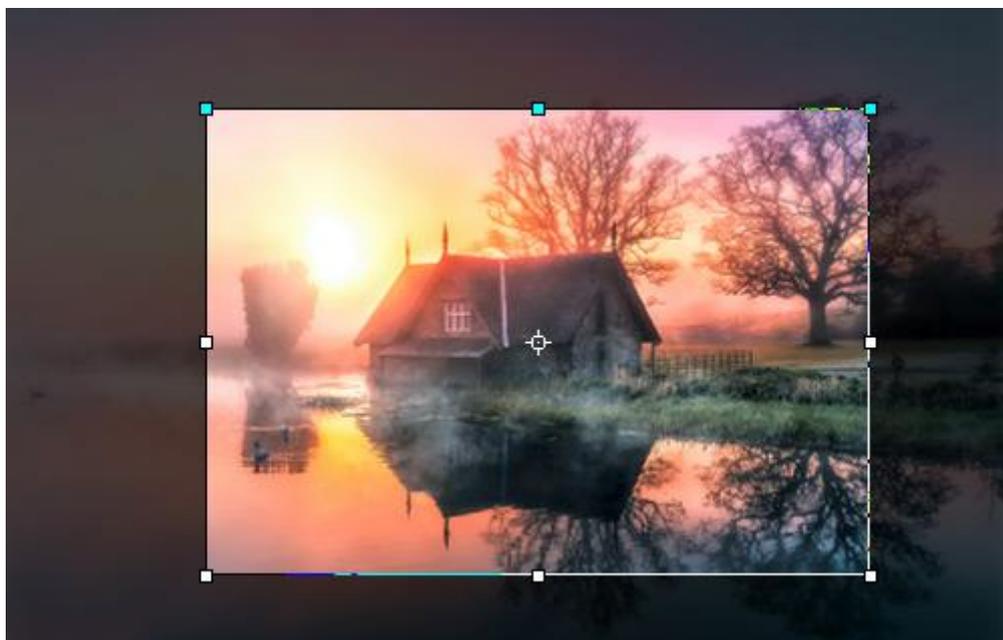
Crop Area

If there is an active selection on the image, the crop frame automatically appears around the selection area.

You can change the size of the area by dragging the markers on the sides and angles of the bounding frame. To constrain the proportions hold down `Shift`. To move the frame, place the cursor ⬆ inside it and drag. If you move the cursor to the center point, it turns to an arrow with a circle ⬆ : in this case, only the center is movable.

To rotate the area, place the cursor ↻ outside the frame, and move it with the left mouse button. If you press `Alt`, the rotation angle will change in 5 degrees. The frame rotates around the transformation center.

> **Note:** Blue markers on the bounding frame indicate where will be the top of the cropped image.

If the frame is beyond the image, the empty area will be filled with a transparent background.

The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon 🔲 in the Tool Options panel or F5 -key.
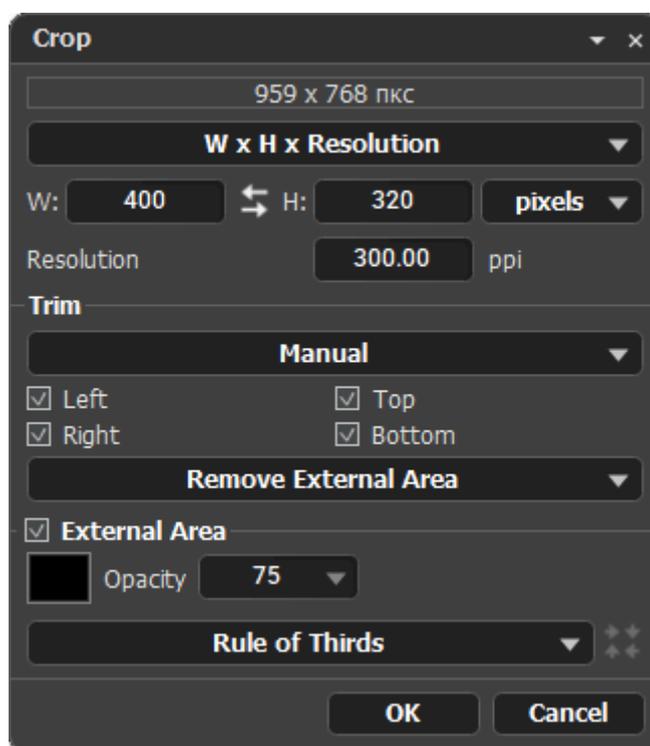
Crop Settings

You can choose between the crop modes: **W x H x Resolution** - an exact size, **Freehand**, **Custom Ratio**, **Original**, etc. - an aspect ratio.

> **W x H x Resolution**. This option allows you to crop an image to a fixed size (in pixels, inches, mm, cm). The cropped image will be resized to the specified **Width**, **Height**, and **Resolution**.

> **Freehand**. Enable this option to select the crop area by dragging the cursor over it.

> **Custom Ratio**. This option allows you to crop an image to a specific ratio. Enter the desired horizontal and vertical aspect ratio in the **Width** and **Height** fields.

> **Original**. Use this option to keep the original aspect ratio fixed.

> Other items in the list allow you to choose one of the most common aspect ratios.

Click 🔀 to swap the **Width** and **Height** values of the crop area.

In the **Trim** section, specify the crop mode:

> **Manual**. The crop area is created using the cursor.

> **Trim Alpha**. The crop frame is created using the alpha channel's information.

> **Trim Selection**. The crop frame is created using the selection channel's information.

Top Left Color. Areas having the same color as the upper left pixel in the image will be placed outside the crop frame.

Bottom Right Color. Areas having the same color as the lower right pixel in the image will be placed outside the crop frame.


| Trim Alpha | Top Left Color |

You can select the side from where to crop the picture: **Top**, **Bottom**, **Left**, **Right**. This option is disabled for the selected **Manual** mode.

The tool can work in two modes:

Remove External Area. The areas outside of the bounding frame will be deleted.

Hide External Area. The areas outside of the frame will be hidden but still accessible. This mode lets you correct the cropped area later - you can move the visible part with the **Move** tool.

External Area. The check-box helps to better visualize areas in and outside of the crop frame. If the check-box is enabled, the outer parts are highlighted in a selected color.
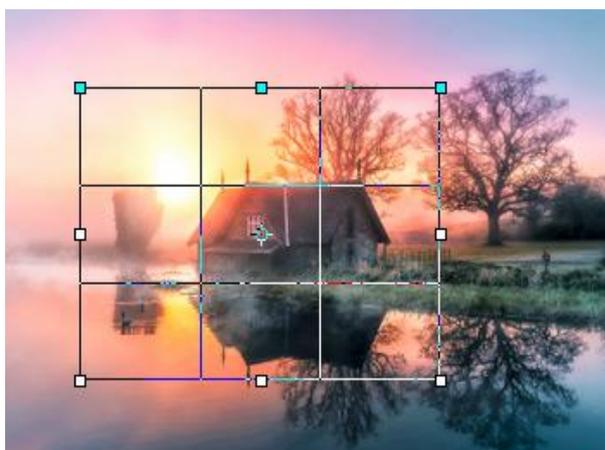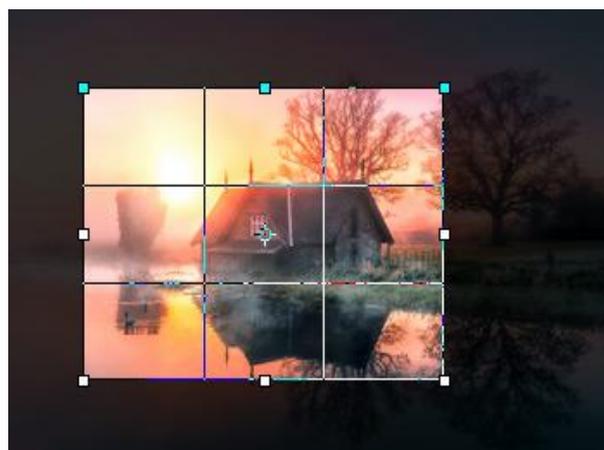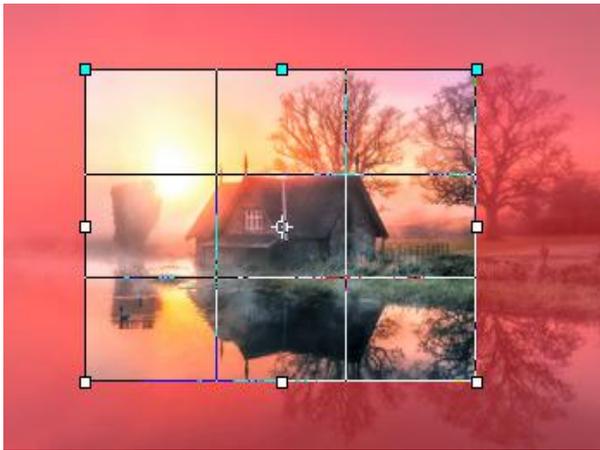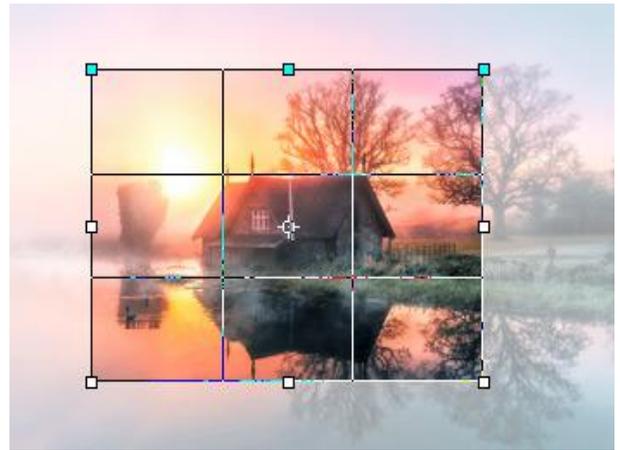

| Check-box is Disabled | Check-box is Enabled |

Adjust the visualization options for the external area:

Color. Click the color square to open the **Select Color** dialog box.
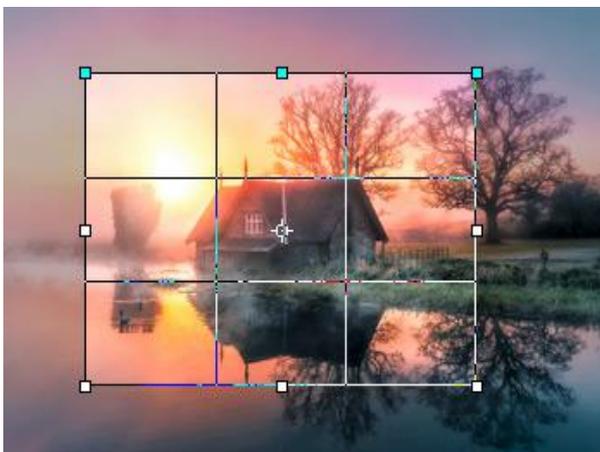
Using Red Color   Using White Color

Opacity (1-100). The parameter defines the transparency of the highlight color.
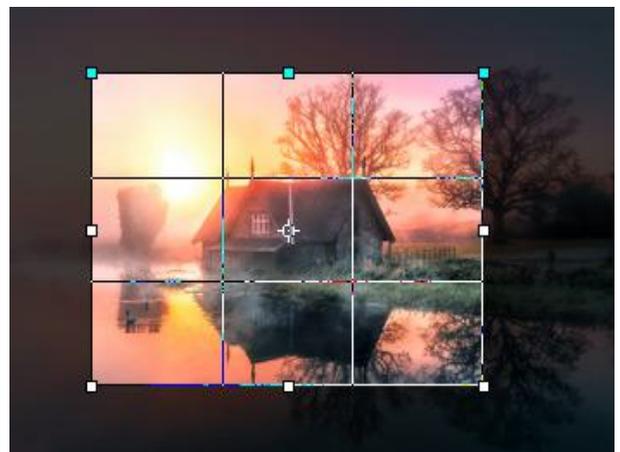
Opacity = 25   Opacity = 75

Grid ⊞. In the drop-down menu, select one of the display options grid that helps when building an image composition or aligning frame boundaries. You can switch the grid view using the `0` key.

For the **Triangle** and **Golden Spiral** grids, the **Cycle Orientation** button is active 🗘. It allows you to mirror and rotate the grid. You can also flip the grid using the `Shift`+`0` key combination.

To apply the tool and remove the areas outside the frame, click **OK** or press `Enter`. To cancel the crop, press **Cancel** or use the `Esc`-key.

PERSPECTIVE CROP

The **Perspective Crop** tool [icon] combines two operations into one – correcting perspective and cropping.

The tool can be used to fix perspective distortions, which can occur when taking pictures of wide or tall objects with a camera at an angle to the subject.

Perspective Crop

Activating the tool creates a crop frame that encloses the entire image. Select an area you want to keep by dragging the cursor while holding left mouse button.

If there is an active selection on the image, then the crop frame will cover the selection area.
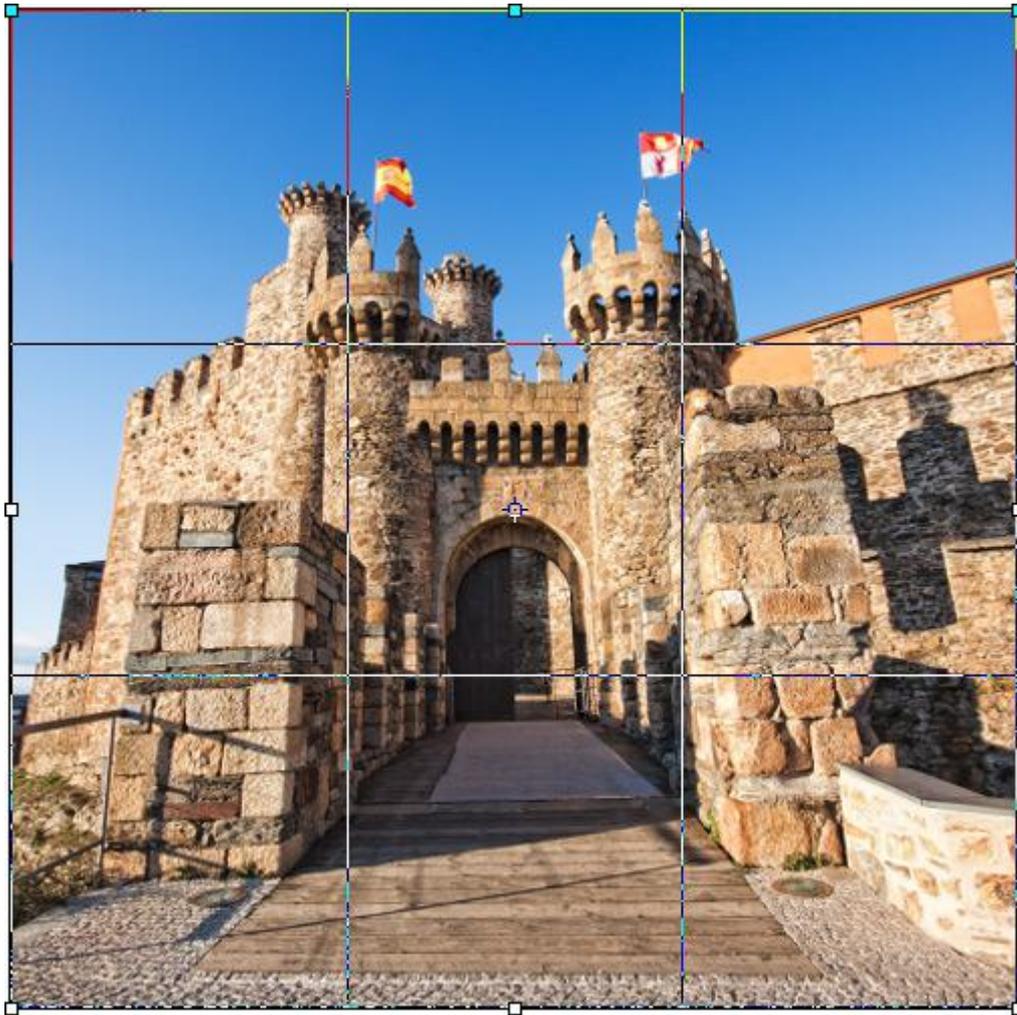
Initial Crop Area

Drag the corner markers to change the perspective of the contour. When moving the markers, it is necessary to ensure that the sides of the frame become parallel to the sides of the object being corrected.

Hint: Blue markers on the frame indicate where the top of the cropped photo will be.

Modified Crop Area

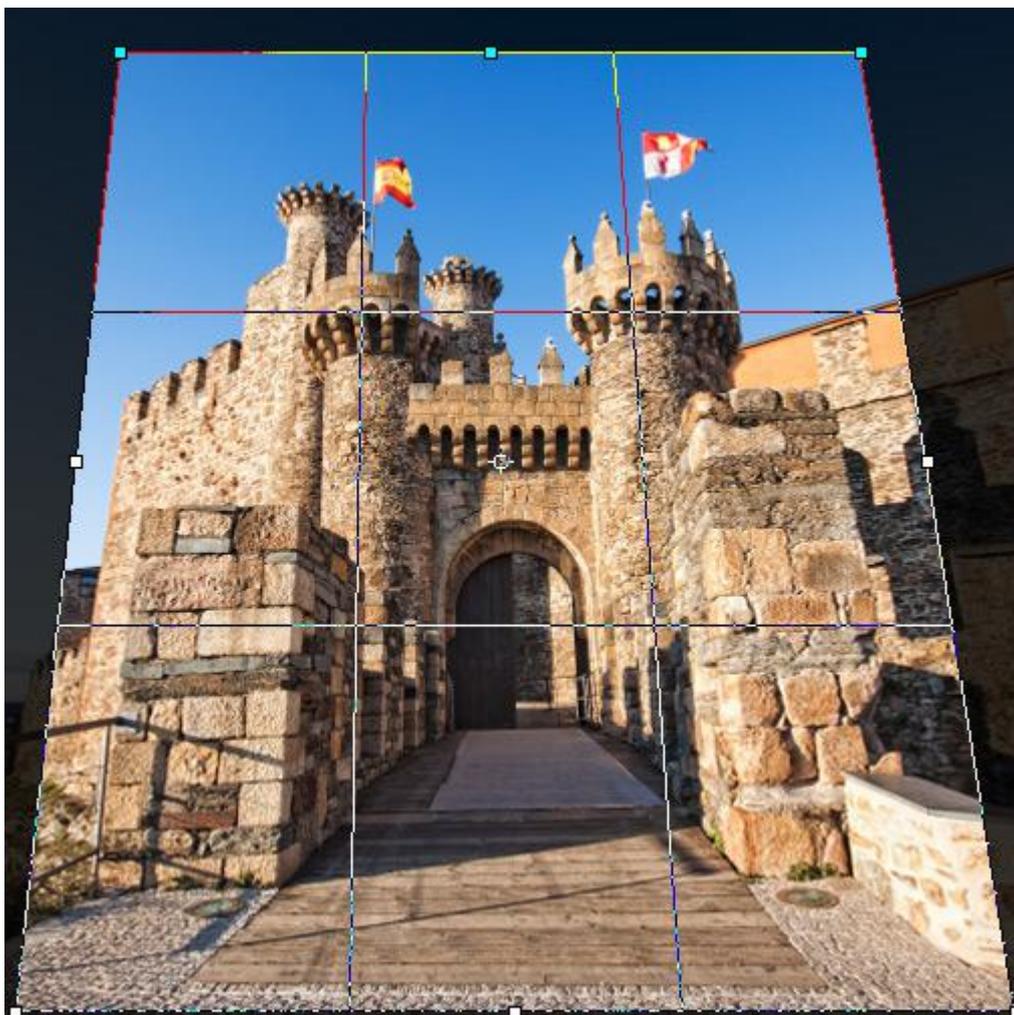The basic tool settings are shown in the **Tool Options** panel above the Image Window. To display the full list of parameters, press the tool icon ⌷⌷ in the Tool Options panel or F5 -key.

In the **Width**, **Height**, and **Resolution** fields, specify the final dimensions of the cropped image. If values are zero, the final image dimensions will be determined automatically.

In the **Trim** section, specify the method for creating the crop area:

Manual. A crop frame is created manually using the mouse cursor.

Trim Alpha. A crop frame will be created based on the contents of the alpha channel.

Trim Selection. A crop frame will be created based on the contents of the selection channel.

Top Left Color. Areas having the same color as the upper left pixel in the image will be placed outside the crop frame.

Bottom Right Color. Areas having the same color as the lower right pixel in the image will be placed outside the crop frame.

You can select the side from where to crop the picture: **Top**, **Bottom**, **Left**, **Right**. This option is disabled for the selected **Manual** mode.

External Area. The check-box helps to facilitate visualization of the crop frame. If the check-box is enabled, the outer parts are highlighted in a selected color.
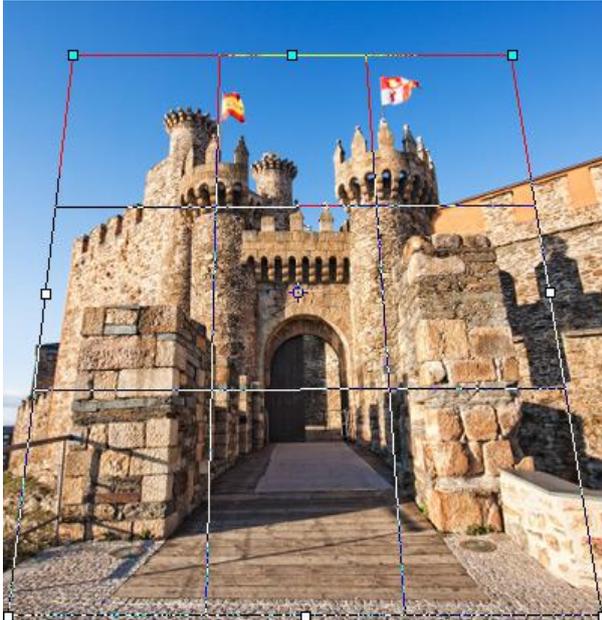
External Area check-box is disabled   **External Area** check-box is enabled
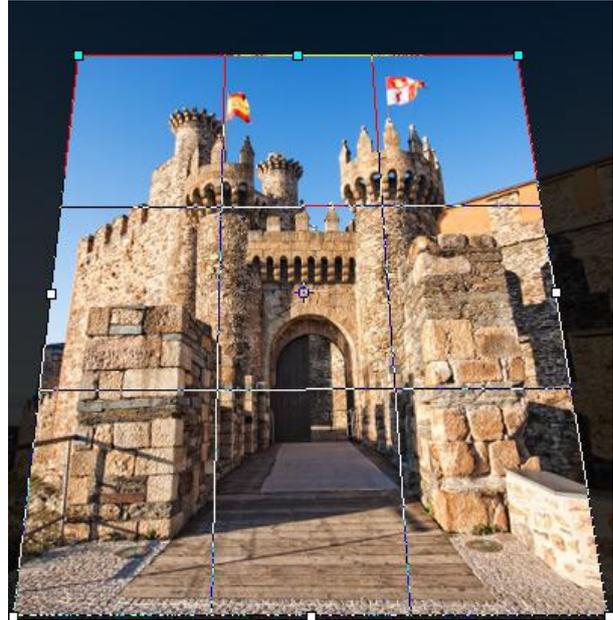
Show Grid. When the check-box is active, a grid is displayed above the crop area, which helps when adjusting the crop frame.

To complete the perspective cropping, click **OK** or press the Enter key. After that, the crop area will convert to a rectangular shape, and everything outside the frame will be deleted.

Cropped Image

TRANSFORM TOOL

Call the **Free Transform** and **Transform** commands in the **Edit** menu to apply transformations to the selected layer or object. The transformation parameters are displayed on the **Settings Panel**.

> **Note:** If you want to transform the entire image, you should select the needed operation in the menu **Image -> Transform Image**. In this case, all layers of the active image will be transformed.
>
> To transform the contour of the selection, use the **Transform Selection** command in the **Select** menu.

Transformation Options:

> **Shift**. You can change the position of an object horizontally (**X**) and vertically (**Y**). The parameter uses the coordinates (in pixels) of the upper left point of the bounding box or of the center point (if the sign ⊕ is activated). Usually the center point is fixed, but you can move it to the different location.

Place the cursor ▶ inside the bounding frame and drag the object. If you bring the cursor to the center point, you will get a pointer with a circle ▶ₒ - now you can move only the center point.
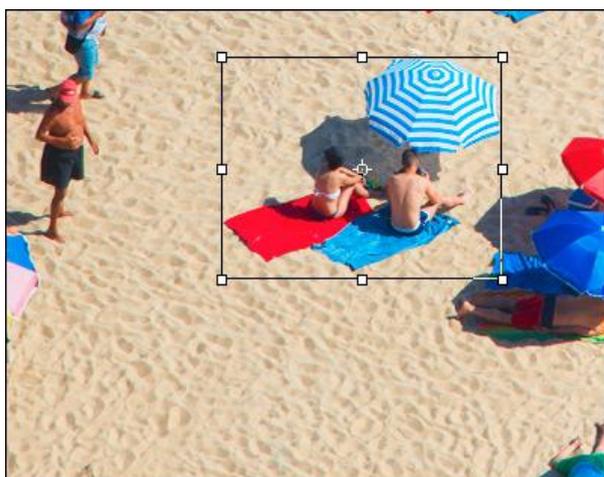
| Before Moving Object | After Moving Object |
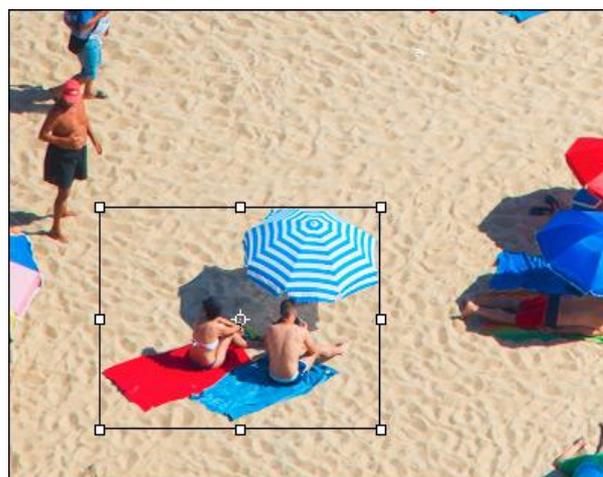
> **Scale**. You can adjust the size of an object in width (**W**) and height (**H**) (in percent). Drag one of the eight square markers on the frame to increase or reduce the size. The cursor will turn into a two-sided arrow ↔. Use `Shift`-key or press the sign φ between **W** and **H** to constrain the proportions of the object. If the sign is deactivated the proportions can change. Hold down the `Alt` key to scale a fragment or a layer relative to its center point (transformation center).

Original Size

Scale Increased

Skew. You can shift some parts of an object relative to the others. When you bring the cursor to the frame, it will look like this ⇌. Press and drag to transform the object. Hold down the `Alt` key to skew a fragment or a layer relative to its center point (transformation center).
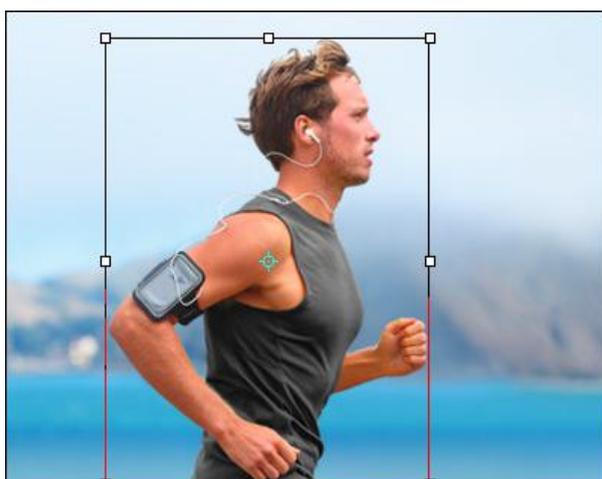
Source Object

Object is skewed

Perspective. You can alter the perspective of the selected object and fix perspective distortions. Select **Edit -> Free Transform...** and move the corner markers while holding down the `Ctrl` key. Each marker can be moved independently of the others, which allows you to easily change the perspective of the selected object.

Original Perspective   Modified Perspective
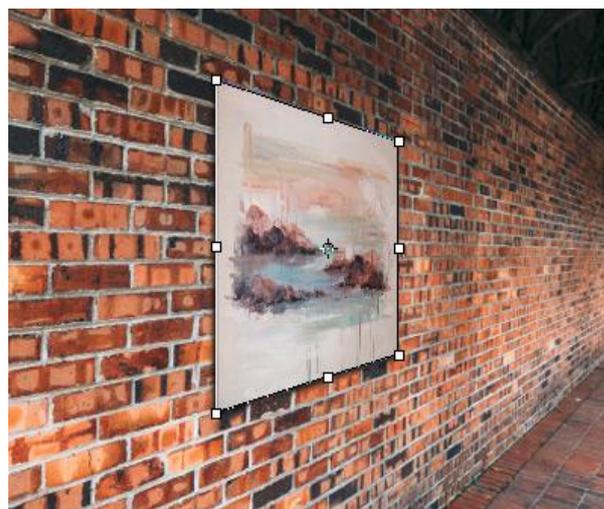
Rotate. You can rotate an object. The center of rotation can be changed by moving the center point of the object. Outside the bounding frame the cursor turns to a rounded two-sided arrow ↩↪.

Holding down the left mouse button, rotate the object clockwise or counter-clockwise. If you press `Alt`, the rotation angle will change in five degrees.

Before Rotation   After Rotation

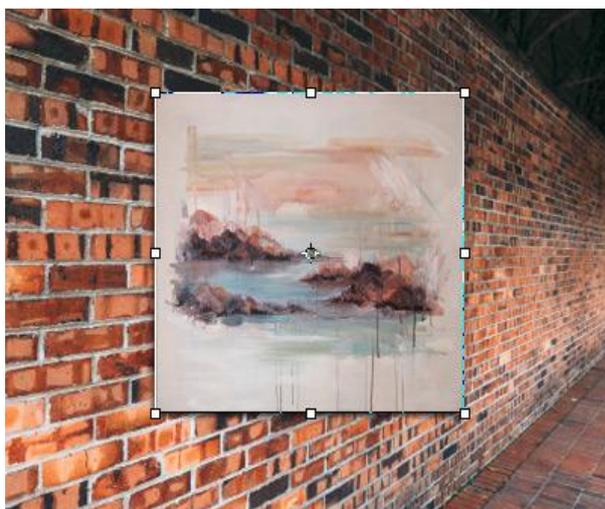Click the **Reset Perspective** button to reset the changes you made to the perspective. The transformation will be determined by the parameters in the settings panel.

Click the **Reset Center** button to restore the center point in its default position.

Press **OK** to apply changes. To cancel the transformation press **Cancel** or use the `Esc`-key.

Also, you can apply transformations using the following commands from the **Transform** submenu:

The commands **Rotate 90⁰ CW**, **Rotate 90⁰ CCW**, and **Rotate 180⁰** rotate the image to specify degrees.

Flip Horizontal. The command allows an object to be mirrored along the standing axis, i.e. interchanging the left and right sides.

Flip Vertical. The command mirrors an object by turning it upside down.
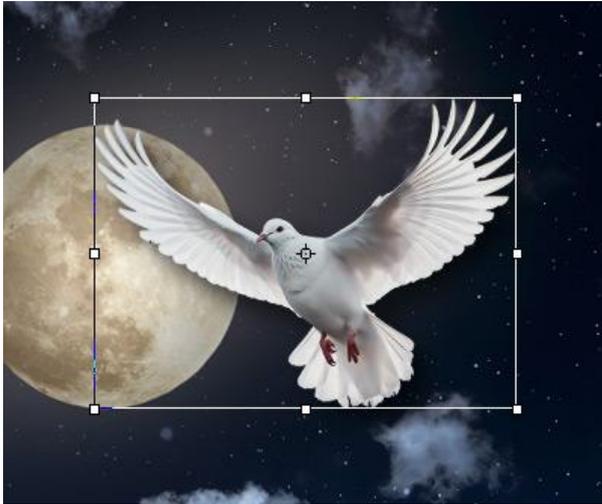
Before Transformation

Rotate 90 CW
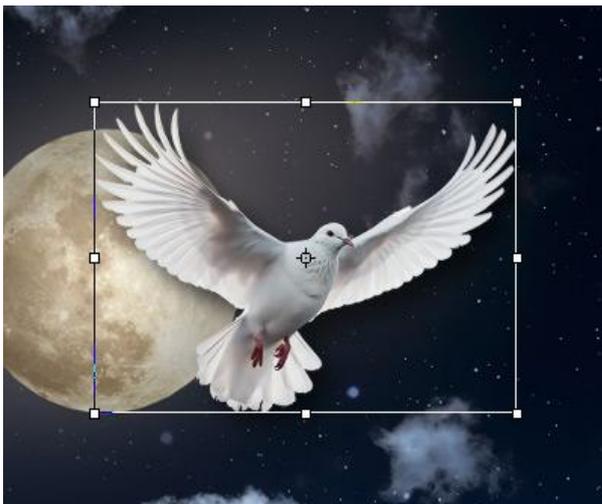
Flip Horizontal
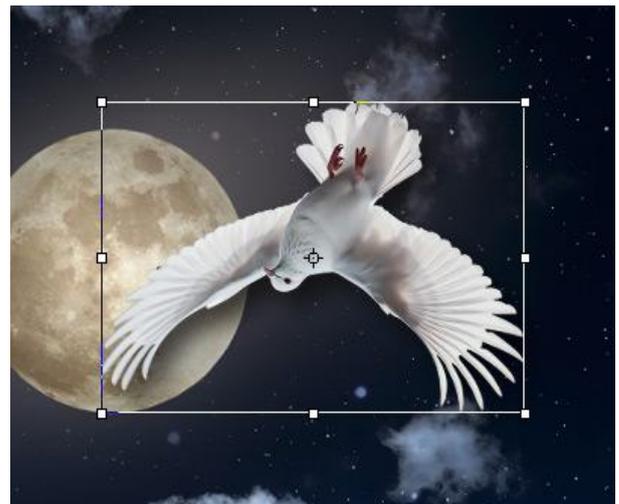
Flip Vertical

EYEDROPPER

The **Eyedropper** tool ![icon] lets selecting a color from an image. A color selected with a mouse-click is shown as the current color. If you move a cursor holding down the Eyedropper tool you can see how the current color dynamically changes. Moving the Eyedropper with the pressed `Shift`-key averages out colors along all pixels in the cursor's path. Press `I` to quickly access this tool.

The tool's parameters are shown in the **Tool Options** panel above the Image Window or by right-clicking the image. To specify the parameter settings, enter a numerical value in the parameter's field or use the slider.

Sample Size (1-51). The number of pixels around the eyedropper's tip that are used to average the selected color. At minimum values, the area around the eyedropper's tip is reduced to one pixel. A higher value of the parameter can be used on photos with a lot of color noise (random red and blue pixels on homogeneous background).

In the popup menu you can select between the variants. In the Tool Options panel it's possible to set more precise Sample Size using the slider or entering a numerical value in the parameter field.

Show Color Ring check-box. If the option is enabled, the eyedropper's cursor is displayed as a **Color Ring** with 5 sectors that lets to get more information about the colors in this area.
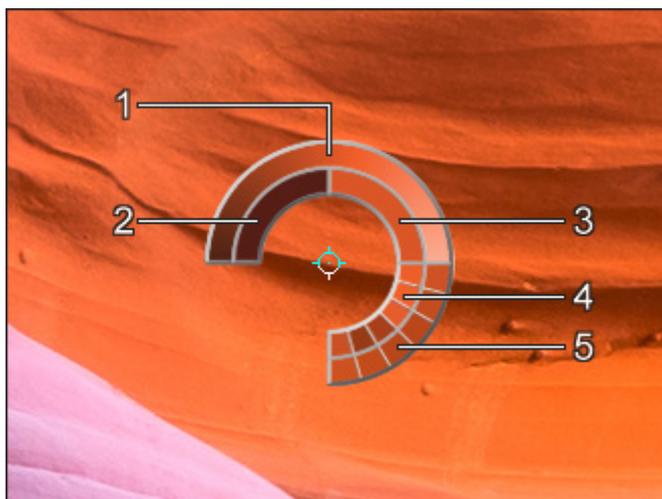
1. Gradient line with the current color in the center, on the left side is +30% black, and on the right side +30% white.
2. The previously selected color.
3. The current color of the pixel where the cursor is.
4. Colors of surrounding pixels.
5. Average colors from areas of 3x3, 5x5, 11x11, 31x31, 51x51, 101x101 px (around the eyedropper's tip).

This feature helps you select colors more precisely. If it's hard to catch a certain color, you can see adjacent tints in the **Color Ring** and select the color on the ring while holding the `Ctrl`-key.

HAND

The **Hand** tool ![hand icon] is designed to scroll the displayed area of the image in the window if the whole image doesn't fit into the window at the chosen scale. To move the image you should press this button, put the cursor onto the image, press the left button and, keeping it pressed, move the image in the window.

Scrolling of Displayed Area

To scroll through the image, you can use the scroll bars or press the space bar and drag the image with the left mouse button.

To align the picture in the center of the **Image Window**, double-click on the square field between the scroll bars.

Use the buttons in the **Tool Options** panel above the Image Window to adjust the image scaling:

   100% (`Ctrl`+`1` on Win, `⌘`+`1` on Mac) - the image is displayed at its **actual size**;

   Fit to View (`Ctrl`+`0` on Win, `⌘`+`0` on Mac) - the image is fully visible in the Image Window;

   Fill Window - the image is scaled to fill the Image Window completely.

Double-clicking the tool's icon ![hand icon] on the **Toolbar** makes the image fit the **Image Window** (Fit to View).
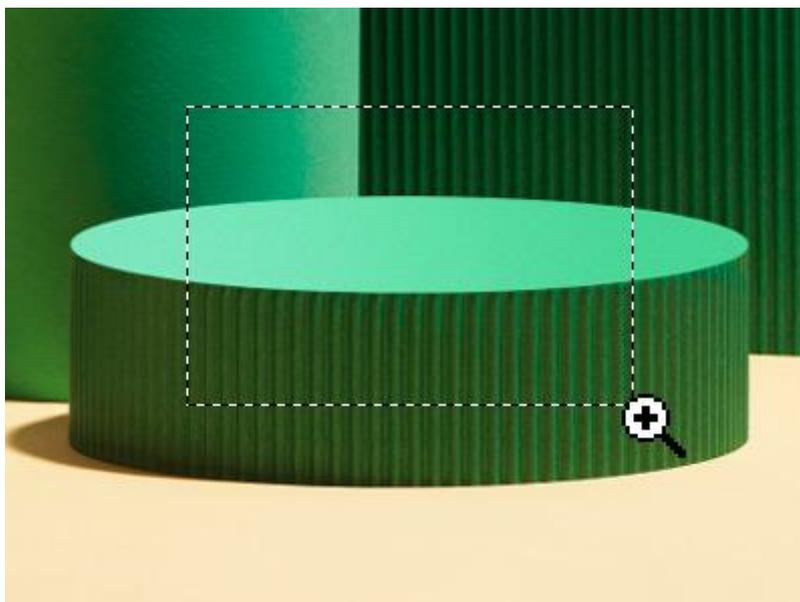
ZOOM

The **Zoom** tool $\boxed{Q}$ is used to change the image scale. You can also use the **Navigator** panel.

To zoom in or out, select the tool and click the image. In the Tool Options panel, select one of two modes:

- **Zoom In** $\oplus$: click in the image or hold-down the left mouse button to zoom in; hold down the $\boxed{Alt}$ key and click in the image to zoom out.

- **Zoom Out** $\ominus$: click in the image or hold-down the left mouse button to zoom out; hold down the $\boxed{Alt}$ and click to zoom in.

When the **Scrubby Zoom** check-box is enabled, the scale is changed by holding the left mouse button and moving the cursor: to the right to increase the scale, to the left to decrease the scale.
When the check-box is disabled, you can zoom in an image area. To do this, hold down the left mouse button and select a rectangular area. Once the rectangle is drawn, the area will be scaled to fit the Image Window.

Zoom-In Selected Area

To restore the original scale, press the **100%** button in the Tool Options panel. When you click the **Fit to View** button, the image will automatically scale to fit the size of the Image Window.

You can also use the keyboard shortcuts to change the image scale: $\boxed{+}$ and $\boxed{Ctrl}$+$\boxed{+}$ ($\boxed{\mathⅢ}$+$\boxed{+}$ on Mac) to zoom in, $\boxed{-}$ and $\boxed{Ctrl}$+$\boxed{-}$ ($\boxed{\mathⅢ}$+$\boxed{-}$ on Mac) to zoom out.

You can adjust the scale using the following commands in the **Image** menu: **Zoom In**, **Zoom Out**, and **Scaling**.

Double-clicking the tool's icon $\boxed{Q}$ on the **Toolbar** makes the image scale to 100% (Actual Size).

RAW PROCESSING

When you open a RAW file in AliveColors image editor, the RAW editing mode is launched. It is possible to preprocess the image, and then continue working in the graphic editor.
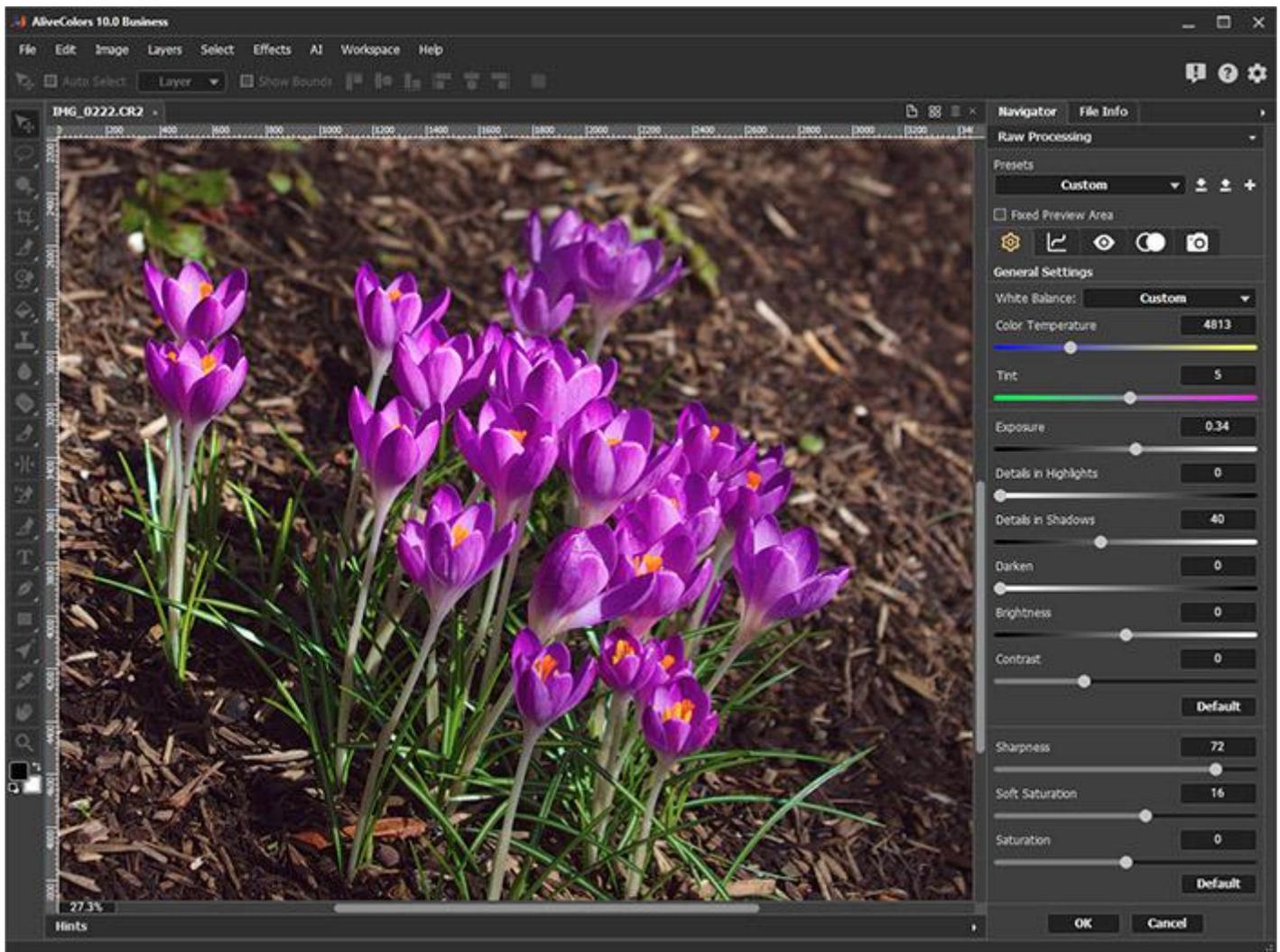
Use the parameters in the following tabs to adjust the RAW files:

> **General Settings**
> **Tone Curve**
> **Details**
> **HSL/Grayscale**
> **Lens Corrections**

In the Presets field, you can save the settings of all the tabs as a preset in order to reuse them with the other RAW files.

After adjusting the parameters, click the **OK** button to apply the settings to the entire image or the **Cancel** button to discard all changes. Then you can edit the image using the tools and filters of the software.

GENERAL SETTINGS

The **General Settings** tab ⚙ contains settings for adjusting the white balance, tone and saturation of an image. In this tab, you can perform the basic correction, and then use the parameters of other tabs to fine-tune the image and get rid of some optical defects.
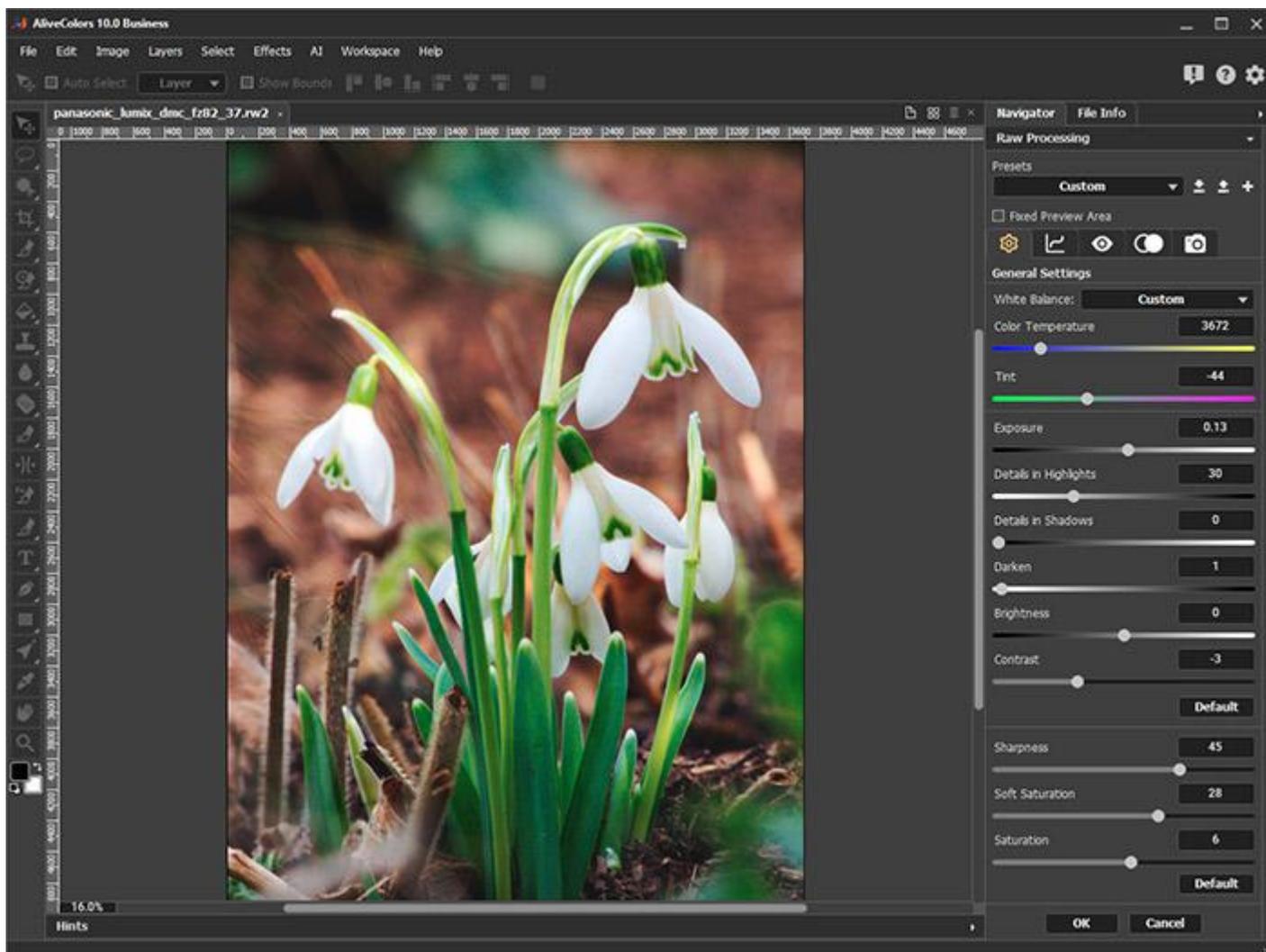
The following parameters are used for tonal and color correction of an image:

In the **White Balance** section, you can adjust the color correction settings to provide more accurate color reproduction of an image.

White balance is a process of color correction that makes white appear white, with no color tinge.

You can automatically adjust the **Color Temperature** and **Tint** parameters using the presets in the White Balance drop-down list. The entire color tone of the image changes according to the chosen preset.

The default preset is **As Shot**. It applies camera white balance settings to the image if they are available (recorded in the image metadata area).

When you select **Auto**, the program will analyze the image and automatically adjust the white balance.

If the white balance was set incorrectly when shooting, you can choose one of the presets whose name most closely matches the ambient light conditions in the photo: **Daylight**, **Cloudy**, **Shade**, **Incandescent Lamp**, **Fluorescent Lighting**, or **Flash**.

As Shot	Shade

If you are not happy with the automatic adjustment, you can change the parameter values manually:

Color Temperature (2000-50000). The parameter moves the color temperature of the image between blue and yellow along the Kelvin scale. If the photo was taken at a higher color temperature of light (bluish), increase the value of the parameter. If the image was photographed at a lower color temperature of light (yellowish), reduce the value of the parameter.

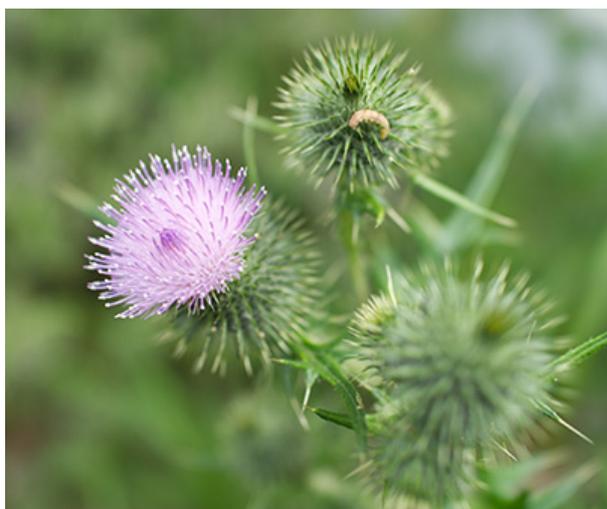|	
Color Temperature = 4760	Color Temperature = 3552

Tint (-150..150). Changing the value of the parameter compensates for a green or magenta tint. Decreasing the value of the parameter adds more green, and increasing the value adds more magenta.

<table>
<tr><td align="center">Tint = 5</td><td align="center">Tint = 50</td></tr>
</table>

When setting the parameter values manually, the name of the preset will change to **Custom**.

In the **Tone Correction** section, you can even out the brightness in certain areas of the image as well as reveal details in the overexposed and underexposed areas.

Exposure (-4.00..4.00). The parameter allows you to increase/reduce the amount of light being rendered. As the value of the parameter decreases, the image becomes darker. When increasing the parameter value, the image becomes lighter.

<table>
<tr><td align="center">Exposure = -1.00</td><td align="center">Exposure = 1.00</td></tr>
</table>

Details in Highlights (0-100). The parameter allows you to reveal the details hidden in over-exposed areas. As the parameter increases, the bright areas become darker, the details in these areas become clearer.

| Details in Highlights = 5 | Details in Highlights = 50 |

Details in Shadows (0-100). The parameter allows you to reveal the details hidden in under-exposed areas. As the parameter increases, the shaded areas become brighter, the details in these areas become clearer.

| Details in Shadows = 5 | Details in Shadows = 50 |

Darken (0-100). The parameter enhances the shadows in the image. The impact in the dark areas is more intense, while light and mid-tone areas change less. The parameter increases the contrast of the image.

| Darken = 0 | Darken = 15 |

Brightness (-150..150). The parameter allows you to adjust the overall brightness of the image, make it darker or lighter. When increasing the parameter, the image becomes lighter. When decreasing the parameter, the image becomes darker.

| Brightness = -50 | Brightness = 50 |

Contrast (-50..100). The parameter allows you to increase or decrease the contrast of the image. When increasing the parameter, the dark areas of the image become darker, and the light areas become lighter.

Contrast = -25   Contrast = 25

Click the **Default** button to revert the settings to their defaults.

In the **Color Correction** section, you can change the sharpness of the image as well as the saturation of colors.

Adjust the following parameters:

Sharpness (-100..100). The parameter enhances the details by increasing the difference between the pixels located at the edges of the light and dark areas. The local change in contrast affects mainly the halftone areas. By increasing the parameter, the image becomes sharper.

Sharpness = -50   Sharpness = 50

Soft Saturation (-100..100). The parameter enhances less saturated colors without affecting saturated colors.

Soft Saturation = -50   Soft Saturation = 50

Saturation (-100..100). The parameter adjusts the intensity of all colors in the image. The parameter value varies from -100 (black and white image) to +100 (most-saturated colors).

Saturation = -50   Saturation = 50

Click the **Default** button to revert the settings to their defaults.

Adjusting the parameters of this tab is usually sufficient to achieve a good result.

If needed, you can apply additional effects to the image or remove some defects using the parameters of other tabs.

You can save the selected parameters as a preset in the **Presets** tab in order to reuse them when processing other RAW files.

TONE CURVE

The **Tone Curve** tab ⤷ is used to adjust the brightness (tonal range) of the image. It makes possible to adjust the contrast not only in the entire image but also selectively.
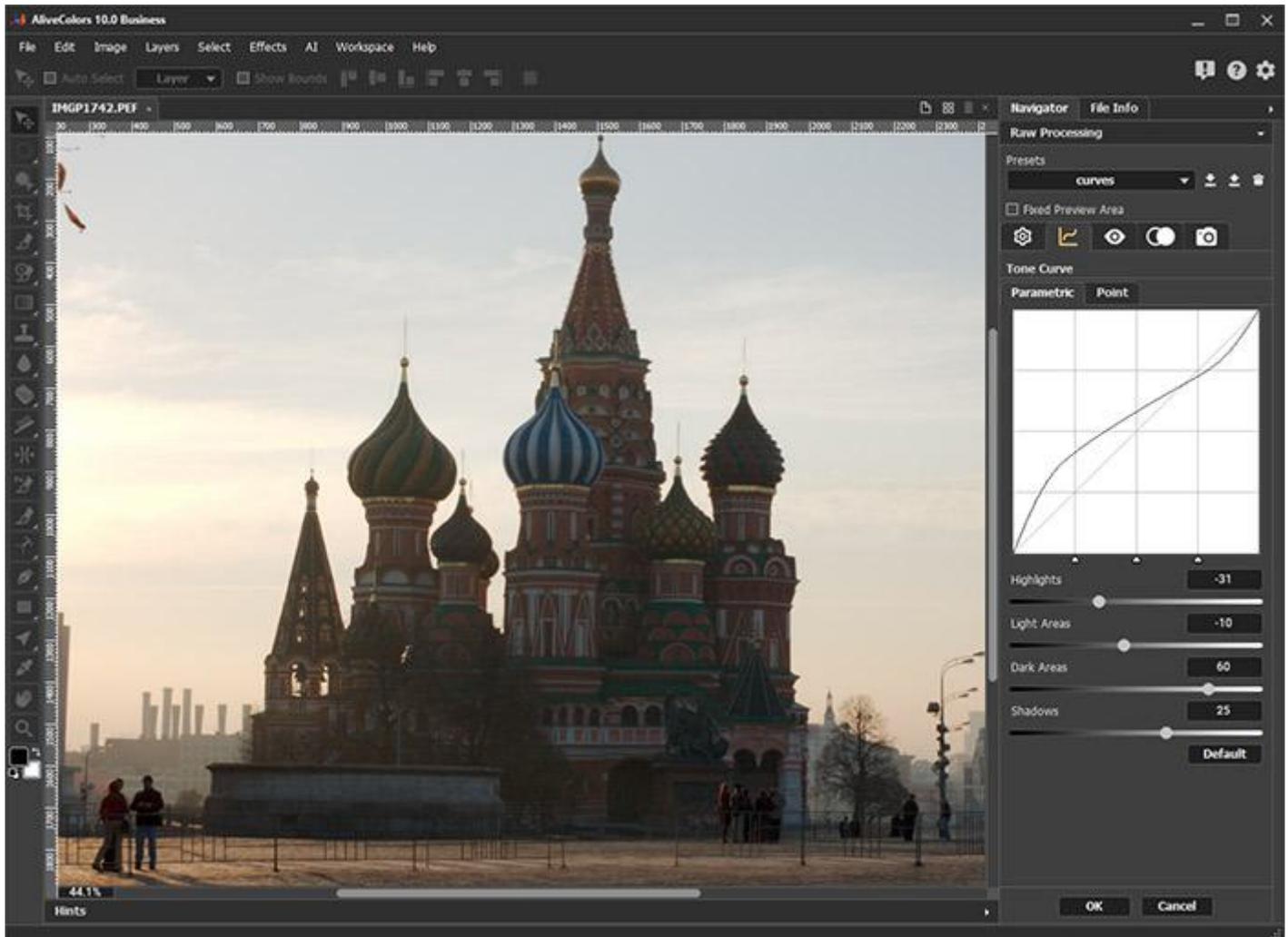
By default, the curve is a straight line at a 45° angle and does not reflect any changes. The initially specified input tone values completely match the output values.

Where the curve is above the diagonal, these image areas become lighter. Where the curve is below the diagonal, these image areas become darker. If the entire curve lies above the diagonal, then the entire image becomes lighter. If the entire curve lies below the diagonal, then the entire image becomes darker.

The tab contains two curves: **Parametric** and **Point**. The settings for each curve are adjusted individually.

The **Parametric Curve** allows you to gradually change the brightness of certain areas of the image. The curve can be modified by changing the following parameters:

The parameters **Light Areas** and **Dark Areas** mainly affect the middle area of the curve. Changing these parameters affects the mid-light and mid-dark areas of the image.

The parameters **Highlights** and **Shadows** affect the extreme values of the curve. Changing these parameters affects the lightest and darkest areas of the image.

Each parameter affects a specific area of the curve. To expand or narrow the range of a particular parameter, you can use the separators located on the horizontal axis of the graph. The division into areas goes from left to right from the darkest to the lightest area.
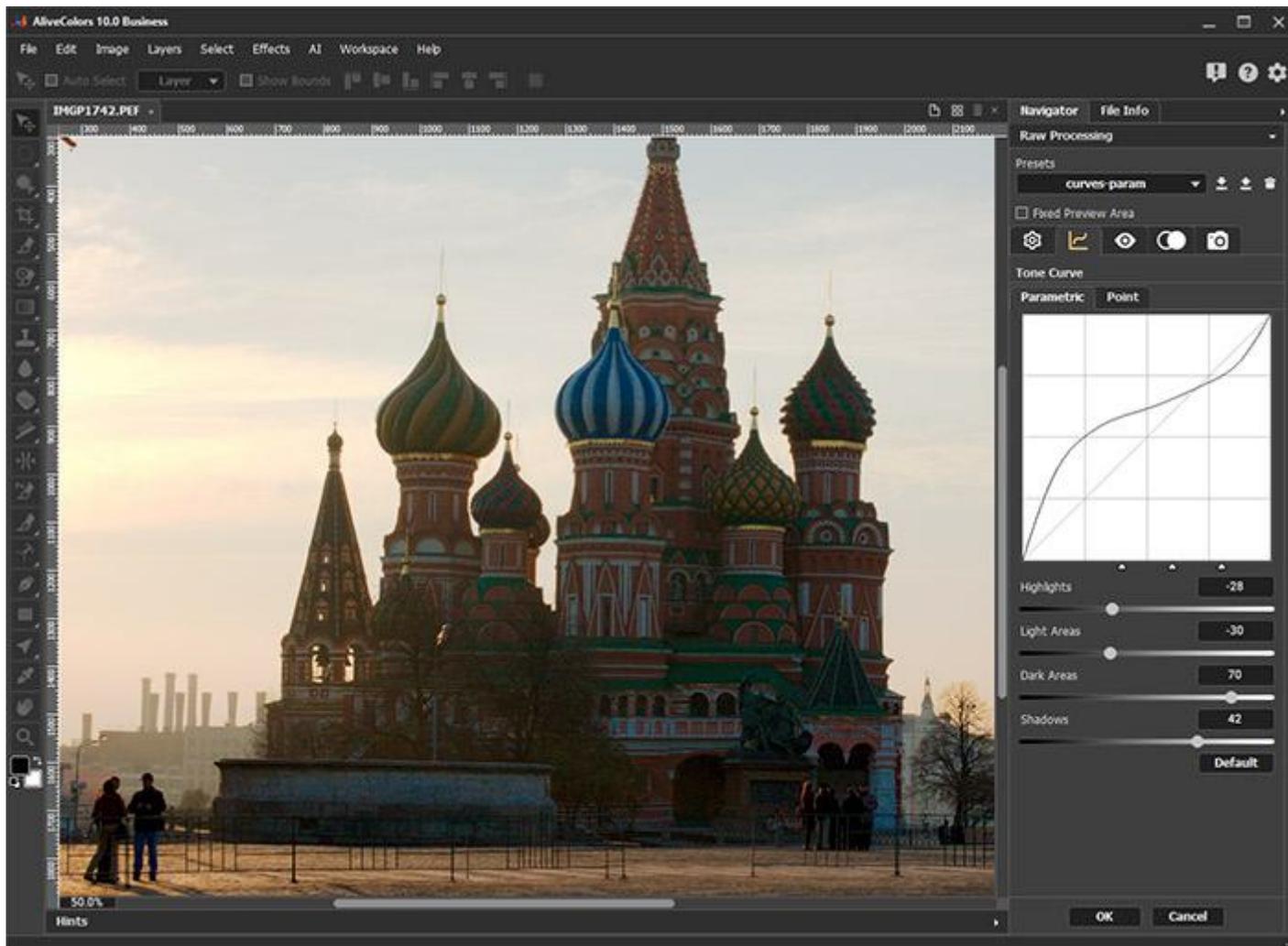
Modifying Parametric Curve

Using the **Point Curve**, you can finely adjust a certain range of brightness. The curve is modified by setting and moving control points.

In the **Curve** list, you can select one of the standard curves that affect the brightness of the image: **Medium Contrast** or **Strong Contrast**. When adding points manually, the name in the list will change to **Custom**. If you select **Default**, all added points will be deleted, and the curve will be reset to neutral/ linear.

For each point of the curve, the **Input** and **Output** brightness values are displayed under the graph.

The input brightness values are arranged horizontally; the output values are arranged vertically.

If the output brightness value is less than the input value, then the image area corresponding to this point of the curve becomes darker (the point of the curve is below the diagonal). If the output value is greater than the input one, then it becomes lighter (the curve is above the diagonal).

The curve will change if you drag one of the control points. If there are not enough specified points, you can add extra points in any parts of the curve by clicking on it with the left mouse button. To remove an extra point, right-click on it.
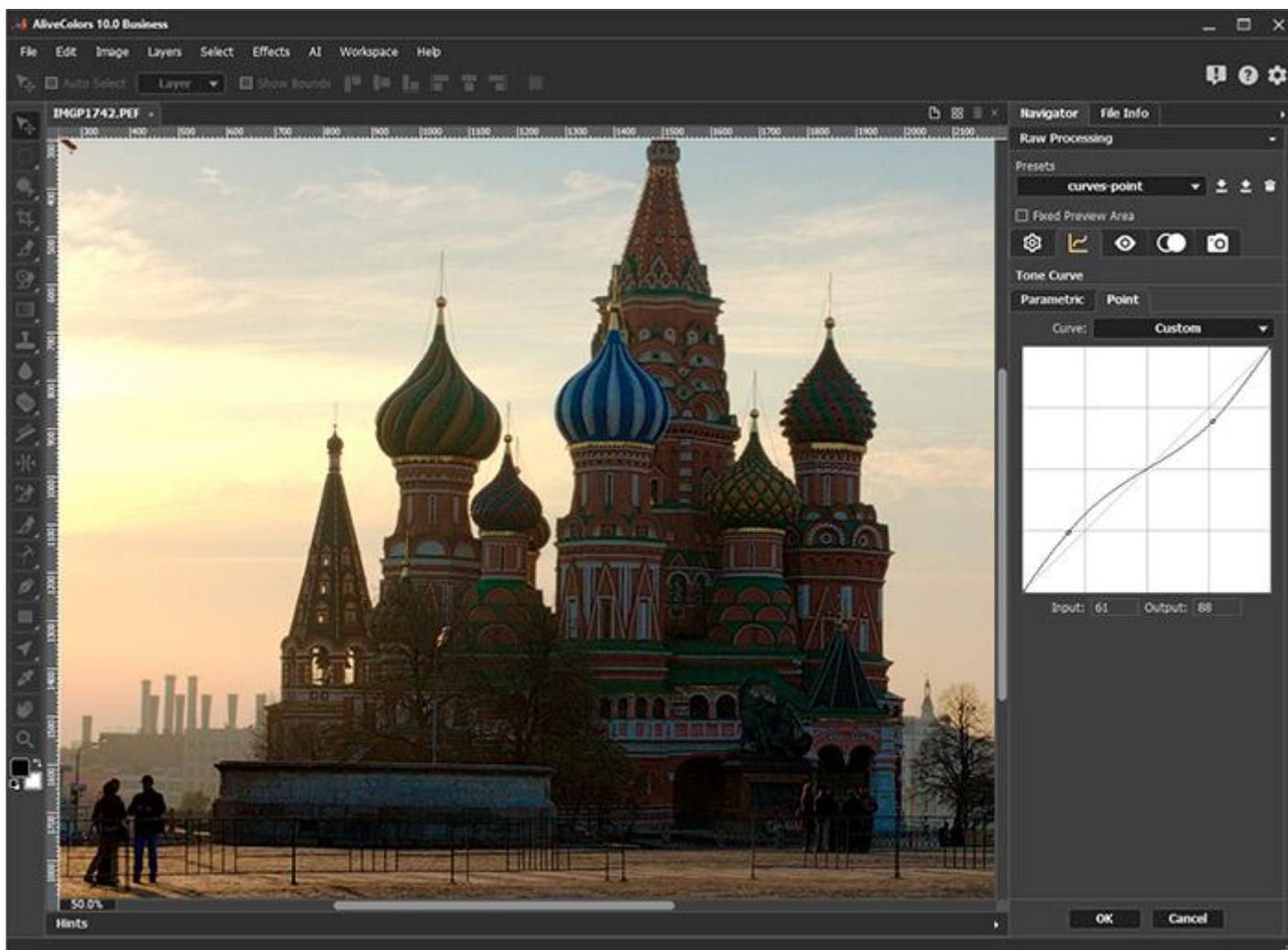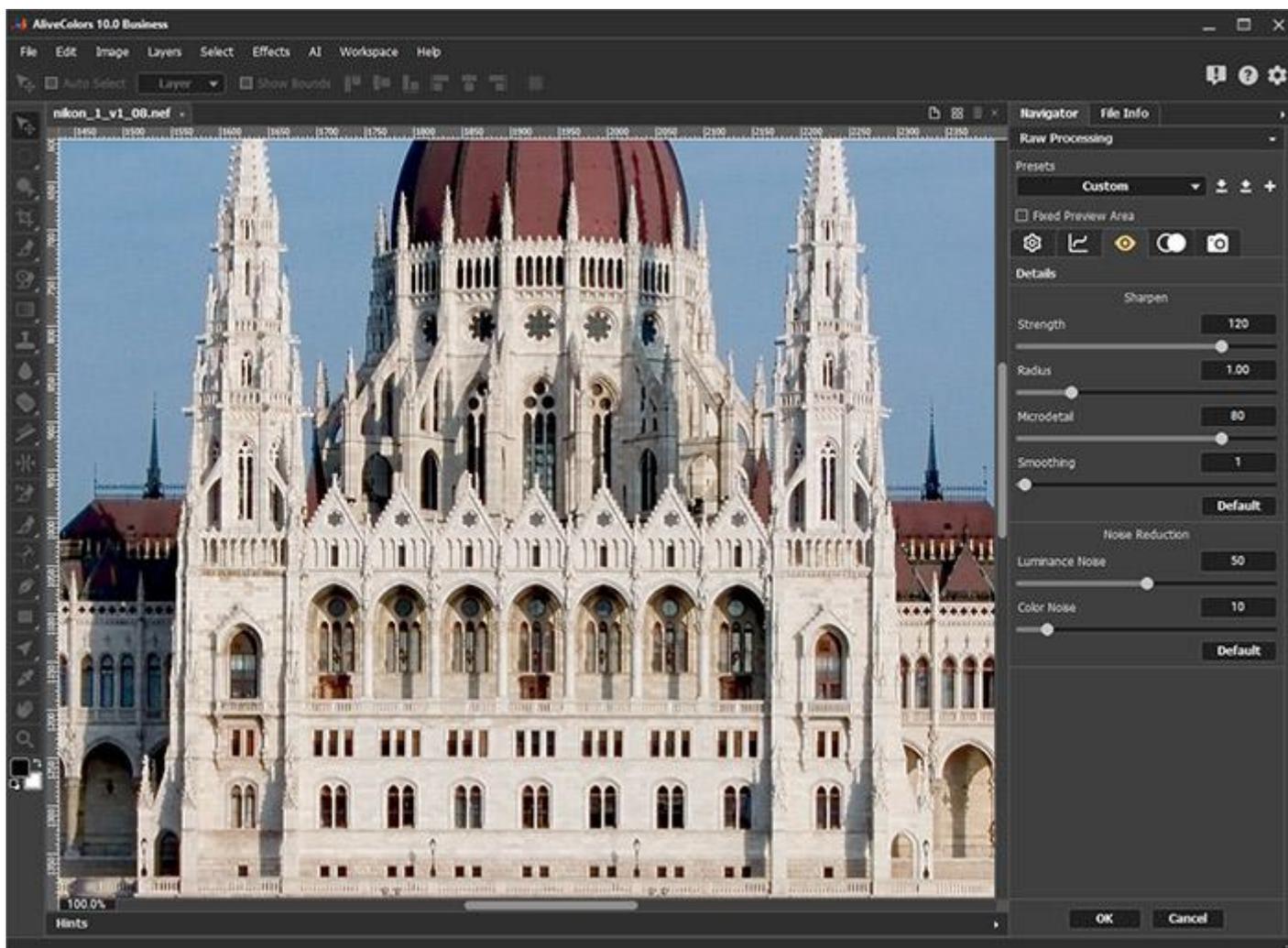

Modifying Point Curve

Note: When modifying both curves, their impact is cumulated.

DETAILS

In the **Details** tab 👁, you can improve the sharpness of the image as well as reduce noise.

>   **Hint:** To achieve better results, it is recommended to adjust these parameters at a scale of at least 100%.

The parameters in the **Sharpen** section are used to increase the sharpness and clarity of the image.

>   **Strength** (0-150). The parameter allows increasing the contrast along the edges of the objects. As the parameter increases, the light pixels along the edges become lighter, and the dark ones become darker. Due to this, the image becomes sharper.

Strength = 10   Strength = 100

Radius (0.50-3.00). The parameter determines the width of the area along the edges in which the contrast will be enhanced.

Radius = 1.00   Radius = 3.00

Microdetail (0-100). The parameter increases the contrast between neighboring pixels. The light pixels in the image become lighter, and the darker ones become darker. Increasing the parameter increases the sharpness of smaller image details.

Microdetail = 10   Microdetail = 100

Smoothing (0-100). When increasing the parameter, the edited image is blended with the original image, and the sharpness is reduced.

Smoothing = 5   Smoothing = 50

Click the **Default** button to revert the settings to their defaults.

The parameters in the **Noise Reduction** section are used to reduce noise in images.

Noise in a color image can be divided into two types: luminance noise and color noise. Luminance noise appears as dark dots or small blots; color noise appears as colored speckles.

Luminance Noise (0-100). Increase the parameter to reduce the image graininess and remove the luminance noise.
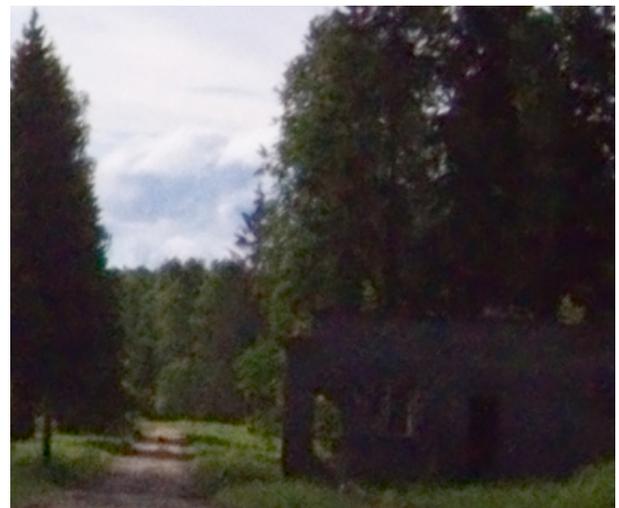
Luminance Noise

Luminance Noise Reduced

Color Noise (0-100). Increase the parameter to reduce the color noise (by decreasing the saturation of colored dots).

Color Noise

Color Noise Reduced

Click the **Default** button to revert the settings to their defaults.

When reducing the noise, it is important not to overdo. When setting high smoothing values for the luminance noise, the image may appear unnatural and "plastic". When setting high smoothing values for the color noise, the color of small details changes due to blurring.

HSL/GRAYSCALE

The parameters in the **HSL/Grayscale** tab ⬤ are used to adjust individual color ranges or convert a color image to grayscale.

HSL is a color model that represents colors using **Hue** (H), **Saturation** (S) and **Luminance** (L).

Enable the check-box **Convert to Grayscale** (disabled by default) to convert the image to black and white. Adjust the parameters in the **Grayscale Mix** tab. Each parameter changes the brightness of gray corresponding to a specific color range, from white to black.

Original Colors   Grayscale

With this check-box enabled, you can adjust the brightness of local areas in the image based on their original color.

When the check-box is disabled, three sub-tabs with sliders are available to adjust the individual color components of each specific color range. Let's consider each sub-tab:

In the **Hue** tab, you can shift the hues of specific color ranges in the image. For example, you can change the color of the sky from light blue to purple.

Light Blue Sky   Purple Sky

In the **Saturation** tab, you can change the intensity or vividness of each color. For example, you can change the color of the sky from gray to blue.
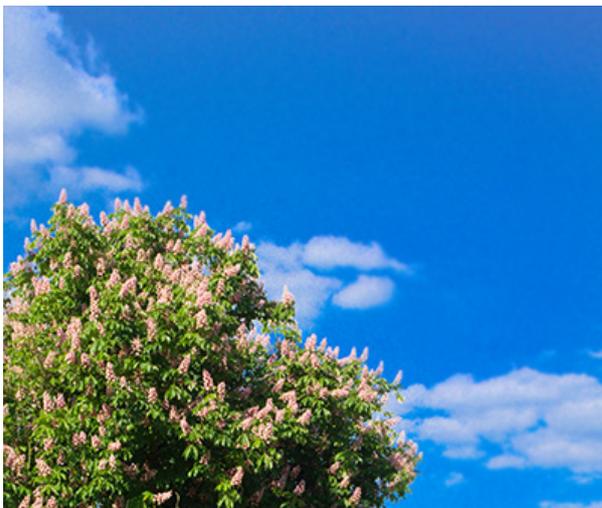
Gray Sky

Blue Sky

In the **Luminance** tab, you can change the brightness of the specific color range. Adjust the parameter to make the area of the selected color lighter or darker.


Dark Sky

Light Sky

Adjusting the colors should be done carefully because when you move the slider of a certain color range, all parts of the image that have this color will change.

Click the **Default** button to reset all settings to the default values.

LENS CORRECTIONS

The camera lens may exhibit various types of distortion at certain focal lengths and apertures. Such defects can be eliminated using the **Lens Corrections** tab 📷 .
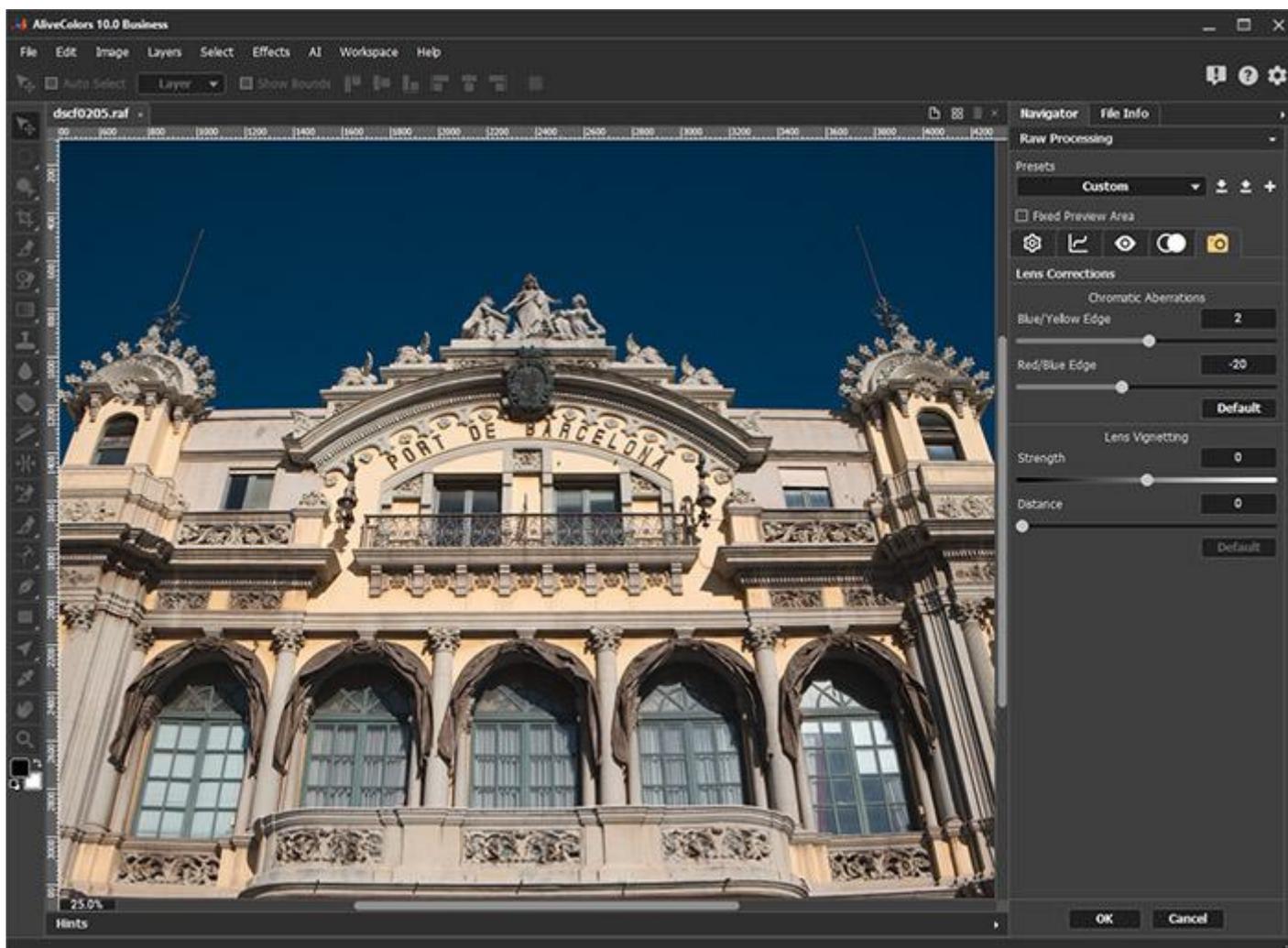
Using the following parameters you can get rid of the two most common optical defects.

Chromatic aberrations are caused by the dispersion of light passing through the lens. This often results in a fringe or halo around objects. For example, you can observe a red border on one side of an object closer to the center of the image, and a blue border on the side of the object farther from the center of the image.

>   **Red/Blue Edge** (-100..100). Adjust the parameter to remove red or blue fringes.

>   **Blue/Yellow Edge** (-100..100). Adjust the parameter to remove blue or yellow fringes.

Chromatic Aberrations

Chromatic Aberrations Eliminated

Lens Vignetting is a lens defect that makes the edges of the image become darker (or sometimes lighter) compared to the center.

Strength (-100..100). When increasing the value of the parameter, the edges of the image become lighter. When reducing the value of the parameter, the edges of the image become darker.

Distance (0-100). As the value increases, the adjustment is applied to a larger area extending far from the edges of the image. At low values, the adjustment is applied to the area adjacent to the corners.

Shaded Edges

Lens Vignetting Eliminated

The vignetting is not always a defect. Sometimes it is applied to an image for artistic effect. Adding a vignette can be a powerful way to enhance both the mood and the composition of an image as well as to draw the viewer's attention towards the main subject.
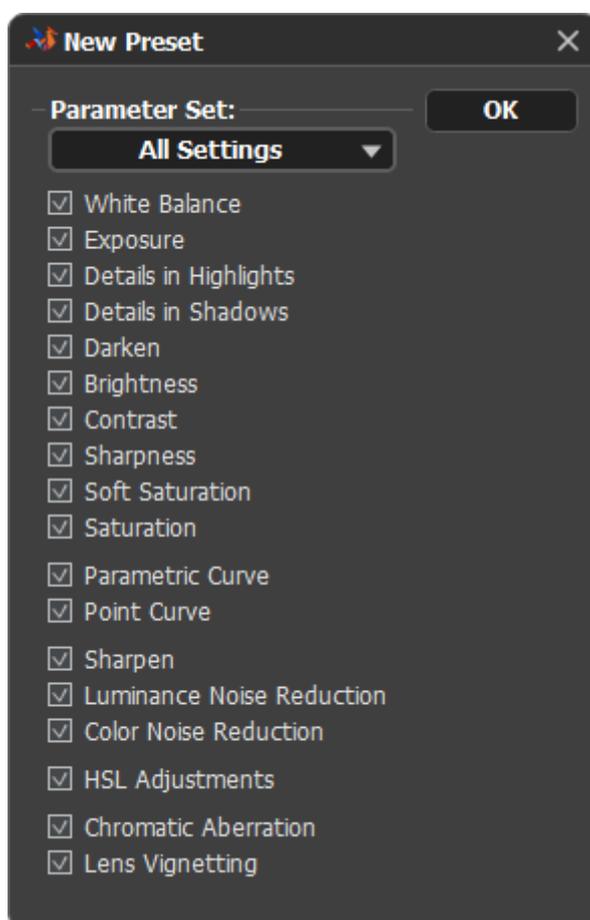
PRESETS

You can save the settings as a preset and reuse them for processing other RAW files. You can use the settings of one tab or several tabs for creating a preset.

Find all available presets in the drop-down **Presets** list.

If you modify any settings, the preset name automatically changes to **Custom**, and the **Save Custom Preset** button ✚ appears next to the list. Click ✚ to save the current settings.

A new preset is automatically assigned a name that can be changed by entering any combination of letters and numbers in the highlighted field. Press the `Enter` key in the name edit mode (while the cursor there is in the preset name field). This will open the **New Preset** dialog where you can adjust the parameters for the preset.

Select the parameters that will be recorded in the preset: either all settings or parameters of a certain tab.

You can also manually enable the check-boxes next to the names of the desired parameters or groups of parameters. The values of the selected parameters will be recorded in the preset.

Click **OK** to save the preset.

Attention! When you select a preset, the values of the parameters that were not recorded in the preset will be reset to default values.

Click ⬇ to export your presets to a *.presets* file.

To load the file with the presets into the program, press on ⬆.

To remove your preset, select it from the list and click 🗑.