Akvis NoiseBuster
Noise Reduction Software
akvis.com
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AKVIS NOISE BUSTER 11.0 | DIGITAL NOISE REDUCTION

No More Noise on Your Digital Pictures!

AKVIS Noise Buster is noise reduction software. It efficiently reduces noise and grain in your images.

Digital cameras opened the door to easy and entertaining photography. However, consumer digital cameras also have their drawbacks: they often produce the so-called digital noise. It can be seen as artifacts or grains that compromise the smoothness of the photo.

It is especially annoying on the skin as it makes it uneven. This kind of noise is called luminance noise. There can also be chroma (color) noise which is perceived as random red and blue pixels spoiling the color accuracy of the snap-shot.

Digital noise can be produced by a number of factors: heating of the camera sensor, long exposure shooting, small pixel size (therefore digital compact cameras generate much noisier images than digital SLRs), high ISO settings, etc.

AKVIS Noise Buster is efficient noise suppression software. It reduces both luminance and color noise on digital images without spoiling other aspects of the photo.
The automatic settings usually give a good result. If not quite satisfied, you can tweak the parameters observing the changes in real time in the **Quick Preview**. The program’s window shows **Before** and **After** images for comparison. You can switch between the windows with a click on the image.

Separate setting areas for luminance and chroma noise allow you to deal with each kind of noise in the most efficient way. For further adjustment you have a few advanced parameters at your disposal. The **histogram** displaying the noise level and noise components of the loaded image is very helpful and shows which settings to adjust.

With **AKVIS Noise Buster** your photos look neat and accomplished!
The software offers **Batch Processing** support that lets you automatically convert a series of images. It is useful when dealing with a lot of photos taken under the same conditions with identical camera settings. It saves you time and effort.

The program is equally useful both for *professional* and *home* users.

**AKVIS Noise Buster** is available in **two editions**: as a *standalone* application and as a *plugin* to a photo editor: AliveColors, Adobe Photoshop, Photoshop Elements, Corel PaintShop Pro, PhotoImpact, etc.
INSTALLATION

Follow the instructions to install **AKVIS Noise Buster** in Windows.

- Start the setup **exe** file.
- Select your language and press the **OK** button to launch the installation process.
- To continue the installation process you have to read and accept the **License Agreement**.

Activate the check box "**I accept the terms in the license agreement**", and press **Next**.

![](akvis_noisebuster_06.png)

- To install the **Plugin** you should select your photo editor(s) from the list.

To install the **Standalone version**, make sure that the check-box **Standalone** is activated. To create a shortcut for the program on desktop, activate the component **Shortcut on Desktop**.

Press the button **Next**.

![](akvis_noisebuster_07.png)

- Press the button **Install**.
The installation is in progress.

The installation is completed.

You can subscribe to the AKVIS Newsletter to be informed about updates and events.
• Press **Finish** to exit Setup.

After installation of the **standalone** version of Noise Buster, you will see a new line in the **Start** menu: **AKVIS - Noise Buster** and a shortcut on desktop, if during installation the component **Shortcut on Desktop** was enabled.

After installation of the Noise Buster **plugin** you will see a new item in the Filter/Effects menu of your photo editor. For example in Photoshop: **Filter -> AKVIS -> Noise Buster**. Please use this command to launch the plugin in the editor.
INSTALLATION

Follow the instructions to install AKVIS Noise Buster in a Mac computer:

- Open the virtual disk dmg:
  
  - akvis-noise-buster-app.dmg to install the Standalone version
  
  - akvis-noise-buster-plugin.dmg to install the Plugin to your image editor (Photoshop or Photoshop Elements).

- Read the License Agreement and press Agree, if you agree with the conditions.

- Finder will open with AKVIS Noise Buster application or AKVIS Noise Buster PlugIn inside.

- To install the Standalone version just drag the AKVIS Noise Buster application into the folder Applications (or any other place you like).

To install the Plugin drag the entire AKVIS Noise Buster PlugIn folder into the Plug-Ins folder of your graphic editor.

For example:
if you use **Photoshop CC 2019, CC 2018, CC 2017, CC 2015.5**, copy the plugin into
Library/Application Support/Adobe/Plug-Ins/CC;

if you use **Photoshop CC 2015**, copy it into Applications/Adobe Photoshop CC 2015/Plug-ins;

if you use **Photoshop CS6**, copy it into Applications/Adobe Photoshop CS6/Plug-ins.

After installation of the plugin, you will see a new item in the Filter menu of your photo editor. In Photoshop select in menu: **Filter -> AKVIS -> Noise Buster**.

Run the standalone app by double-clicking on its icon in Finder.
HOW TO ACTIVATE AKVIS SOFTWARE

Attention! During the activation process your computer must be connected to Internet.

If it is not possible, we offer you an alternative way (see below for Offline Activation).

Download AKVIS Noise Buster and install the program. Read the Installation Instruction here.

When you run the unregistered version, a splash window will appear displaying general information about the version and the number of days left in your trial period.

You can also open the About the Program window by pressing the button in the program’s Control Panel.

Click on TRY IT to evaluate the software. A new window will appear with variants of licenses to test.

You do not need to register the trial version to try all features of the software. Just use the program during the evaluation time (10 days after the 1st start).

During the test period you can try all options and choose the license you like. Select one of the offered functionality types: Home (Plugin or Standalone), Home Deluxe, or Business. Your choice of license will affect which features will be available in the program. Consult the comparison table for more details about license types and versions of the software.

If the trial period has expired, the TRY IT button is disabled.

Click on BUY NOW to choose a license to order.

When the payment is effected, your serial number for the program will be sent to you within minutes.
Click on **ACTIVATE** to start the activation process.

![AKVIS Noise Buster Activation Screen]

Enter your name (the program will be registered to this name).

Enter your serial number (your license key).

Choose the method of activation — either direct connection to the activation server or by e-mail.

**Direct connection:**

We recommend activating the program using direct connection, as it is the easiest way.

At this step your computer must be connected to Internet.

Press **ACTIVATE**.

Your registration is completed!

**Request by e-mail:**

In case you have chosen activation by e-mail, a message with all necessary information will be created by the program.

**NOTE:** You can also use this method for **Offline Activation**:

If your computer is not connected to Internet, transfer the activation message to a computer connected to Internet, for example, with a USB stick. Send us this information to: activate@akvis.com.

**Please do not send the screenshot!** Just copy the text and save it.

We need your serial number for the software, your name, and HardwareID (HWID) of your computer.

We will generate your license file (**Noise Buster.lic**) using this information and will send it to your e-mail address.

Save the *.lic* file (do not open it!) to your computer where you want to register the software, in the **AKVIS** folder in Users’ Shared (Public) Documents:

- **Windows Vista/7/8/10:**
Your registration is completed!

When the program is registered, **BUY NOW** turns to **UPGRADE** that lets you improve your license (for example, change **Home** to **Home Deluxe** or **Business**).
AKVIS Noise Buster can work independently as a standalone program as well as a plug-in to a photo editor.

- **Standalone** is an independent program; you can open it by clicking on the program’s icon.

  To launch the standalone version, run the program directly:
  
  On a **Windows** computer - select it from the **Start** menu or use the program’s shortcut.
  
  On a **Mac** computer - launch the app from the **Applications** folder.

- **Plugin** is an add-on for a photo editor, for example for Photoshop.

  To call the plugin, select it from filters of your image editing program.

The **AKVIS Noise Buster**'s workspace looks like this:

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**Features of the Workspace:**

Most of the **AKVIS Noise Buster** workspace is taken by the **Image Window** with two tabs: **Before** and **After**. In the **Before** tab the original image is shown, while in the **After** tab you can see the result. You can compare the original image with the result by just left-clicking on any point of the image.

Note that if **After** tab is pressed, it initiates image processing with the current settings.

You can select how **Image Window** and **Before/After** tabs will be shown by adjusting the **View Modes** in the bottom part of the left panel.
In the upper part of the window you can see the Control Panel.

The button opens the home page of AKVIS Noise Buster.
The button (only in the standalone version) allows opening an image for processing.

Right mouse click on this button displays the list of recent files. You can change the number of recent documents in the program’s Preferences.

The button (only in the standalone version) allows saving image to the disk.
The button (only in the standalone version) allows printing the image.
The button lets posting pictures from the program to the social networks.

The button (only in the standalone version) opens the Batch Processing dialog to automatically process a series of images.
The button cancels the last action. If it is pressed multiple times, it will cancel several previous actions. This can also be activated with the keyboard, by pressing Ctrl+Z on Windows, ⌘+Z on Mac.
The button restores an action cancelled by .
The button launches filtration of the entire image. Before you press this button the filtration result is shown only in the preview area.
The button (only in the plugin version) allows applying the filtration result to the image and closes the AKVIS Noise Buster window.
The button allows calling information about the program.
The button is designed to call the Help files of the program.
The button calls the Preferences dialog box for changing the program’s options.
The button opens a window showing the latest news about Noise Buster.

To the left of the main window there is the Toolbar. The tools’ parameters are shown in a pop-up box after right-clicking in the image.

**Pre-Processing Tools** (in the Before tab):
The button switches on/off the Quick Preview area (more about the preview).
The button (only in the standalone version) activates the Crop tool which allows cutting off unwanted areas in the image.

**Post-Processing Tools** (available in the After tab):
**Attention!** If you switch to the Before tab and run the image processing again, the changes made with these tools will be lost!
The button activates the Smudge tool which helps to refine the image by removing unwanted irregularities.
The button activates the **History Brush** tool which restores areas to their original state.

The button activates the **Smart Blur** tool which smoothes out grain and noise while preserving outlines and details. It is available only under **Home Deluxe and Business** licenses.

The tools' parameters:

- **Size** affects the tool's diameter.
- **Hardness** affects the blurriness of the tools edges. The lower the value the more blurry the tool's edges become.
- **Strength** affects the force of the tool applied to the image.

**Additional Tools:**

The button activates the **Hand** tool, which allows you to scroll the image when it does not fit within **Image Window** at the desired scale. To use it click on the button, bring the cursor over the image, and while keeping the left mouse button pressed move in the desired direction.

Double-clicking on the tool's icon on the **Toolbar** makes the image fit the **Image Window**.

The button activates the **Zoom** tool, which changes the image's scale. To zoom in left click on the image. To zoom out right click on the image. Press `Z` to quickly access the tool.

Double-clicking on the tool's icon on the **Toolbar** makes the image scale to 100% (actual size).

Moving and scaling the image is done in the **Navigator**. In the **Navigator** you can see the reduced copy of the image. A frame surrounds the part of the image visible in the **Image Window**; the area outside of the frame will be shaded. The frame can be dragged to display a different part of the image. To move the frame, bring the cursor inside the frame, press the left mouse button and while keeping it pressed, drag the cursor.

Additionally, you can move the image in the **Image Window** with the scroll bars or by holding down the space bar, then holding down the left mouse button while moving the mouse. The mouse's scroll wheel can move the image up and down, and holding `Ctrl` (`⌘` in Mac) – while using the scroll wheel will move the image left and right. Holding `Alt` (`Option` in Mac) will scale the image. Right-click on the scroll bar to activate the quick navigation menu.

Use the buttons `+` and `-`, as well as the slider to scale the image in the **Image Window**. By clicking on `+` or by moving the slider to the right, you scale up the image; by clicking on `-` or by moving the slider to the left, you scale down the image in the **Image Window**.

It is also possible to enter a new scale coefficient into the appropriate field. Frequently used scale coefficients can be found in a fall-down menu.

You can also scale the image using hot-keys: `+` and `Ctrl` `+` `+` (`⌘` `+` `+` on Mac) to scale up the image, `−` and `Ctrl` `+` `−` (`⌘` `+` `−` on Mac) to scale down the image.
In the **Settings Panel** you can see parameters for manual adjustment.

In the **Presets** field you can save favorite settings as a preset to use them in the future. The current settings can be saved, edited, deleted. When you launch the program, it uses the "Auto Filtering" preset.

Under the **Settings Panel** you can see **Hints** for the parameters and buttons when you hover over them with the cursor.
At the bottom of the Toolbar of AKVIS Noise Buster, there are three buttons which let you choose how the Image Window will look like and arrange the Before and After tabs.

- Click the first button to open a submenu that contains various options for viewing the original and processed images:
  - The button provides the standard image window mode with two tabs: Before and After.
  - The buttons and divide the main window into two parts, vertically or horizontally, respectively. The original and processed images become partially visible and the tabs are combined to form the whole picture.

With this arrangement, it’s possible to drag the splitter changing the aspect ratio between the Before and After parts.

- The buttons and split the main window into two parts, vertically or horizontally, as well. However, in contrast to the previous option, the windows display the same fragment of the image before and after processing.
Note: Use two windows side by side when you want to see and compare the original and processed versions of an image fragment on one screen. If you would rather see the final image as a whole, you can choose the standard image view mode.

- The button swaps the positions of the original image and result when displaying two windows.
- The 3rd button lets you choose the background color of the Image Window. Pressing , , or changes the background color to white, gray, or black, while clicking on opens the Select Color dialog where you can choose a color of your choice.
HOW IT WORKS

**AKVIS Noise Buster** reduces both *luminance* and *color noise* on images without spoiling other aspects of the photo. The software can work independently as a *standalone* program and as a *plugin* to a photo editor.

Compare the fragment below before and after filtration with **AKVIS Noise Buster**.

Follow the instructions below to reduce noise on a picture using **AKVIS Noise Buster**.

**Step 1.** Open an image.

- If you work with the standalone edition:

  The dialog box **Select File to Open** appears if you double-click on the empty workspace of the program or if you click on the button on the **Control Panel**. You can also drag the required image into the workspace of the program. The program supports images in the JPEG, TIFF, BMP, PNG, and RAW formats (CRW, NEF, ORF, PEF etc - see the full list here). You can also drag the required image into the workspace of the program.

- If you work with the plugin:

  Open an image in your photo editor by calling the command **File -> Open** or using the key combination **Ctrl+O** (or **⌘+O** on Mac).

Call the **AKVIS Noise Buster** plugin in the Filter/Effects menu of the photo editor:

- in **AliveColors**: Effects -> AKVIS -> Noise Buster;
- in **Adobe Photoshop**: Filter -> AKVIS -> Noise Buster;
- in **Corel PaintShop Pro**: Effects -> Plugins -> AKVIS -> Noise Buster;
- in **Corel Photo-Paint**: Effects -> AKVIS -> Noise Buster.
Step 2. Once the program is open, it will begin processing the image using the default settings (the Automatic Filtering preset).

Auto Filtering automatically chooses the best settings for particular kinds of noise by adjusting 4 noise suppression parameters.

The result of the filtration will be shown in the Quick Preview area in the Before tab. It is represented by a dotted frame. You can drag the frame or draw it anew on any part of the image, thus analyzing parts of the photo.

You can compare the filtered result with the original image by clicking in the preview area.

It's possible to change the size of the quick preview area in the program's Preferences.
Step 3. If the result of automatic filtration is not wholly satisfying you can adjust the effect parameters to achieve the best result.

The task of noise reduction is to find the golden mean between suppressing noise and keeping detail. Besides, it is important to take into account the psychological characteristics of visual perception: when comparing the original and the filtered photo pay your attention not only to details but to the overall impression as well. A certain amount of noise does not necessarily spoil a picture, while some smoothness of a photo may add to the visual effect (especially in portrait retouching where it is not desirable to see the skin structure in detail).

Step 4. To process the entire image, press the button . Filtering of the entire image also starts when the After tab is pressed.

After processing it is possible to switch between Before/After tabs by pressing the left mouse button anywhere in the image window.
Step 5. You can also use the post-processing tools in the After tab: Smudge, History Brush and Smart Blur.

Attention! If you change the parameters and run the image processing again, the changes made with these tools will be lost.

The Smudge tool helps to refine the image by removing unwanted irregularities.

The History Brush tool restores areas to their original state.

The Smart Blur tool smooths out grain and noise while preserving outlines and fine details. It is available only under Home Deluxe and Business licenses.

Step 6. It is possible to save the settings you like as a preset and use them in the future. The presets are also helpful when working in the batch processing mode.

To save a preset, enter a name for the preset into the Presets field and press the button Save. If you change the values of the parameters, you can always come back to the default settings of the preset by pressing the button Reset.

To delete a preset, select it from the list and press Delete.

To process an image with the settings of a certain preset, you should select it from the drop-down menu and press the button.

Step 7. You can share your images by clicking on . It lets you publish the picture from the program to the social networks.

In the standalone version you can also print your image with .

Step 8. Save the processed image.

- If you work with the standalone edition:
Click on the button ⏯️ to open the Save as dialog box. Enter a name for the file, choose the format (TIFF, BMP, JPEG or PNG) and indicate the target folder.

- If you work with the plugin:

To apply the result to the image and close the plug-in’s window, press the button ✓.

Call the Save As dialog box using the command File -> Save As, enter a name for the file, choose the format and indicate the target folder.
**NOISE REDUCTION**

**AKVIS Noise Buster** allows you to remove both luminance and color noise from your digital photographs.

![Noise Removal](image)

Noise on any color picture can be divided into: **luminance noise** and **color noise**. Luminance noise is perceived as dark dots or small blots, color noise represents color spots on areas having a different color. Another name for color noise is chroma noise.

The **Histogram** below the **Settings** is a graphical depiction of the noise level and noise components of the original picture. The gray area shows the **luminance noise**; the red area shows the **color noise**. The more the histogram is shifted to the right, the higher the noise level is. And vice versa, if the histogram is shifted to the left, the image has a low noise level. The height of the histogram displays the number of pixels having this noise level.

When adjusting the parameters, pay attention to the **right part of the histogram**, as it shows the amount of highly noised pixels. The amount of pixels in the left part shows low noised pixels that are a part of the picture, its natural background.

![Image Noise Histogram](image)

**Note:** On a **grayscale** photo there is no color component and therefore no color noise. To suppress noise on a grayscale photo it is enough to regulate the parameters of the **Luminance Noise**.

**Attention!** The **Histogram** is only a **graphic representation** of the picture’s noise level. It **does not change** as you change the settings. The histogram helps you estimate the noise level and decide what parameters should be adjusted.

On the **Settings Panel**, adjust the effect parameters:
**Fade** (0-100%). This parameter sets the mixing ratio of the filtered image and the original. At 100% all elements of the photo defined as noise are smoothed in accordance with the value of the parameter **Smooth Level**. As you move the slider to the left (i.e. reduce the value of the parameter), the original image noise mixes into the filtered image; at 0% there is no filtration at all. In most cases a certain amount of original noise adds to the natural look of an image and allows restoring small details.

![Fade = 10%](image1.png)  ![Fade = 90%](image2.png)

**Quality** (1-20). The parameter reduces the number of color spots but significantly increases the processing time.

![Quality = 3](image3.png)  ![Quality = 10](image4.png)

**Noise Level** (0-100). The parameter defines which elements of the image are to be considered noise (luminance or color) and which are to be considered important details. At high value of the parameter small details can be defined as noise and, therefore, be smoothed.

![Noise Level = 0](image5.png)  ![Noise Level = 100](image6.png)
**Smooth Level** (0-100). The parameter sets the extent to which the elements defined as noise should be smoothed. The higher the parameter, the smoother the filtration result. However, at high values of the parameter, an image can lose detail and look flat. High values of the parameter **Smooth Level** for color noise can produce an alteration of colors and loss of small color details.

![Smooth Level = 20](image1) ![Smooth Level = 100](image2)

**Improve Detail** Parameter Group:

**Microdetail** (0-100). The parameter restores small details on the image. The default value usually offers a satisfactory result, but it is possible to increase the value of the parameter to improve sharpness.

![Microdetail = 10](image3) ![Microdetail = 80](image4)

**Edge Intensity** (0-100). The parameter makes the edges and borders more visible without revealing noise. The higher the value, the stronger the effect - the edges become clear and well-defined.

![Edge Intensity = 0](image5) ![Edge Intensity = 100](image6)

**Sharpness** (0-100). The parameter changes the contrast of adjacent pixels. Use this parameter carefully, it can return digital noise to the image.
Remove Moiré Check-Box. Use this mode to reduce unwanted moiré patterns and remove halftone from scanned newspaper photos. The degree of smoothing is regulated by the Blur parameter.

Note: The Remove Moiré check-box and the Blur parameter are available only for Home Deluxe and Business licenses.
AKVIS Noise Buster supports **batch processing** that lets you automatically process a series of images and saves you time and effort. It is useful when dealing with a lot of photos taken under the same conditions with identical camera settings.

Even if you've never used this feature before it is simple to learn!

If you use the standalone version of **AKVIS Noise Buster**, read the instructions here.

If you use the **Noise Buster** plugin in Photoshop, use this tutorial.
The button opens the Preferences dialog box. It looks like this:

- **Language.** Change the program language by selecting another from the drop-down list.
- **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.
- **Interface Theme.** Select the style of the program interface: Light, Gray or Dark.
- **Preview Window Size.** Choose the desired value of the size of the quick preview area. It can have values from 200x200 to 1000x1000 pixels.
- **Initial Image Scale.** This parameter defines the way the image is scaled in the Image Window after opening. The parameter can take one of two values:
  - image scaling Fit to View. The scale adjusts so that the image will be completely visible in the Image Window;
  - if the option 100% is checked, image doesn’t scale. Generally, when the scale = 100%, only part of the image will be visible.
- **Hints Panel.** When you hover over parameters and buttons with the cursor you can see a brief description of them in the Hints field. You can choose how the hints will be shown:
  - Under Image Window. It shows the hints in the main window, under the image. This mode is useful if there is not enough space by height to display this field under the settings;
  - Under Settings Panel. Select this to show hints at the bottom of the right part, under the settings;
  - Hide. Use this option if you do not need the hints.
- **Recent Files** (only in the standalone version). The number of recent documents. The list of the recent files, sorted by time, become visible by right mouse clicking on . Maximum: 30 files.
- **Use OS File Dialog** check-box (only in the standalone version). You can check this option if you want to use the System Open/Save Dialog. By default, the AKVIS File Dialog is used.
- **Lock the Control Panel** check-box. It disables the possibility to hide/show the top panel. If the check-box is enabled the panel is always visible. Uncheck the option to unlock the panel, and you will be able to hide/show it by clicking on the small triangle button (in the middle of the panel). The minimized panel will be shown when moving the cursor over it.
- **Use GPU.** The check-box lets you turn on GPU acceleration and significantly speed up the noise suppression filtering. If your computer does not support GPU acceleration the check-box will be
disabled.

To save changes made in the Preferences window press OK.

If you need, click on the button Default to come back the default settings.
PRINT IMAGES IN AKVIS NOISE BUSTER

In the standalone version of AKVIS Noise Buster you can print the image. Press the button \( \text{Print} \) to open the Print options.

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

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 access the advanced settings and send the document to print.
Shooting with a good camera does not necessarily spare you from trouble with noise. If lighting is insufficient for the sensor you can often see color noise in your photos. Color (chroma) noise is perceived as random color dots spoiling the color accuracy of a snap-shot.

Below is a fragment of the image: on the left - before filtration, on the right - after the color noise suppression.

The following photo illustrates color noise.

If we scale up the image we will clearly see color noise. Do you see these color blots on the cat’s hair?
Step 1. Open the photo in **AKVIS Noise Buster**.

**Auto Filtering** will be applied automatically.

The result of the filtration will be shown in the **Before** tab in the preview area. To evaluate the accuracy of filtering, you can drag the preview frame to see any other part of the photo processed, or just draw the preview area anew on any part of the image.

Step 2. As a result the color noise is completely suppressed. Now we can also see some luminance noise. It’s up to you to decide to reduce it or not.

To apply the filtration settings to the whole image press the button.
**Step 3.** To save the result press the button.
Digital noise can appear even on professional photos made with high quality cameras, for example, if you use high ISO settings. Noise Buster suppresses both luminance and color noise on digital images.

The following photo has been taken with digital camera **NIKON E5700** at ISO 400.

On the reduced copy noise is not visible, but if we scale up the photo to 100% or more it will become manifest: we can see luminance noise on the red background and color noise (red and violet blots) on the pet's hair.
Most likely the noise was caused by high sensitivity settings for the camera sensor.

**Step 1.** To reduce noise in the photo open the image in **AKVIS Noise Buster** using the button.

Once the program has opened, filtering of the image will begin automatically. The result will be displayed in the **After** tab.

![Image of AKVIS Noise Buster interface](image)

**Step 2.** To filter the image further we use the settings displayed in the image below:

![Image of AKVIS Noise Buster interface with settings](image)
Step 3. The filtration result will be shown in the preview area. To apply the filtration settings to the whole image press the button.

If you are happy with the result press the button to save the image to a file.

Below is an image fragment: on the left - before the filtration, on the right - after the filtration with the above-mentioned settings.
**REMOVE MOIRE ON SCANS**

Images in print media represent a series of overlapping dots that should create an illusion of more colors. When you scan such a photo you can usually discover a moire pattern. A moire pattern results from incorrect screen angles of overprinting halftones.

You can try to avoid moire at the scanning stage. Sometimes a well-chosen scan angle can produce a remarkable effect. However, if you deal with a scanned image you have only one method of the moire suppression at your disposal - apply image processing techniques.

On the photo below you can see a scan of a music CD cover. Moire is visible.

![Original Image](image1.jpg) ![Result](image2.jpg)

**Step 1.** Open this fragment of the scanned cover in **AKVIS Noise Buster** with the button.

**Noise Buster** will process the image using the **Automatic Filtering** preset from the list of presets. The program will analyse the noise on the whole image, create histograms for the noise, and offer settings for the parameters **Noise Level** and **Smooth Level** for every noise type.
Step 2. In this case, when the noise is not regularly spread over the surface but represents visible squares, it’s better to increase the value of the parameter **Smooth Level** (luminance noise).

Step 3. If the result in the preview area is good, press the button to apply the filtering to the whole image. Then save the image by pressing the button.
**COVER GIRL**

**AKVIS Noise Buster** can be helpful not only for enhancement of "noisy" images but for improving the quality of snapshots as well. You can apply it to portraits to smooth the skin of a model.

In professional portrait photography they often use special softening filters that smooth small wrinkles and mask minor skin defects.

![Original Image](image1)
![Result](image2)

*Click on the images to open larger variants*

At first glance the photo seems pretty good. However, if we increase the scale of the image we can see unevenness of the skin that spoils the impression from the snapshot.

![Original Image](image3)

**AKVIS Noise Buster** will help us to smooth the skin and create a "cover-girl" effect.
AKVIS Noise Buster is available as a standalone program or a plug-in. We will use the standalone version.

**Step 1.** First we open the image in **AKVIS Noise Buster** with the button.

**Noise Buster** will process the image using the **Automatic Filtering** preset from the list of presets. The result is good, but we can increase the value of **Sharpness** to minimize blurring of the hair.

**Step 2.** We are satisfied with the result of filtering in the preview area and apply it to the whole image with the button.
Step 3. Finally, we press the button to save the image.

Pay attention to the girl's skin, now it is smooth and even!

This photo could be published in a fashion magazine.
AKVIS PROGRAMS

**AKVIS AirBrush — Airbrushing Techniques on Your Photos**

(Windows | Mac)

**AKVIS AirBrush** automatically transforms a photograph into a work of art which looks like made with a special airbrush tool that sprays paints or inks. The software works as an artistic filter creating stylish colorful airbrush designs from images using chosen settings of photo-to-painting conversion. More...

![Polar Bear Comparison](image1.png)

**AKVIS ArtSuite — Frames and Effects for Your Photos**

(Windows | Mac)

**AKVIS ArtSuite** is an impressive collection of versatile frames and effects for photos. ArtSuite contains many templates and texture samples that can be used to create a virtually limitless variety of options for generating frames. Decorate a photo to give it an original and festive look! More...
AKVIS ArtWork — Collection of Painting & Drawing Techniques

(Windows | Mac)

AKVIS ArtWork is photo to painting software designed to imitate different painting techniques - Oil Painting, Watercolor, Gouache, Comics, Pen & Ink, Linocut, Pastel, and Pointillism. ArtWork helps you to create a piece of art out of any picture! More...
**AKVIS Chameleon — Photo Collage Creation**

*(Windows | Mac)*

**AKVIS Chameleon** is a fun to use tool for photo collage creation. It makes the process easy and entertaining. The tool is very easy to handle as it does not require precise selection of objects. Using the software you can quickly create your own photo collages. More...

![Photo Collage Creation](image)

**AKVIS Charcoal — Charcoal & Chalk Drawings**

*(Windows | Mac)*

**AKVIS Charcoal** is a creative tool for conversion of photos into charcoal and chalk drawings. Using the program you can make professional-looking expressive black and white images. Playing with colors and options you can achieve outstanding artistic effects, such as sanguine and others. More...

![Charcoal & Chalk Drawings](image)

**AKVIS Coloriage — Add Color to Black and White Photos**

*(Windows | Mac)*

**AKVIS Coloriage** allows colorizing B&W photos and replacing colors in color images, performing selective colorization and desaturation. It helps to breathe new life into your old family photographs, bring a vintage or artistic appearance to your digital images. More...

![Add Color to Black and White Photos](image)
AKVIS Decorator — Resurface and Recolor
(Windows | Mac)

AKVIS Decorator lets you change the surface of an object in a realistic manner. The program puts on a texture keeping the volume of an object, following its folds and creases. The new pattern looks absolutely natural and makes you see things differently. Recoloring is also made easy. More...

AKVIS Draw — Hand-made Pencil Drawing Effect
(Windows | Mac)

AKVIS Draw converts your photos into hand made pencil drawings. The software creates realistic looking line art illustrations, produces both B&W and color drawings. Add a hand-drawn look to your pictures! More...
AKVIS Enhancer — Bring Detail To Your Pictures
(Windows | Mac)

AKVIS Enhancer is image enhancement software that detects detail in underexposed, overexposed and mid tone areas of a photo with uneven exposure. Enhancer improves every part of the image! The software works in three modes: Improve Detail, Prepress, and Tone Correction. The program offers a fast method to fix a dark photo, add contrast and brightness to a picture, it lets you improve color and adjust tones. More...

AKVIS Explosion — Fabulous Particle Explosion Effects
(Windows | Mac)

More...

AKVIS Frames — Decorate Your Photos with Frames
(Windows | Mac)

AKVIS Frames is free software designed for working with the AKVIS frame packs

AKVIS HDRFactory — High Dynamic Range Images: Brighter than Reality!
(Windows | Mac)

AKVIS HDRFactory lets you create a High Dynamic Range image from a series of shots or from one single photo. The program can also be used for photo correction. The program brings life and color to your photos! More...
AKVIS LightShop — Light and Star Effects

(Windows | Mac)

AKVIS LightShop lets you create an infinite number of astounding light effects! The program offers advanced lighting techniques for adding stars and glow effects to images. A light effect draws attention and brighten up any photo. Add a little magic to your pictures! More...

AKVIS Magnifier — Change Image Size without Quality Loss

(Windows | Mac)

AKVIS Magnifier helps to resize images without loss in quality. Whether creating poster-size images, adding resolution for printing an enlargement, or reducing image size, Magnifier will make your prints look sharper and better defined. More...
AKVIS MakeUp — Retouch Your Portrait Photos!
(Windows | Mac)

AKVIS MakeUp improves your portraits giving them a professional look. The software retouches facial imperfections making your skin radiant, beautiful, pure and even. The program adds glamour to your pictures and creates a high key effect. Look your best in every photo with AKVIS MakeUp! More...

AKVIS Noise Buster

AKVIS NatureArt — Bring Nature to Your Photos
(Windows | Mac)

AKVIS NatureArt is an excellent tool for imitating the magnificence of natural phenomena on your photos. The program includes a number of effects: Rain
AKVIS Neon — Glowing Drawings from Photos

(Windows | Mac)

**AKVIS Neon** lets you create amazing glowing lines effects. The software transforms a photo into a neon image that looks like drawn with luminescent ink. [More...](#)

AKVIS Noise Buster — Digital Noise Reduction

(Windows | Mac)

**AKVIS Noise Buster** is software for noise suppression on digital and scanned images. Digital noise can be
seen as artifacts and random red and blue pixels that compromise the smoothness of a photo. The program is efficient against both color and luminance noise. More...

AKVIS OilPaint — Oil Painting Effect

(Windows | Mac)

AKVIS OilPaint turns your photos into oil paintings. The mysterious production of a painting happens right before your eyes. The unique algorithm authentically reproduces the technique of the real brush. With this cutting-edge software you can become a painter! More...

AKVIS Pastel — Turn Photos into Pastel Paintings

(Windows | Mac)

AKVIS Pastel turns your photos into pastel paintings. The program converts your photo into a lifelike digital art imitating one of the most popular artistic techniques. AKVIS Pastel is a powerful tool to unleash your creativity! More...
**AKVIS Points — Apply Pointillism Effect to Your Photos**

(Windows | Mac)

**AKVIS Points** lets you transform your photos into paintings using one of the most exciting artistic techniques - pointillism. With the software you can easily create gorgeous works of art in a pointillist manner. Discover the world of bright colors! More...

**AKVIS Refocus — Focus Improvement & Blur Effects**

(Windows | Mac)

**AKVIS Refocus** improves sharpness of out of focus photos, enhances the entire image or partially, creating selectively focused area. It's also possible to add bokeh and lens blur effects to your photos. The program provides five image processing modes: *Refocus, Tilt-Shift, Iris Blur, Motion Blur, and Radial Blur*. More...
AKVIS Retoucher — Image Restoration Software
(Windows | Mac)

AKVIS Retoucher is an efficient program for photo restoration and photo retouching. The software removes dust, scratches, stains, and other defects that appear on damaged photos. It intelligently reconstructs the missing parts of the photo using the information of the surrounding areas. More...

AKVIS Sketch — Turn Your Photos into Pencil Sketches
(Windows | Mac)

AKVIS Sketch converts digital photos into amazing pencil drawings. The software creates realistic color artworks and B&W sketches, imitates the technique of graphite and color pencil, and even generates the charcoal, pastel, and watercolor effects. More...
**AKVIS SmartMask — Save Time on Complex Selections!**

(Windows | Mac)

*AKVIS SmartMask* is an efficient selection tool that saves time and is fun to use. Selection has never been so simple! The software considerably increases your productivity. You will be freed from boring work and will have more room for creativity and realization of your ideas. [More...](#)

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**AKVIS Watercolor — Aquarelle Art from Photos**

(Windows | Mac)

*AKVIS Watercolor* easily makes a photo look like a brilliant and vibrant watercolor painting. The software turns ordinary images into amazingly realistic aquarelle pieces of art. [More...](#)