



DEHANCER

PHOTO PLUGIN QUICK GUIDE



Dehancer Photo plugin

Quick Guide

25 Jun 2024

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Installation, configuration, and first launch

The installation, initial configuration and activation of the plug-in is described in the **Quick Setup Guide**, which is also included with the installation package, separately for each host application and OS.

Recommended color settings



Dehancer plugin for Adobe Photoshop / Lightroom Classic / Capture One currently supports source images in **sRGB IEC61966-2.1** color space (other color spaces will be supported as well in the future).

Please consider that Film Emulation usually doesn't require any gamut wider than sRGB due to the natural printed media gamut compression, therefore you won't get any theoretical or practical benefits from working in Adobe RGB or ProPhoto RGB.

It is important that the same color management is consistent throughout the entire processing and viewing pipeline.

Please follow the recommended settings:

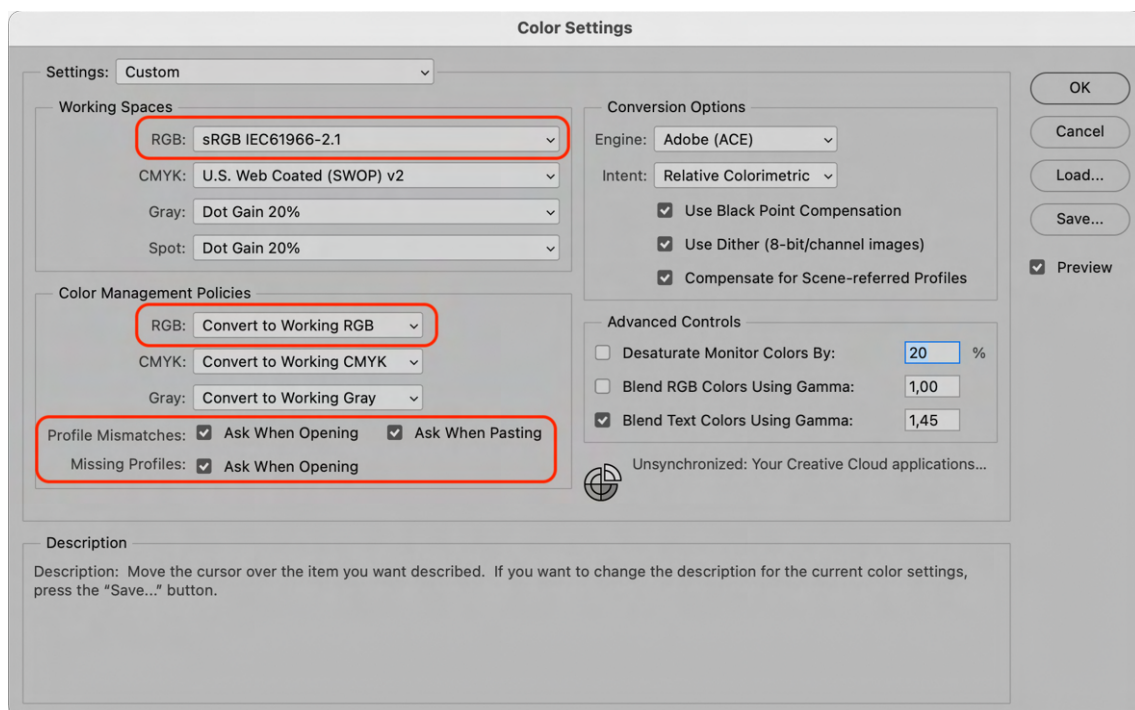
Display Setup

1. Set your display to its native **sRGB color gamut mode** if possible.
2. Use the appropriate calibration profile built especially for your display in **sRGB, Gamma 2.2** (color temperature is insignificant).

Tip: On Mac you can also use the **Internet and Web (sRGB)** reference display preset provided with your new MacBook Pro or Pro Display XDR.

Adobe Photoshop

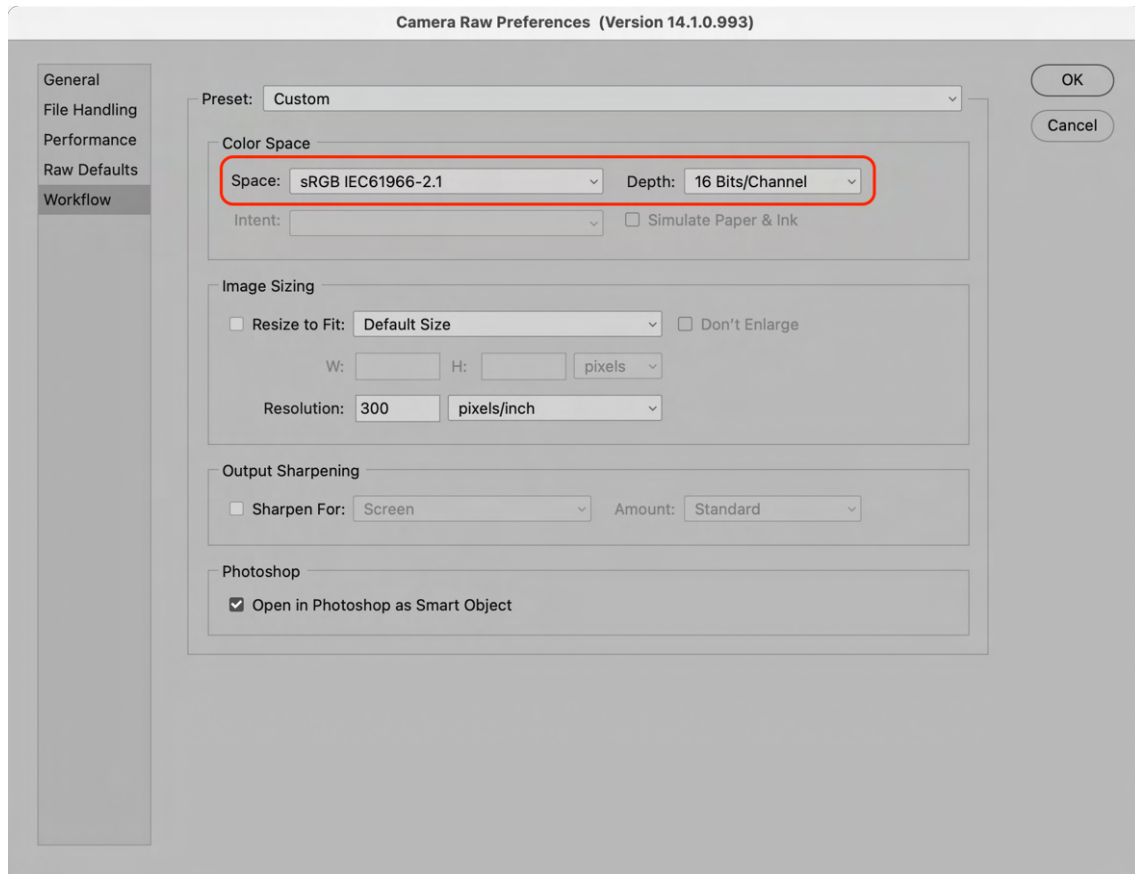
In **Photoshop**, go to **Edit → Color Settings...** and set the parameters as shown below:



- Set the working space to **sRGB IEC61966-2.1**
- In the **Color Management Policies** section, select **Convert to Working RGB** mode, and turn on the checkboxes indicated. Now, when you open the photo, the color space mismatch will be checked and a conversion to sRGB will be suggested.

Adobe Camera Raw

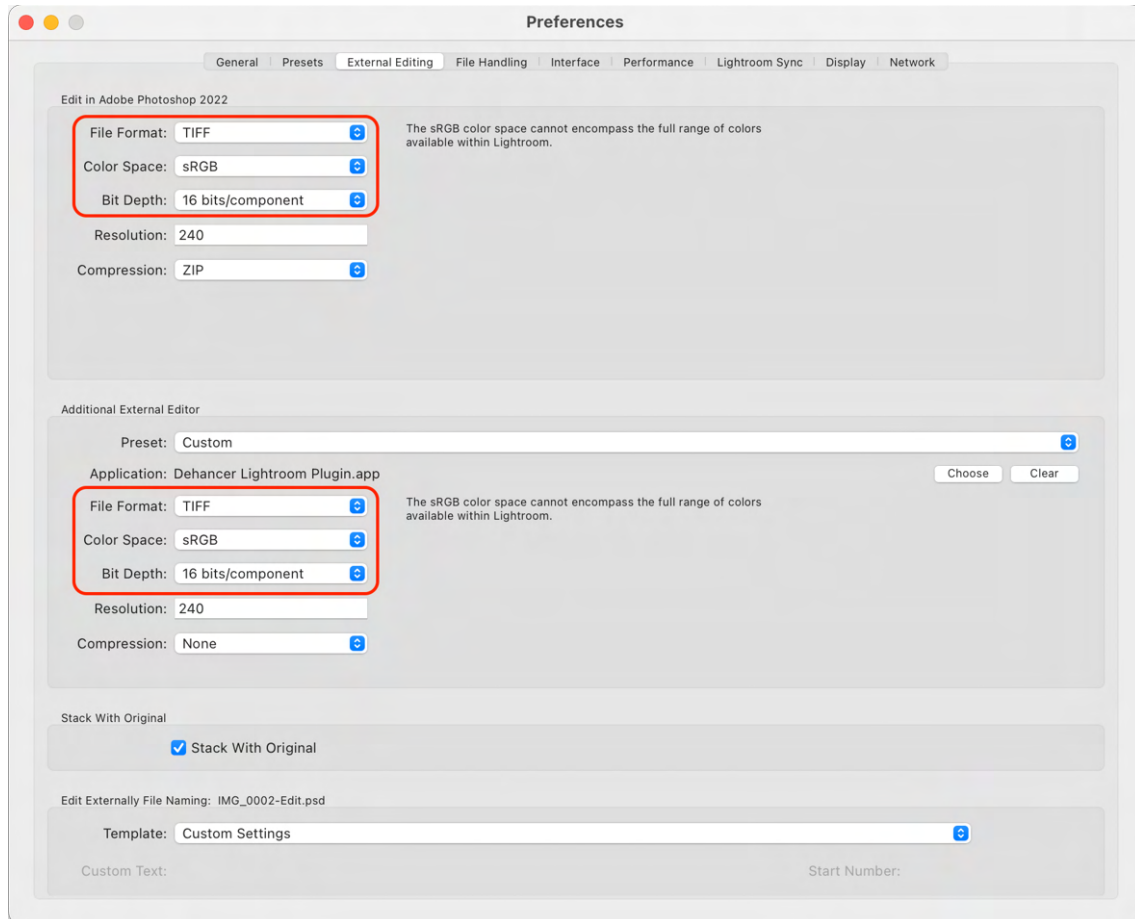
Go to **Photoshop** → **Preferences** → **Camera Raw...** and adjust the settings as shown here:



- Select the **sRGB IEC61966-2.1** color space
- Set the color depth to **16 bit**

Adobe Lightroom Classic

Check the settings in **Lightroom Classic** → **Preferences** → **External Editing**

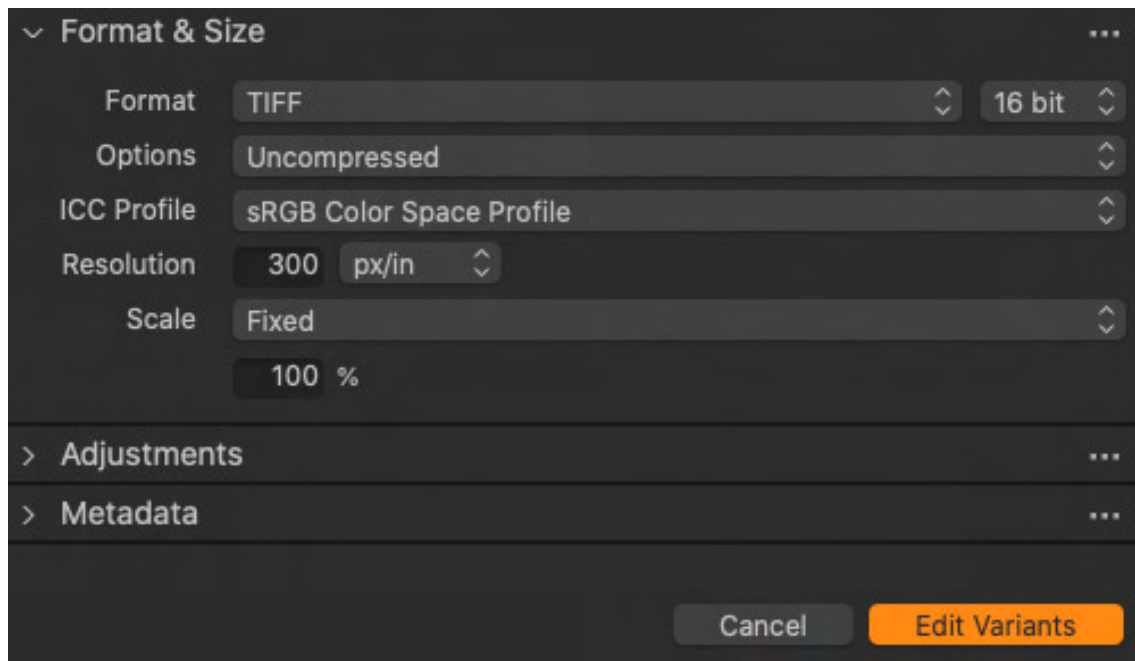


- Use **TIFF** format
- Select the **sRGB** workspace
- Set the color depth to **16 bit**

Use the same settings when exporting from Lightroom if you plan to process it later in Photoshop.

Capture One Pro

In the dialogue that follows the **Edit With...** command, select the appropriate options:



- Format: **TIFF 16 bit**
- ICC Profile: **sRGB Color Space Profile**

Recommended RAW development settings

RAW files for Dehancer can be processed with almost any software.

Photoshop / Lightroom (ACR – Adobe Camera Raw)

We have observed that color rendering in ACR / Lightroom leaves much to be desired, but an acceptable result can be obtained with the following settings:

Profile: Adobe Standard
Exposure: –1
Contrast: –40
Blacks: +60
Curve: Linear
Sharpening = 0
Noise Reduction = 0
Color Space: sRGB IEC61966-2.1
Bit Depth: 16 bit

If you are shooting with an iPhone and using **Apple ProRaw DNG**, try setting the **Amount** value for the **Apple ProRaw profile** to zero. Thus you will reduce the automatic Apple algorithms that are not always reliable (but still, sometimes acceptable). Meanwhile, we recommend setting the **Sharpening** value in the **Detail** tab to zero in order to prevent oversharpening.

Tip: In Photoshop any RAW photo can be opened with the **Open As Object** option. The smart object will be created and Dehancer plugin will be applied as a **Smart Filter**, which allows you to easily access both the RAW settings and the plugin's parameters at any time.

Capture One Pro and other RAW converters


While processing photos in Capture One Pro and other RAW converters, we recommend to:

- Correct the most severe deviations in **exposure** and **white balance**
- Use the **Linear contrast curve** if possible, avoiding clipping in shadows and highlights
- Disable noise reduction and sharpening
- Avoid any local enhancements which might cause visible halos
- Export files as **sRGB TIFF 16 bit**

Tip: Recommended RAW settings are based on the fact that technically the marketed ISO is usually overstated by camera makers, and RAW software tends to mimic the camera jpeg, rather than the real RAW exposure. Thus, the recommended -1Ev setting for Adobe products is closer to the real exposure and also gives more headroom in highlights.

Please consider that there is no ‘the one and only’ good settings, since different cameras have different RAWs and there is no standards for processing. Getting the most out of your camera always takes some experimentation.

Dehancer Plugin Settings

Hit the gear icon  in the plugin toolbar or press the **[S]** key to open Dehancer plugin Settings.

Update Film Profiles

Use this button to launch the **Profile Update widget**.

All the new or missing Film Profiles will be immediately downloaded and installed for shared usage with Ps / LrC / C1 plugins.

Activate Dehancer / License Info



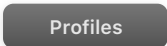











This button launches the **Activation widget** that allows to check your License status and to activate the plugin.



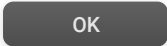





Processing GPU

If there are multiple GPUs available in your system, you can manually select the best-performing one. You can also try a different GPU in case of any specific problems with the plugin.

→ Learn:
[Dehancer Updates](#)
[How to buy and activate the License?](#)

Interface and keyboard shortcuts

 	Preview Before/After	[Space]
	Show/Hide Profiles	[Q]
	Show/Hide Presets	[W]
	Show/Hide Settings	[S]
	Show/Hide left panel	
	Reset all adjustments to their defaults	[R]
	Restore last used settings	[L]
	Undo last edit	[Z]
	Redo last edit	[Shift+Z]
	Show/Hide Levels (Histogram)	[i]
	Show/Hide Clipping indication	[U]
 	Zoom to fit / Zoom to 100%	[Double click] on the image preview

	Visit Dehancer web store	
<hr/>		
	Close Dehancer plugin window without applying any changes	[Esc]
<hr/>		
	Apply Dehancer processing	[Enter]
<hr/>		
	Add selected Film Profile to Favorites	
<hr/>		
	Delete selected Preset	[Backspace]
<hr/>		
	Create new Preset with current settings	[A]
<hr/>		
	Export selected Preset to file	
<hr/>		
	Import Preset from file	
<hr/>		
	Select next Film Profile	[↓]
<hr/>		
	Select previous Film Profile	[↑]
<hr/>		

Typical photo editing workflow

Dehancer is a versatile tool that allows a variety of approaches. However, based on our experience, we can provide an all-purpose workflow for photo processing.

1. Develop your RAW photo

Working with RAW is always the preferred option because it contains lots of useful information and, most importantly, it is free of the excessive processing that is typical of smartphone cameras in particular.

Detailed advice on processing RAW files is given in the [Recommended RAW development settings](#) chapter of this manual.

2. Adjust Source Corrections

The original image may still have some issues, which can be conveniently corrected immediately with the [Source Corrections](#) tool.

3. Choose a Film Profile and adjust the Push/Pull

Choose the [Film Profile](#) that best suits your scene. Note that you can switch between Film Profiles with the up and down arrow hotkeys.

Also, remember that the **Push/Pull** option gives you the opportunity to further adjust the profile appearance according to the film exposure.

4. Adjust the Expand settings

We recommend adjusting [Expand](#) immediately after a film profile selection. Set the black and white points to 'fit' an image into a dynamic range of your color space.

5. Configure Print options

Start by selecting [Print Medium](#), then sequentially adjust Exposure, Contrast, and other [Print settings](#).

To improve the detail at the extremes of the tonal range, you can optionally enable the [Analogue Range Limiter](#).

6. Revisit the Expand tool

Since the edits you made in the previous step can significantly affect the black and white points, it is recommended that you readjust the Expand settings.

7. Adjust the CMY Color Head

After setting the tone of the image, you can make further adjustments to the color balance. The CMY Color Head tool is perfect for this kind of fine-tuning.

8. Enable additional effects

Some salt and pepper will make the dish even better.

→ Learn:
[How to manage image contrast and avoid clipping](#)

Batch processing multiple photos

A series of photos are often edited with the same or similar settings. The most convenient way to organize the process is to use a combination of Adobe Photoshop and Dehancer Film plugin.

Last Edits

Dehancer is **automatically saving your last edits** every time you apply the processing with the 'OK' button in the plugin.

When you open the next image, you will see that the latest settings have automatically been applied to it. Even if you've changed some parameters, you can always recall the last settings by clicking the corresponding icon in the toolbar:



Also, you can click the **Last Edits preset** with the same effect.

To apply Dehancer with your last edits without opening the plugin interface, press **Ctrl+Cmd+F (macOS) / Ctrl+Alt+F (Windows)** or select Dehancer Film in the top-line of the Photoshop **Filters** menu.

Attention: The Last Settings and Last Filter are retained during the current Photoshop session and will be lost when you close the host application.

Dehancer Presets

Presets are a more reliable way to keep your favourite settings for a long-term storage.

Once you have achieved the desired result, press **A** button on the keyboard or click the appropriate icon in the Presets panel:



Tip: Presets can also be **exported** and **imported**, allowing you to share them with others or save them as a backup.

Non-destructive editing with Smart Objects and Smart Filters

When you edit a normal layer, the effects are permanent and you can't alter the plugin settings once it has been applied.

The **Smart Object** allows you to enclose the source layer in a 'container', and your corrections and effects will be applied to it, with the option to switch each filter on, off, or change settings at any time, without affecting the original image permanently. This is the main concept of the non-destructive editing.

The Smart Filter settings are stored inside the document, so they are not lost when you restart Photoshop. You just need to save the image as a PSD or TIFF file with layers.

Dehancer fully supports the Smart Filter functionality. This means that after applying the plugin to a Smart Object, you can revisit Dehancer settings at any time and make the adjustments.

To apply Dehancer as a Smart Filter:

1. Select the layer.
2. Press the right mouse button and click **Convert to Smart Object**.
3. Thereafter, Dehancer (like any other filter) will be applied automatically as a Smart Filter.

This feature can also be used to transfer settings from one photo to another. To do this, the source and target photos must be Smart Objects in the same document. Then the entire set of filters and corrections, including Dehancer, can be moved from one Smart Object to another by drag-and-drop.

Using Dehancer in Photoshop Actions

Actions allow you to record and playback any sequence of image manipulations, including filters and plugins.

Dehancer fully supports the Photoshop Actions functionality. This means that all plugin settings once recorded will be reproduced when the action is executed.

Actions can be launched manually with every photo or used in batch processing.

Tip: Dehancer settings saved in an action can be easily adjusted. To do this, open the Actions tab, find the particular action and double-click the Dehancer Film step. Dehancer window will open and now you can make adjustments. Then click OK and the action will be updated with the latest changes.

Batch processing with Actions

In Photoshop any action can be automatically applied to the opened images or even to the entire folder on your hard drive.

You can use the two built-in Photoshop tools that work in a very similar way, but have a slightly different options:

File → Automate → Batch

1. In the Play section select your pre-recorded Dehancer action.
2. As the Source you can choose a Folder or the Opened Files.
3. Select the Destination ('Save and Close' overwrites the source images, while 'Folder' saves duplicates).
4. Click 'OK' and all your photos will be processed and saved automatically.

File → Scripts → Image Processor

1. Select the images to process (choose a Folder or the Open Images).
2. Select location to save processed images ('Save in Same Location' overwrites the source images, while 'Select Folder' saves duplicates).
3. Select File Type, quality and resize options, if needed.
4. **In the Preferences section check the Run Action option and select your pre-recorded Dehancer action.**
5. Enable the Include ICC Profile option to ensure that your photos will display correctly in any application or web browser.
6. Click 'Run' and all your photos will be processed and saved automatically.

Tool Profiles

Several Dehancer tools have a drop-down list of **Tool Profiles** that makes them much easier and simpler to use.

Tool Profiles are the sets of pre-configured parameters designed to recreate the typical look of **8 mm**, **16 mm**, **35 mm** and **65 mm** films.

You will find more specific information on Tool Profiles in the dedicated tool specifications in this manual:

Film Grain

Halation

Bloom

Film Damage

Tip: In order to change the parameters of any profile, you must first select the most suitable one and then switch to **Custom** mode. All the usual effect settings will be available to you, and the parameter values will match the last selected profile.

→ Related article:
[Dehancer Tool Profiles](#)

Film Profiles, Push/Pull

Film Profiles are heart and soul of Dehancer. Each film is accurately sampled with all of its characteristics. If you are ready to bet on years of film experience – then you can simply scroll and try film profiles in the list until you get the most interesting or desired results.

Push/Pull (Ev)

All films behave differently depending on how much light they received during exposure. In Dehancer film exposure is implemented with the Push/Pull (Ev) parameter. In fact there are 3 different film exposures sampled to build each film profile in Dehancer.

As a creative tool Push/Pull allows you to vary color-contrast look of a scene within a selected film profile. Also, Push/Pull can be a good helper in clipping control, since contrast greatly depends on film exposure. With negative films it affects overall color and contrast. With positive films Push/Pull allows to set the desired slide exposure, opening blocked shadows or protecting blown-out highlights.

Film color temperature and source white balance

When creating film profiles, we illuminate the color target using the light source with the color temperature for which a particular film is intended by the manufacturer. Thus, Daylight films are shot under the reference light source with a temperature of about 5300K, while Tungsten emulsions require 3200K incandescent bulbs. Therefore, we get the neutral color reproduction with minimal deviations in white balance at the shooting stage.

When printing the negative optically, we additionally correct the white balance using color filters in the enlarger, bringing the neutrals to the reference value with great accuracy.

This means that technically any film profile is designed for source material with neutral white balance.

Remember that you can use the **Temperature Comp.** and **Tint Comp.** settings in the **Input** section to additionally compensate for the source white balance.

Tip 1: We optically print negative B&W films on the famous Slavich Bromportrait paper known for its noble warm tone. If you need a pure black and white look, you may set the Saturation = 0 in the Print section at any time. Also you can try [CMY Color Head and Print Toning](#) parameters to adjust tint and split-toning at your taste.

Tip 2: There is no dedicated Opacity control for Film Profile by technical reasons but mostly by design – one cannot shoot on film ‘halfway’. However you can apply two Dehancer nodes – first with the Input and Film Profile enabled, second with Expand, Print, Grain, and other FX. It’s rather flexible as you can set the desired ‘film opacity’ with Total Impact slider, available in common plugin controls.

→ Related articles:

[How we build film profiles](#)

[What is Push/Pull and how it works?](#)

[Modern motion picture color negative films](#)

[Complete list of Dehancer film profiles](#)

Source corrections

Source corrections are meant to quickly compensate for obvious technical issues of a source material.

Exposure Comp.

This setting can be used to compensate for the exposure errors of the source media.

Unlike the Exposure setting in Print tool, this is a technical correction of the original image before any Dehancer effects are applied. Conversely, Print Exposure is rather a creative setting, the results of which largely depend on the selected profile, print media, and other settings within the plugin.

Temperature Comp., Tint Comp.

These settings technically work in a similar manner but in relation to the temperature and tint of the source.

Defringe

Defringe helps to deal with the chromatic aberrations visible at the edges that may interfere with some of the Dehancer effects, such as Halation and Bloom.

Tip 1: Temperature and Tint compensation are better suited for strong deviations of a source, while Color Head is designed mostly for creative application and more subtle adjustments.

Tip 2: In some particular cases Defringe may lead to visible halos around the edges in combination with the Bloom or Halation effects. Lowering the Defringe amount and radius settings helps to deal with this issue.

Film Developer

The conventional analogue approach makes it possible to process film by individually configuring the formula of the developer solution and the development process. **Film Developer tool** allows to make your own development recipe depending on the source material, shooting conditions and creative tasks.

Contrast Boost

This parameter controls the developer contrast. In analogue processes, development contrast is determined by developer temperature and concentration. In Dehancer this parameter can take both positive values (contrast increases) and negative values (contrast decreases).

Gamma Correction

In film processing gamma correction controls the contrast ratio of a negative, in relation to the exposure time. This parameter determines how much the midtones are shifted towards shadows or highlights. Gamma correction is possible with any Contrast Boost value other than zero.

Color Separation

The color separation of the negative film is determined by the color filters in the emulsion layers, the sensitisation of each layer and their order. In Dehancer you can control the ‘chemical component’ of the developer, which affects the sensitisation of the emulsion layers.

When Color Separation value is reduced, saturation of the most intense colors is reduced first, while medium and low saturation colors remain almost unaffected.

By default, the Color Separation setting has a maximum value of +100. It affects the image at any Contrast Boost value other than zero.

Color Boost

Some color development processes allow saturation to be controlled by the properties of the dyes that are introduced into the emulsion at the development stage. In Dehancer, this feature is implemented in the Color Boost parameter, which increases or decreases the overall saturation of the image (not only the most saturated colors, as with Color Separation). This type of color enhancement is gentle and does not lead to clipping, i.e. all colors remain inside the color gamut.

Practical tasks that can be solved with Film Developer:

- Grading a source with an undefined gamma, contrast and color, for example, a JPEG from an unknown camera and exposure conditions.
- Making additional adjustments to the interpretation of the source material.
- Adjusting the excessive or insufficient contrast, which you want to normalise and make more flexible for further processing.
- Increasing the overall saturation, while avoiding oversaturation and color clipping where possible.

→ Related article:
[Film Developer – a new Dehancer tool](#)

Film Compression

Usually on a negative film, clipping in the highlights occurs much later than on a digital camera.

To emulate the film-like compressed tonal range, we invented the **Film Compression tool**. It lets you fine-tune the redistribution of the highlights. The resulting image looks more analogue and becomes more flexible for further manipulation with exposure, contrast, film/print profiles, etc.

Impact

This parameter determines the degree of compression. The higher the Impact value, the more the highlights are pushed towards the midtones.

White Point

The White Point parameter defines the ‘film clipping threshold’, and directly affects contrast because it determines the steepness of the transition to the clipping area. As the white point gets closer to the midtones, the more contrast the image appears.

By default, White Point = 100. This means that it stays at its initial position.

The White Point can be lowered, thereby increasing the overall contrast of the compressed range. The minimum possible value is 50. The lower the White Point is, the more likely clipping will occur in the highlights.

Alternatively, the white point value can be increased. In this case, the overall contrast of the compressed range is reduced. The maximum possible value is 120. The higher the White Point is, the more flat and grayed the highlights appear.

Tonal Range

This parameter represents the width of the tonal range affected by Film Compression tool. A minimum value = 0 means no compression. A maximum value = 100 means that the compression affects the wide range from the brightest highlights almost all the way down to the deepest shadows.

Color Density

Different films reproduce color differently as they get closer to the highlights. Negative films tend to noticeably lose saturation in the highlights. Slides remain more vibrant, even though the clipping occurs earlier.

The Color Density parameter controls the color intensity of the compressed range. Color Density = 0 produces the lowest saturation in the highlights, which is more typical for negative films. Color Density = 100 provides maximum saturation, and the image looks more like positive films.

Tip: Although the Film Compression tool is not designed to restore highlights lost in the source file, you can still use it effectively to make the highlights more textured and smooth out the clipping.

→ Related article:
[Film Compression — new Dehancer tool](#)

Expand

Expand tool provides a separate manual control for black and white points in relation to the output color space.

All films naturally have different contrast, different black and white points. At the sampling stage, we avoid digital correction to preserve the individual features of the films, which ensures a fair and convincing simulation. Thus, film profiles in Dehancer, without additional adjustment, usually lack contrast, but at the same time they have a lot of headroom for creative adjustments.

We recommend adjusting Expand immediately after a film profile selection. Set the black and white points to ‘fit’ an image into a dynamic range of your color space.

During a grading session you will probably revisit this tool several times.

Color Mode

The Color Mode option can be useful if you encounter unwanted color shift or oversaturation. In the Luma mode Expand affects only the luminance component of an image, but does not affect its color, so the changes in contrast have no effect on the saturation.

Tip: If your source doesn’t have enough headroom for the Expand adjustments try to enable the **Analogue Range Limiter** checkbox in the **Print** toolset which gives more ‘relaxed’ extremes.

Also you can use the **Film Compression** tool to make the highlights more textured and smooth out the clipping.



Related article:

[How to manage image contrast and avoid clipping](#)

Print Medium

Optical printing is the last stage of the analogue production. As the result we get a paper print for direct viewing or a positive film for screen projection. Both can be scanned for digital delivery. Optical printing is the only analogue solution that can be used for proper interpretation of the negative films.

Beyond the technical significance, any print medium has its own tint, photo latitude and contrast curve that makes it a useful creative tool.

In the **Print** parameters group, you have a choice of the print mediums:

Linear

Only a 'pure' profile of a selected film is used, without the influence of the characteristics of photographic paper.

Cineon Film Log

Selected film is 'printed' into **Cineon film scan format**. This parameter also makes it possible to 'print-out' negatives outside Dehancer.

Kodak 2383 Print Film, Fujifilm 3513 Print Film

Selected film is 'printed' onto **Kodak Vision Color Print Film 2383** or **Fujicolor Positive Film Eterna-CP 3513DI**.

Kodak Endura Glossy Paper

Selected film is 'printed' onto **Kodak Endura Premier Glossy Paper**.

Tip: It is convenient to follow the analogue pipeline when matching the print medium with the film. Use the Linear profile with positive films, Kodak 2383 or Fujifilm 3513 for corresponding movie stocks and Kodak Endura paper for photographic negative films. However, experiments are always welcome.

→ Related article:
[Print Film Profiles in Dehancer](#)

Print Settings

Relying on our experience in optical printing and our research into the psychophysiology, we have developed the dedicated print settings that faithfully reproduce the analog processes:

Target White

Only available when **Kodak 2383 Print Film** or **Fujifilm 3513 Print Film** is selected. Allows to adjust the temperature of the printing light source in the 5500-6500 K range.

Exposure (Ev)

The Exposure tool is based on characteristic curves of optical prints. With the analogue approach to the exposure correction it naturally affects the image contrast too. This parameter is measured in the exposure value steps (Ev).

Tonal Contrast

The Tonal Contrast tool inherits a nonlinear nature of analogue processes. Increase the value to give more punch or apply negative correction to visually ‘soften’ an image. Notice that changing the contrast also visually affects the exposure, which is also typical for analogue media.

Color Density

Traditional ‘digital’ saturation affects all hues equally and linearly. On the contrary, the Color Density tool provides perceptual saturation control, i.e. it affects aesthetically significant colors in a higher degree.

Color Density can be used to quickly solve many specific problems – for example, to mitigate oversaturated accents or emphasise meaningful colors without painstaking adjustment.

Saturation

This is a more "traditional" saturation control based on altering the chroma components in YCrCb space. This correction is available only in the reduction way due to the fact that oversaturation usually degrades the aesthetics.

Analogue Range Limiter

By default, Print adjustments work within the boundaries of the 'digital' contrast range. Black and white points are normalised to the digital brightness values of 0 and 100, respectively.

To obtain a softer image and improve the detail at the extremes of the tonal range, enable the Analogue Range Limiter which uses the uncorrected black and white point values as they were measured on the reference prints.

Tip 1: Even though Tonal Contrast uses sophisticated nonlinear compression, it may lead to some clipping at high values. If this happens, revisit Expand to set a more 'relaxed' cutoff for black and white points or enable the Analogue Range Limiter checkbox to get more headroom for processing. Also you can use the [Film Compression](#) tool to make the highlights more textured and smooth out the clipping.

Tip 2: To get a saturated and expressive image, we recommend starting with increasing the contrast and simultaneously slightly decreasing the exposure. You can also adjust the Color Density to emphasise your colors.

Tip 3: Some combinations of the print settings may produce colors falling out of the gamut, with visible artefacts, especially when Color Density is increased. In this case lower the contrast and saturation or try another film or print media profile.

→ Related article:

[How to manage image contrast and avoid clipping](#)

CMY Color Head and Print Toning

Subtractive CMY Color Head is based upon the analogue color correction tool integrated in photo enlargers. The similar method is used in Printer Lights – a special device for optical movie printing to a positive film. Both have the same principle – changing the color of light used for print exposure.

In Dehancer the Color Head tool is represented with three complementary color pairs (YMC-BGR or commonly used CMY-RGB), combining both analogue devices into one digital tool:

Yellow — Blue

Magenta — Green

Cyan — Red

The effect of changing these parameters corresponds respectively to their labels.

Gang

Dehancer uses the real-life measured color filters values. Thus, even with the identical adjustments in all three axis, the color changes are visible. For your convenience, we have provided the Gang checkbox, which allows changing all three filters at once.

Shadows Tone

Midtones Tone

Highlights Tone

In a general analogue sense, toning refers to giving a paper print or film positive additional tints that are not originally characteristic of a particular media combination. This technique is widely used in movie production to give a special character or atmosphere when the original film properties are insufficient.

Unlike the digital world, where you can ‘fill’ the entire picture with a single hue, analog media is more varied. In addition to the natural variations across the tonal range, a print can be intentionally colored with different tints in the shadows, midtones, or highlights.

Toning can be achieved using a variety of methods, including special exposure and processing mode, additional treatment with various chemicals, and split printing through color filters with masking.

In Dehancer, the toning control is a natural evolution of the CMY Color Head tool. Therefore, it's based on split printing through color filters, with the only difference that masking is performed automatically.

You can control the color temperature separately within three equally quantised ranges – in shadows, midtones, and highlights.

Preserve Exposure

During the analogue printing the exposure is affected by color filters. Dehancer inherits this behaviour. When Preserve Exposure is set to 100%, it automatically compensates any exposure changes, introduced by the Color Head corrections.

Impact

This slider adjusts an overall impact of the effect, acting like 'opacity'.

Tip 1: Prefer the Color Head tool for creative adjustments, while leaving the Input Temperature and Tint compensation for strong WB deviations of a source material.

Tip 2: Setting the Preserve Exposure slider to zero results in exposure changes during color correction – just the way it does with the analogue printing process. This is an additional way to naturally change an image density in Dehancer.

→ Related article:
[CMY Color Head – analogue correction for digital images](#)

Film Grain

Real grain on film isn't just overlaid on top of an image, but in fact the image itself entirely consists of grain. Dehancer literally reconstructs the shot, using the local color and brightness characteristics along with a complex physical modelling of a film emulsion.

Grain Profiles

We've created grain profiles for **8, 16, 35 and 65 mm**, each in three versions: **ISO 50, 250 and 500**.

In order to change the parameters of any profile, you must first select the most suitable one and then switch to **Custom** mode. All the usual effect settings will be available to you, and the parameter values will match the last selected profile.

Custom settings

The **Custom** settings allow you to configure Film Grain as you like.

There are 2 film types and 2 processing modes available in Dehancer:

Film Type

1. **Negative** grain is more pronounced in the highlights and the image has a slightly higher microcontrast, which is more typical for negative films.
2. **Positive** grain uses the 'classic' algorithm that reproduces a softer grain, which is less pronounced in the highlights and is more typical for positive films.

Processing Mode

1. **Analogue** is the original type of grain that requires more processing power but results in lifelike simulation.
2. **Noise** is the high performance simplified grain that may be useful for dithering tasks (for example, to eliminate the posterisation), for low-resolution projects and draft rendering.

Size

This parameter determines a size of silver halide granules. A higher Size value corresponds to a more photosensitive (and therefore more granular) emulsion.

Amount

Total amount of grain generated, corresponding to a 'film' optical density.

Shadows, Midtones, Highlights

This parameter affects grain distribution between different zones of a tonal range to match your scene texture and grading look by setting the grain amount individually for shadows, midtones and highlights.

Film Resolution

Usually the smallest image detail on film does not exceed the grain size. Dehancer Film Grain is considering this fact by design. Also it is possible to manually adjust this effect to mimic a specific emulsion resolution or to compensate for an excessive image softness.

Film Resolution parameter set to 100 keeps the initial sharpness of a source media. Lowering the Resolution results in gradual loss of detail, while an image becomes more blurred. Resolution set to 50 represents the detail balanced with a current grain size and amount.

Chroma

Grain chromaticity may vary on different films. This parameter determines the saturation of the dye granules in film emulsion.

Tip 1: On the real film, grain can be found in both the deepest shadows and the lightest highlights. But it cannot be visible on pitch black or pure white – technically there's no detail in there. That is why Film Grain naturally affects black and white points, lowering visible contrast when enabled. Thus the **Expand** correction is recommended to regain the contrast.

Tip 2: Sometimes, even at the minimum Size and Amount settings, grain appears too obvious for some applications. To get even subtler and softer grain lower the **Shadows**, **Midtones** and **Highlights** values and use the Film Resolution to make-up the excessive sharpness. Also you can try different grain types and processing modes.



Related article:

[How does film grain work in Dehancer OFX plugin](#)

Halation

Halation is the film emulsion effect visible as the local red-orange halos around the bright light sources, specular highlights and contrasting edges. Also, halation may produce a well pronounced red glare in the midtones, mostly affecting the skin tones.

Halation Profiles

There is **8 basic profiles** with average values for the main film formats that solve most creative tasks and provide a convenient basis for creative adjustments.

Each Halation simulation profile has two versions – a standard emulsion and a film of the same format, but with the anti-halation layer removed (**No Remjet**). On films without remjet, Halation is usually excessively pronounced.

In order to change the parameters of any profile, you must first select the most suitable one and then switch to **Custom** mode. All the usual effect settings will be available to you, and the parameter values will match the last selected profile.

Custom settings

The **Custom** settings allow you to configure Halation as you like:

Source Limiter

This setting defines the minimum light source brightness that is able to produce halation. The default value = 0 means that even the weakest source is able to produce halation. By increasing this value, you can cut the effect produced by low intensity lights.

Background Gain

This parameter sets the range of the background tones on which halation becomes visible. Default value allows halation to appear on most backgrounds. Decreasing this value eliminates the effect over the lighter ones.

Smoothness

This integral parameter controls the distribution of the halation effect between the large and small sources, visually smoothing smaller halation details. Increasing the Smoothness value reduces the effect around the point sources in favour of the larger areas. Setting the Smoothness to zero leads to the most detailed halos.

Local Diffusion

This parameter defines how far the light spreads in an 'emulsion'. The higher the Local Diffusion value, the larger the geometric size (radius) of the halos.

Global Diffusion

Global Diffusion controls the degree of the secondary glare produced by scattered light. This is a more global effect that affects mostly low-contrast midtones and also enhances the primary halation.

Amplify

It is important not to confuse this setting with the Impact as the Amplify affects the sensitivity of an 'emulsion' to the scattered light, not the opacity of the effect. Increasing the Amplify value makes the effect more pronounced and shifts the halation toward yellow hues.

Hue

This parameter modifies the sensitivity of the green layer of an 'emulsion' to the scattered light. Use this setting to better match halation hues to a scene in the wide range from cool reds to warm yellows.

Blue Comp.

Cool backgrounds usually dampen the halation. Blue Compensation allows to counterbalance this effect.

Impact

This parameter can be conventionally referred to as ‘opacity’, since it controls not the physical parameters of the emulation, but the overall transparency of the superimposed effect.

Mask Mode

This checkbox enables a special preview mode which allows you to better control the settings with the effect preview isolated from the source image.

Halation + Defringe

In some cases chromatic aberrations interfere with the Halation effect. Defringe tool helps to deal with this issue.

Halation + Bloom

Usually these effects coexist on film and mutually influence each other. Therefore, it is generally best to use Halation and Bloom in tandem to get a more accurate simulation.

Tip 1: Basic Adjustment

Halation effect is most pronounced when Source Limiter is at its lowest and Background Gain at its highest settings, with Amplify set to maximum. It can be a good starting point – just gradually reduce the effect until getting optimal results.

Tip 2: Enhance Portraiture

Increasing the Global Diffusion can be an instant solution to naturally enhance any portraiture, filling the skin tones with a touch of vivid warm glare.

Tip 3: Mask Mode visibility

Mask visibility depends on the exposition and contrast of the image. If Halation appears too dim or invisible in Mask Mode, try to temporarily increase the Amplify and Impact values.

Tip 4: Simple way

There is a simple way to fine tune these effects:

Dial Amplify to max, adjust limiting and details, then lower Amplify to the reasonable value and the Impact slider to the desirable amount.

→ Related article:
[Halation and its simulation in Dehancer](#)

Bloom

Bloom emulates the combined effect of light dispersion on the boundaries of contrasting image areas, which originates in the optical system, and then amplified in the emulsion layers. Notice that bloom has little in common with optical soft-effects as it appears only around the light sources.

Bloom Profiles

To simulate the Bloom diffuse glow effect, we have created four versatile profiles for **8, 16, 35 and 65 mm** film formats. We have selected the average settings, which reflect the general image character.

In order to change the parameters of any profile, you must first select the most suitable one and then switch to **Custom** mode. All the usual effect settings will be available to you, and the parameter values will match the last selected profile.

Custom settings

The **Custom** settings allow you to configure Bloom as you like:

Highlights

In general, this setting may be considered the ‘sensitivity’ of the effect and determines the brightness threshold for bloom to appear. The higher is the value, the wider the tonal range that produces blooming is.

Source Limiter

Source Limiter is used to cut-off the unwanted blooming from the lower end of the tonal range defined by the Highlights setting.

Details

This setting controls the distribution of the bloom effect between large and small light sources. Increasing the value makes the effect more detailed and precise, up to the smallest point sources. Lowering the Details results in a more global effect across a frame, affecting larger objects.

Diffusion

Diffusion controls the extent of the bloom effect relative to the boundary where it appears. The bigger is the Diffusion value, the larger is the geometric size of the glow radius.

Amplify

Amplify controls the overall effect strength by virtually 'changing' the brightness of a light source and the diffusion properties of an emulsion. The higher the value, the more obvious the whole effect becomes.

Save Lights

Bloom affects not only the background but also increases brightness of a light source itself. In digital pipeline this may lead to clipping. Save Lights protects the highlights from possible clipping induced by the Bloom effect.

Saturation

Naturally Bloom inherits the hue and saturation of a light source. This setting makes it possible to desaturate the effect at your taste..

Impact

This parameter can be conventionally referred to as 'opacity', since it controls not the physical parameters of the emulation, but the overall transparency of the superimposed effect.

Mask Mode

This checkbox enables a special preview mode which allows you to better control the settings with the effect preview isolated from a source image.

Tip 1: Basic Adjustment

Bloom effect is most pronounced when Source Limiter is at its lowest and Highlights at its highest settings, with Amplify set to maximum. It can be a good starting point – just gradually reduce the effect until getting optimal results.

Tip 2: Reducing halo artifacts

Sometimes with extreme settings Bloom may produce excessive halo-like artefacts. In this case try to increase the Save Lights, decrease the Amplify value and disable the Defringe tool.

Tip 3: Mask Mode visibility

Mask visibility depends on the exposition and contrast of the image. If Halation appears too dim or invisible in Mask Mode, try to temporarily increase the Amplify and Impact values.



Related article:

[Bloom: what it is and how it works](#)

Film Damage

Dust, hair, scratches, stains, and emulsion irregularities damage inevitably appear on film. Natural 'dirt' enhances the impression.

Film Damage Profiles

We have created profiles of the most characteristic defects for the major photographic film formats. The smaller the film format, the greater the scale of the artifacts relative to the frame size and the more frequently they appear.

In order to change the parameters of any profile, you must first select the most suitable one and then switch to **Custom** mode. All the usual effect settings will be available to you, and the parameter values will match the last selected profile.

Custom settings

The **Custom** settings allow you to configure Film Damage as you like.

Film Damage tool consists of several modules, each responsible for a different type of artifact:

1. Dust

Dust Amount

The total number of dust particles that can be present within the frame at the same time.

Scale

The parameter sets the scale of dust, i.e., the single coefficient of magnification for all particles.

Size Balance

The Size Balance slider adjusts the ratio between artifacts of different sizes. At the minimum value only the smallest particles are added, at the maximum – the largest ones, and in the middle position – about the same amount of dust of different sizes.

White-Black

The White-Black parameter adjusts the quantitative ratio between light and dark artifacts. In the leftmost position only light particles will appear, in the rightmost position – the dark ones, and in the middle position both light and dark particles will appear equally.

Dust Enabled

The Dust Enabled checkbox turns dust on or off completely.

2. Hairs

Hairs Amount

The total number of hairs that can be present within the frame at the same time.

Scale

The parameter sets the scale of hairs, i.e., the single coefficient of magnification for all particles.

Size Balance

The Size Balance slider adjusts the ratio between hairs of different sizes. At the minimum value only the smallest hairs are added, at the maximum – the largest ones, and in the middle position – about the same amount of hairs of different size.

White-Black

This parameter adjusts the quantitative ratio between light and dark artifacts.

Hairs Enabled

The Hairs Enabled checkbox turns hairs on or off completely.

3. Scratches

Scratches Amount

The total number of scratches that can be present within the frame at the same time.

Scale

The parameter sets the magnification of all scratches relative to the frame size.

Size Balance

Size Balance adjusts the ratio between large and small scratches.

White-Black

Depending on which stage of the film production the scratches appeared, they may be dark or light. The ratio between them can be adjusted with the White-Black parameter.

Scratches Enabled

The Scratches Enabled checkbox turns scratches on or off completely.

4. Global Settings

Total Amount

You can use the Total Amount slider to decrease or increase the total amount of all artifacts within the frame, with no need to reconfigure each type individually.

Global Period

The defect areas on film are irregular along its length. The Global Period parameter controls how often artifacts appear. The smaller the value, the more evenly the defects are distributed along the length of the roll.

When Global Period = 1, the amount of dirt between neighboring frames will be almost the same. When Period is increased, the areas with the maximum and minimum amount of artifacts will be more extended.

Global Opacity

Global Opacity allows you to adjust the total transparency of the effect, to make it more or less noticeable. This parameter doesn't affect the number of artifacts, but only their visual density.

Global Chromaticity

Dirt particles affect the light flow, and their transparency, thickness, distance from the film surface, depth of damage and other factors determine the affected emulsion layers and their exposure.

When transparency is reduced, light artifacts visually take on a bluish hue, while dark artifacts, on the contrary, appear warmer.

The Global Chromaticity parameter adjusts the overall saturation. When it is set to minimum, artifacts become pure black and white, regardless of their transparency.

→ Related article:
[Dehancer Film Damage](#)

Overscan

Usually film is scanned with additional area for further processing. In this case, the scanning area may contain the interframe space, perforations, portions of the previous and next frame.

Normally, scans are cropped using the exposed area, but sometimes information outside the film gate is intentionally included. This technique is called Overscan.

Gate Type

The type of film gate sets the film format and the type of camera. The following options are available:

Super 8mm 1.33:1

Super 8 motion picture film with aspect ratio of 1.33:1 (4:3)

Standart 16mm 1.37:1

16 mm motion picture film shot in standard aspect ratio of 1.37:1

Super 16mm 1.66:1

Super 16 mm motion picture film with a 1.66:1 aspect ratio

Ultra 16mm 1.85:1

16 mm motion picture film shot in aspect ratio of 1.85:1

Super 35mm 1.37:1

35 mm motion picture film shot in standard aspect ratio of 1.37:1

Widescreen 35mm 1.85:1

35 mm motion picture film shot in widescreen aspect ratio of 1.85:1

Ultra Panavision 65mm 2.76:1

65 mm motion picture film shot in Ultra Panavision aspect ratio of 2.76:1

Tip: The **16:9** aspect ratio is not here, since it does not exist on film. The closest film format is **Widescreen 35mm 1.85:1** with a frame pitch of 3 perforation holes (3 perf), and it is cropped to 16:9 with minimal loss.

Gate Shape

The shape of the film gate is determined by the specifics of a particular camera. The most common options are available:

Neat Normal - standard frame with slightly rounded corners

Neat Sharp - a frame with sharper corners with almost no rounding

Neat Rounded - a frame with the corners rounded to a large radius

OFF - Film Gate is disabled

Perforation Mode

The perforation type of the scanned film is represented by 3 options:

Negative, Positive, OFF

The negative scan is inverted and the backlit perforations become black. Positive films, on the other hand, do not need to be inverted and retain their original white perforations. At the postproduction stage, they can be filled with the film base color. This action is simulated by the OFF mode.

Film Orientation

In cinema cameras film is pulled down through the film gate vertically, while in most 35 mm photo cameras film travels horizontally.

However, in both cases, you can rotate the camera 90 degrees while shooting. The film scan can also be rotated on postproduction so that the scene will have the correct orientation when viewed.

The **Landscape/Portrait** option allows you to simulate both horizontal and vertical film movement retaining the normal orientation of the subject.

Scale

Image scaling (crop) after scanning. Varies from 0 to 100.

When Scale = 100, the film gate is completely outside the frame.

Lens Zoom

Compared to the Scale parameter, Lens Zoom allows to zoom the scene within the film gate, as if you were zooming the lens in/out at the shooting stage.

When Lens Zoom = 100 (default), the image is zoomed in to cover the entire film width, including the overscan area.

With Lens Zoom set to 0, the image fits the Film Gate area.

Offset X, Offset Y

Sometimes after applying Overscan effects, you may want to move the image to better fit the gate.

Values of +100 and -100 correspond to shifting the image by half of its width or height in the forward or opposite direction, respectively.

Gate Defocus

The frame focus depends on the tightness of the film against the film gate, the type of camera and its technical condition. In Dehancer you can control the degree of defocusing in the range from 0 to 100 conventional units.

Exposure

Depending on the backlight intensity and exposure during scanning, the Halation effect on the edges of the perforation may be visible to a greater or lesser extent. The Exposure parameter sets the exposure of the 'scan' in the range from -2 Ev to +2 Ev, which allows you to make the perforation more or less pronounced.

Flip

Normally, the layout of the perforations and the gate is determined by the film format and the technical standard of the camera and scanner. However, for creative tasks, we have added a Flip option that mirrors the perforations and frame horizontally while keeping the image unchanged.

Enabled

This option allows you to completely enable or disable the Overscan tool.

Notice:

Since Overscan Tool contains a number of practical simplifications, it is appropriate to call it **stylization** rather than imitation.

We have implemented the basic components for the most common formats. In the future, the tool will be improved by expanding the set of gates, formats and additional elements.



Related article:

[Dehancer Overscan Tool](#)

Vignette

In lens design vignetting is usually considered a flaw. However, it is also a proven creative tool that allows for better focusing on a subject and adds extra depth. Also, in digital processing vignette with positive exposure values can be used to compensate for unwanted vignetting.

Exposure

Negative Exposure values result in dark vignette while positive values, respectively, produce the light vignette.

Size

This setting defines a size of the vignetting circle.

Feather

Feather controls the amount of blur applied to the vignette circle.

Aspect Ratio

This parameter affects the proportions of the vignette, allowing to make it elliptical (in both the X and Y directions).

Tip: Although the Vignette tool is located at the very bottom of the Dehancer settings, we recommend to adjust it at the beginning of color grading since it affects the exposure and usually increases contrast between the edges and a frame center, thus requiring additional adjustments of the exposure and contrast.

Application path and user data location

Below you can find the main system paths of the installed application components and user data locations, which you may need when contacting support or maintaining the plug-in.

Installation (macOS)

Adobe Photoshop plugin:

/Library/Application Support/Adobe/Plug-Ins/CC/Dehancer

Adobe Lightroom and Capture One plugin:

/Applications/Dehancer Lightroom Plugin/Dehancer Lightroom Plugin.app

User Data (macOS)

Shared folder:

/Users/{user}/Library/Application Support/com.dehancer.film_shared

User Presets folder:

/Users/{user}/Library/Application Support/com.dehancer.film_shared/presets

Adobe Photoshop plugin log:

/Users/{user}/Library/Application Support/com.dehancer.film_shared/
dehancer_logs/photoshop_plugin.log

Adobe Lightroom and Capture One plugin log:

/Users/{user}/Library/Application Support/com.dehancer.film_shared/
dehancer_logs/lightroom_plugin.log

Standalone application log:

/Users/{user}/Library/Application Support/com.dehancer.film_shared/
dehancer_logs/dehancer_pro.log

Installation (Windows)

Adobe Photoshop plugin:

C:\Program Files\Common Files\Adobe\Plug-Ins\CC\Dehancer

Adobe Lightroom and Capture One plugin:

C:\Program Files\Dehancer Lightroom Plugin\Dehancer Lightroom.exe

User Data (Windows)

Shared folder:

C:\Users\{user}\AppData\Local\dehancer\com.dehancer.film_shared

User Presets folder:

C:\Users\{user}\AppData\Local\dehancer\com.dehancer.film_shared/presets

Adobe Photoshop plugin log:

C:\Users\{user}\AppData\Local\dehancer\com.dehancer.film_shared/
dehancer_logs/photoshop_plugin.log

Adobe Lightroom and Capture One plugin log:

C:\Users\{user}\AppData\Local\dehancer\com.dehancer.film_shared/
dehancer_logs/lightroom_plugin.log