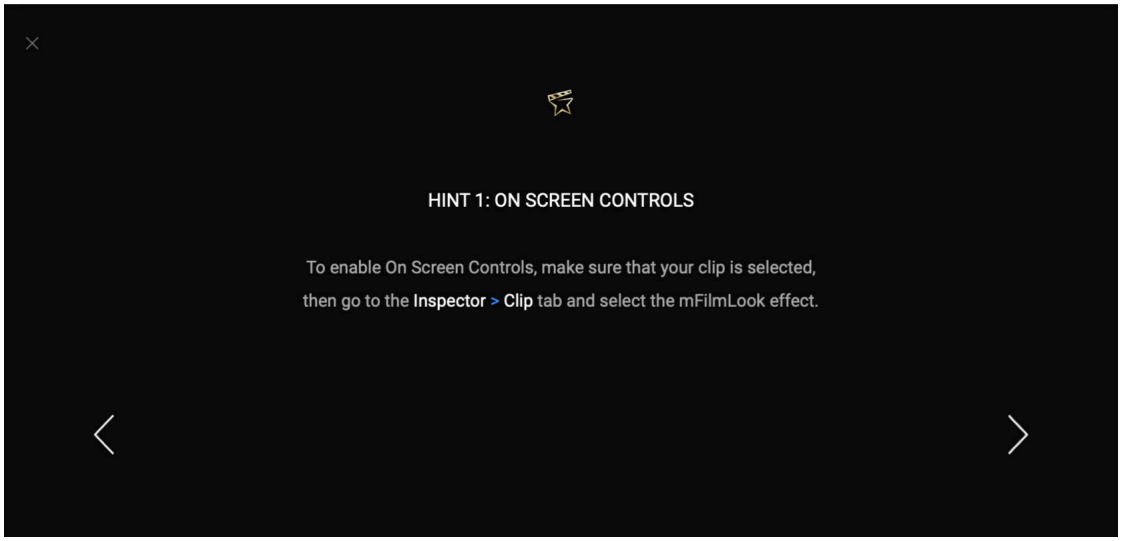
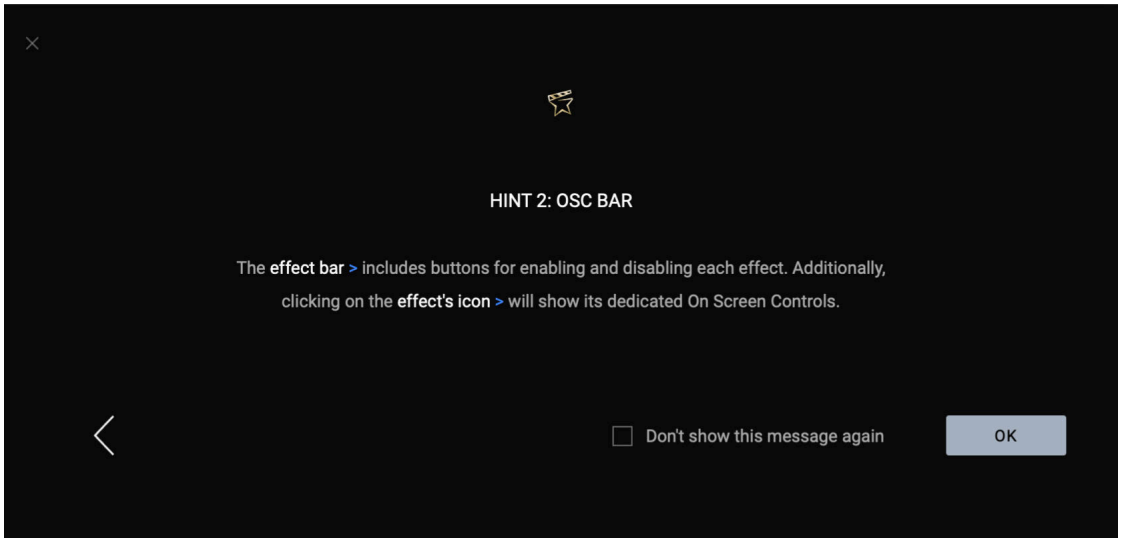
MFILMLOOK

All-In-One Cinematic Look Plugin

1. INTRODUCTION

mFilmLook is an all-in-one plugin created for professionals who know their post-production pipeline inside out, but also for new filmmakers who wish to process their footage according to the current industry standards. It combines a set of tools necessary for color correcting, a fully-featured LUT library and a set of high-quality color grading and post-processing effects that can turn a simple clip into a cinematic masterpiece.



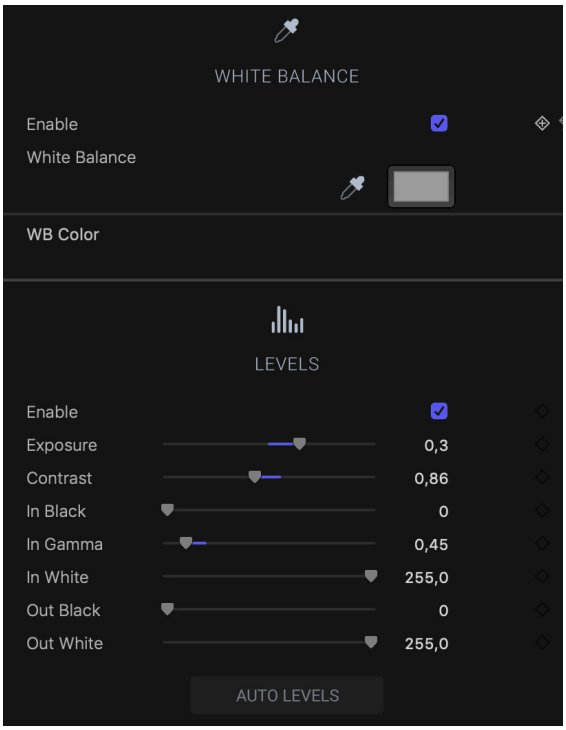


2. UI

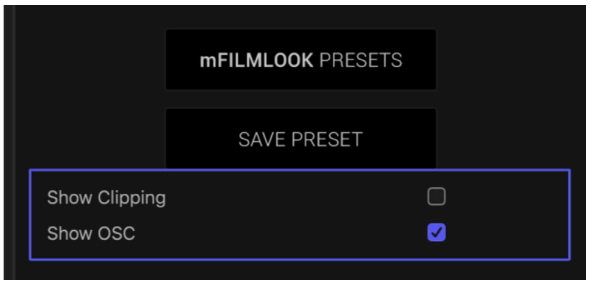
Once mFilmLook is applied to a clip, its controls will be listed within the Clip tab, inside Final Cut's Inspector. The most commonly used features can also be accessed via on-screen controls.

Inspector

mFilmLook contains a set of effects meant for various different purposes. Each effect includes its own, clickable icon that can be used to enable or disable its on-screen controls.



Additionally, near the top of the Inspector, there are two options not related to any specific effect:



- ## Show Clipping

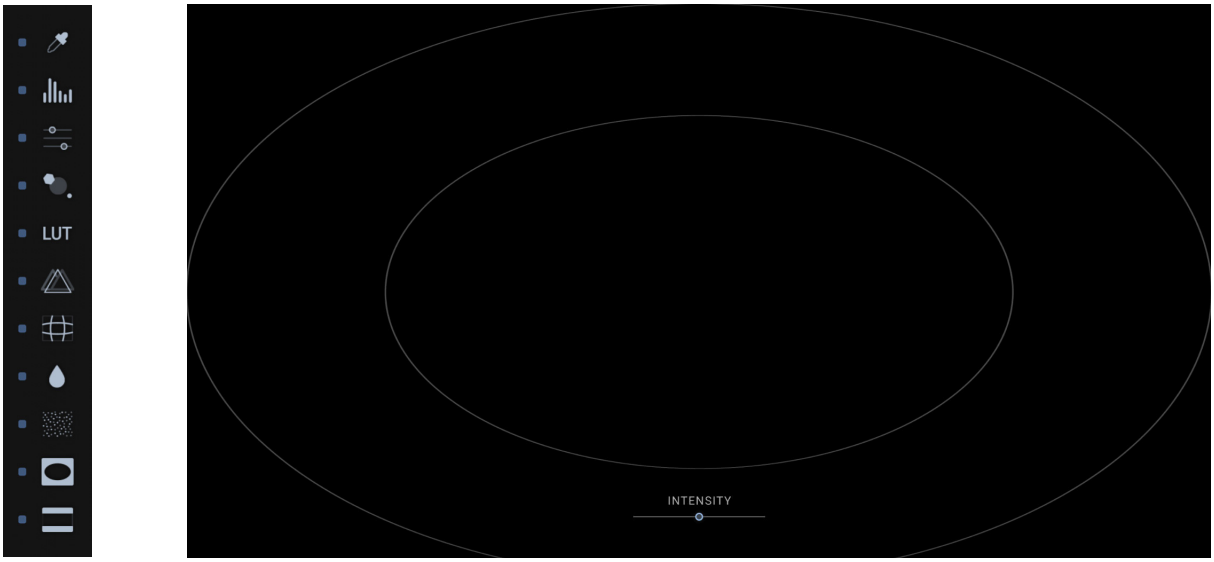
One of the main rules of every post-production pipeline is to preserve as much detail from the input image as possible. This becomes a challenge when adjusting the color, both during color correction as well as grading. Bright pixels can easily be clipped to a solid white color and dark ones may be “crushed” into solid black. Such issues aren’t always visible at a first glance, so by enabling this option pixels that approach full white will be colored with magenta and those which approach full black will be marked blue, providing an instant visual feedback of which areas may need to be adjusted.

- ## Show OSC

This option determines whether the plugin’s on-screen controls are going to be visible or not. It comes in handy when making some final touches to your effects, as well as for previewing the result without it being covered by the elements of the UI.

OSC

Selecting the entire mFilmLook effect within the Inspector will display the plugin's on-screen controls:



OSC Bar on the left and sample Effect Controls on the right.

- ## OSC Bar

This bar lists all of mFilmLook's effects that make use of the on-screen controls. A specific effect can be enabled or disabled by clicking on the on/off button next to its icon.

Clicking on the effect's icon on the OSC Bar will enable it (if it was disabled) as well as switch to the effect's dedicated on-screen controls. Additionally, once an effect's OSC is enabled, mFilmLook will also automatically scroll the Inspector to display the currently selected effect.

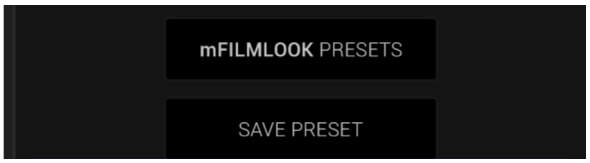
- ## Effect Controls

Once an effect's dedicated on-screen controls are enabled by clicking on its icon - either on the OSC Bar or within the Inspector - the plugin will display sliders, rings and/or buttons that allow to control the most commonly used effect's settings directly within the Viewer.

NOTE: *If none of the OSC elements are visible, please make sure that both your clip and the entire mFilmLook effect are selected, and that the plugin's "Show OSC" checkbox described above is enabled.*

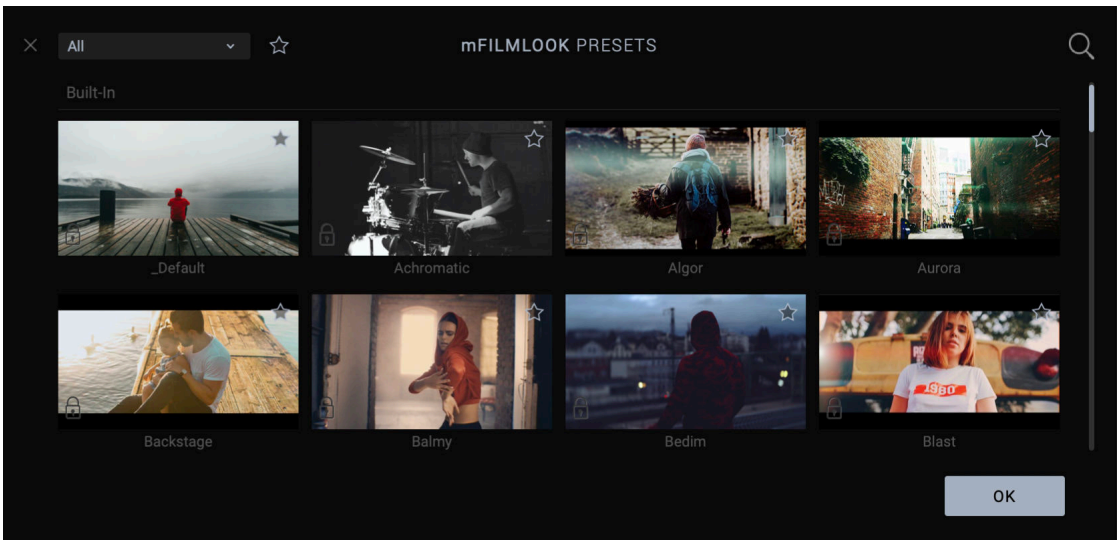
3. PRESETS

mFilmLook includes dozens of presets that can be used out-of-the-box but it also allows to save an unlimited number of custom ones within the mFilmLook Presets library.



- mFilmLook Presets

clicking on this button will launch a complete library that contains built-in presets as well as the ones saved by the user.



Once the library window is open, clicking on one of the presets' previews will replace the current plugin settings with the ones stored inside the picked preset. Specific presets can be quickly found by typing in their name in the search field located in the upper-right corner of the library window. Each preset can be marked as favorite by clicking on the star icon in the upper-right corner of its preview. To display all favorite presets, click on the star icon in the upper-left corner of the library window.

Presets saved by the user can be renamed, removed or moved to a different category at any time. To access these options, right-click on the preset's preview and pick the desired action. Additionally, presets can be renamed by simply clicking on their names.

- Save Preset

clicking on this button will save the current color grading and effects settings in the mFilmLook Presets library with a custom name and into the desired category.

NOTE: *The "Convert to Rec709", "White Balance" and "Levels" effects are meant for color correcting each input clip separately and therefore their settings will not be saved inside presets. This allows to browse through the different looks without affecting the color correction of the source clip.*

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4. COLOR CORRECTION

Before any color grading or effects can be applied, color of the input clip should be normalized. This way it will become a proper base for further adjustments and ensures that all clips will match in terms of color and brightness.

- CONVERT TO Rec709

LOG on the left and a REC709 version on the right.

When recording a scene, the light that comes through the lens is being detected by the sensor, which passes this image information in digital form to an encoder, which then compresses and writes it to a video file. Each of these steps introduces some form of loss - a portion of the light that should reach the sensor is lost when going through

the lens, sensors themselves lose some information while adding noise to the digital signal they generate, and in the end this noisy data is simplified during compression and stored with a limited color palette to make sure we end up with reasonable file sizes. Camera manufacturers and software engineers struggle to minimize these losses so better quality lens, sensors and methods for storing image data are constantly being developed. While the first two require expensive hardware, improving the way we store color in the output video file is usually free and can make a huge difference in how much detail is preserved.

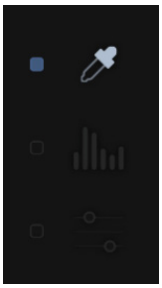
Let's say we need to shoot a scene where a tree is lit by direct sunlight. This means strong highlights, dark shadows and everything in between. If we'd record it using the camera's default color profile, our output video would already be very contrasted and the dark areas under the tree would blend together, resulting in a single spot of dark color. To make things worse, video compression would detect these areas as very similar and simplify them into big blocks of solid color. So even if we'd attempt to brighten the shadows during post-production, there's a good chance we'd end up with brighter blocks of solid color instead of actual details. And don't forget that all of this also applies to bright highlights - either way, we're toast.

Luckily, there's the so-called “LOG”. Once you choose it in the camera settings, the image data generated by the sensor will be modified by lowering its contrast in a clever way and passed to the encoder afterwards. The resulting video file will appear “flat”, with its colors washed out, but this can be easily contrasted again during post. But if we're bringing the contrast back, why use LOG in the first place? Because the shadows are brightened and highlights are darkened before being compressed and stored in video file. This means that all details that got lost when recording using the default color profile are now back! This gives huge control over what is visible in the final frame.

Camera manufacturers have different visions of what LOG really is, which is why mFilmLook includes a wide range of conversion LUTs: Sony's S-Log, Arri's LogC, DJI's D-Log, Panasonic's - V-Log and many more. Additionally, a custom LUT file in .cube format can be picked from the disk.

In the end, each clip will be in the Rec709 color space, prepared for further adjustments.

- WHITE BALANCE



The human eye is extremely efficient in adapting to the changing lighting conditions. Camera sensors aren't as great, especially when it comes to capturing light cast by various different light sources. Because of this, depending on your camera settings, you may end up with a shot that has a bluish or reddish tint in it. White Balance is a tool that allows to correct such problems and bring back the original scene colors.

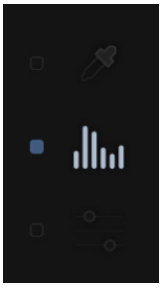
To correct White Balance in mFilmLook, you need to pick a pixel that represents a surface without any color. To do this, make sure you have the On-Screen Controls enabled, click on the color picker icon on the OSC Bar or within the Inspector, and pick a pixel from the screen. When picking a color for the White Balance effect, the plugin will temporarily disable all of its effects, allowing you to pick it from your original shot.

A clip without (left) and with white balance adjustment (right).

Despite the effect's name, you don't necessarily need to click on a white surface. As a matter of fact you should be careful not to use completely white pixels, for example when your sky was so bright that it got clipped to white. In such a case, picking it won't have any result. mFilmLook's White Balance is independent from the picked pixel's brightness so if you don't have any white surfaces in your shot, picking a grey one will work just as well. If none of them are available within the frame, the White Balance color can be set manually.

NOTE: *Some camera manufacturers use RAW video formats that allow to change White Balance even after the clip is saved. mFilmLook's White Balance effect allows to adjust color temperature even in files that don't contain RAW data.*

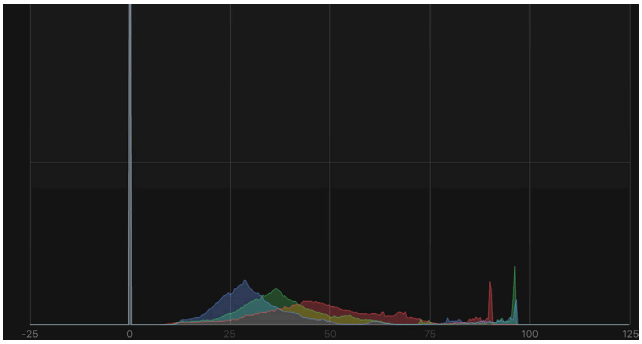
- LEVELS



Once we're in the right color space and white balance is set, it's time to check the brightness (luminance) of our pixels. We could attempt to set the levels by “eyeballing” the result but an accurate way of telling whether our modifications are OK or not would make more sense.

Let's assume that we're working on a grayscale clip. If we'd take all of its pixels and sort and place them next to each other from darkest to brightest, we'd see that many of the neighboring pixels have very similar brightness. By stacking these similar pixels in columns (bins), we'd end up with a stack that contains only fully black pixels, then a stack of slightly brighter pixels next to it and so on, until we encounter the last stack of pixels that are fully white. Such graph is what we call a histogram and it allows us to instantly see how pixel brightness (or color) is distributed.

Final Cut Pro X already includes a set of scopes that allow to verify our image. We're concentrating mostly on the brightness so the Luma histogram will be a perfect fit for us. To display it, first make sure that the Video Scopes view is open - you can find it in the View -> Show in Viewer menu or enable it by pressing the CMD+7 keyboard shortcut. Then, in the upper-right corner of this view, click on the little histogram icon and set the Scope type to “Histogram” and in the Channels pick “Luma”.



NOTE: *The Levels adjustment can be verified through other types of scopes. We are using the Luma Histogram only because it's the easiest one to explain.*

Of course the content of our histogram will change from clip to clip and even between frames so eventually we'll encounter a clip whose pixels are clumped in a part of the histogram. Our goal is to fill it entirely while making sure that out colors don't get clipped (moved below 0 or above 100). This process is called “histogram equalization" and its main purpose is to maximize the contrast and guarantee that we're not wasting any part of our brightness range.

A clip without (left) and with levels adjustment (right).

mFilmLook includes an “Auto Levels" feature that can be used as an instant base for further fine-tuning, as well as a “Show Clipping" option that will mark pixels that are almost completely white with magenta and ones that are almost entirely black with a bluish color. This gives an instant visual feedback of which pixels are going to be clipped.

- Enable - enables or disables all modifications made within the Levels effect. It's an equivalent of the effect's On/Off button located next to its icon on the OSC bar.

- Exposure - allows to adjust the brightness of the image. Increasing it will stretch the content of the histogram towards white, decreasing will squish it towards black.

- Contrast - allows to adjust the contrast of the image. Increasing or decreasing its value will stretch or shrink the content of the histogram around its center (a value of 50), respectively.

- In Black - determines the brightness value that is going to be considered completely black. Increasing it will cause the content of the histogram to stretch towards black. “In Black" can also be controlled through its dedicated OSC slider.

- In Gamma - allows to adjust the image gamma. Increasing it will move the content of the histogram towards white, decreasing it will move the content towards black. “In Gamma" can also be controlled through its dedicated OSC slider.

- In White - determines the brightness value that is going to be considered completely white. Lowering it will cause the content of the histogram to stretch towards white. “In White” can also be controlled through its dedicated OSC slider.

- Out Black - determines the minimum brightness value that is going to be displayed. Increasing it will cause the content of the histogram to squish towards white.

- Out White - determines the maximum brightness value that is going to be displayed. Decreasing it will cause the content of the histogram to squish towards black.

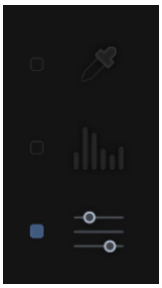
- Auto Levels - a one-click option for setting the “In Black” and “In White” values based on the content of the current frame.

NOTE 1: *Each effect that is applied after Levels alters color in some way, so to make sure that our adjustments are accurate, we need to make sure that all the following effects are disabled during color correction.*

NOTE 2: *The content of the clip often changes between frames (for example due to different lighting), so color correcting using a single set of values may not be enough. mFilmLook allows to animate the White Balance color and the entire Levels effect, making it possible to adjust the correction over time.*

5. GRADING AND EFFECTS:

- BASIC ADJUSTMENTS



A clip without (left) and with simple color adjustments (right).

- Enable - allows to enable or disable all modifications made with the Basic Adjustments effect. It's an equivalent of the effect's On/Off button located next to its icon on the OSC bar.

- Color Temp - allows to modify the temperature of the clip's colors. It is independent from the White Balance effect and therefore can be used either to fine-tune its result or for artistic purposes, for example to tint the image and achieve a specific look. Lowering this value will make the image appear colder and increasing it will warm its colors. “Color Temp” can also be controlled through its dedicated OSC slider.

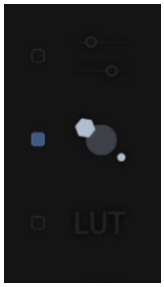
- Vibrance - Vibrance is a “smarter” way to control the color saturation in your image. Once you increase its value, mFilmLook will check the image for more and less saturated areas. If a pixel has a low saturation, it will be affected a lot more than the heavily saturated ones. This allows to increase the clip's overall saturation without over-saturating any of its pixels.

mFilmLook's Vibrance also takes skin tones into consideration and prevents them from becoming over-saturated.

- Saturation - basic color saturation setting. Increasing this value will make the colors more saturated and decreasing it will make them less saturated. Setting it to 0 will result in a greyscale image. “Saturation” can also be controlled through its dedicated OSC slider.

- Sharpness - a simple yet powerful way to retrieve detail from the source clip. Increasing its value will reduce blur caused by depth of field, compression etc.

- OFF-SCREEN FLARE

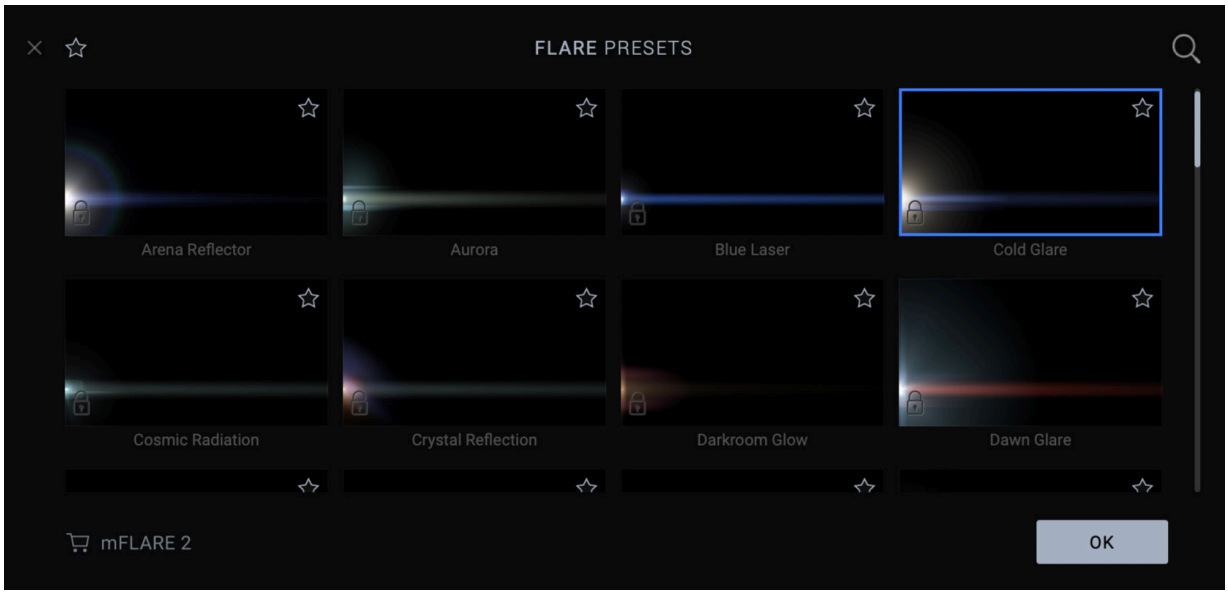


Off-screen lens flares can be used to change the atmosphere of the scene, match the mood between clips and even colorize them to a certain degree. mFilmLook includes over 40 easy-to-use presets that can spice up your footage in just a couple of clicks.

A clip without (left) and with the off-screen flare effect applied (right).

- Enable - enables or disables the Off-screen lens flare. It's an equivalent of the effect's On/Off button located next to its icon on the OSC bar.

- Flare Presets - clicking on this button will launch a Library window that contains all available flare styles. Clicking on one of their previews will set it as the current preset.



Specific presets can be quickly found by typing in their name in the search field located in the upper-right corner of the Library window. It also allows to mark presets as favorite by clicking on the star icon in the upper-right corner of their previews. To display all favorite presets, click on the star icon in the upper-left corner of the Library window.

The Flare Presets library can also be launched via OSC by clicking on its icon in near the bottom of the screen canvas.
- Intensity - controls the overall brightness of the Off-screen lens flare effect. It can also be controlled through its dedicated OSC slider.

- Hue - allows to adjust the hue of the flare's colors. It is mostly meant for matching its color with the source clip and can also be controlled through its dedicated OSC slider.

- Saturation - controls the overall saturation of the flare's colors.

- Scale - determines the size of the entire flare effect and can also be controlled through its dedicated OSC ring.

- Flare Position - the flare's position can be controlled via OSC by simply clicking and dragging its center. This option determines how the Off-screen flare is going to move during playback:

Automatic - the default mode that automatically moves the lens flare each frame by a certain amount. To change its direction and speed, click and drag the tip of the arrow that points from the center of the flare. The arrow's direction controls the direction of the flare's movement and its length determines how fast it will animate.

NOTE: *If the flare moves outside the frame, you can bring it back by clicking on the "Reset Position" button.*

Manual - once this mode is picked, the flare will no longer move automatically. Its position will be controlled entirely by two additional "Position X" and "Position Y" settings that will appear below.

Regardless of the picked Flare Position mode, the flare can be moved by clicking and dragging its center on the OSC.

- Streak Settings - mFilmLook's Off-screen flare effect contains a fully customizable anamorphic streak. This group contains all of its settings:

Color - determines the streak's color.

Brightness - allows to increase or decrease the streak's brightness.

Gamma - controls the streak's color gamma. Decreasing this value will make it appear less contrasted and increasing it will make its colors more saturated and its details more pronounced.

Scale X - determines the streak's width.

Scale Y - controls the streak's height.

Smoothness - allows to soften the streak's edges.

Detail Size - controls the width of the disruptions of the streak's color.

Detail Speed - determines how fast the disruptions of the streak's color will move when changing the entire flare's position.

Detail Offset - changing this value will offset the disruptions of the streak's color vertically, allowing to pick a more suiting style.

Detail Amount - controls the visibility of the disruptions of the streak's color.

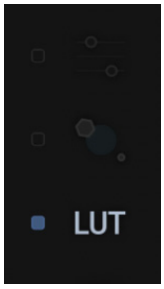
- Flicker Settings - Once a light source gets blocked by some object or moves slightly outside of the frame, the lens flare caused by it gets dimmed as well. mFilmLook's Off-screen flare effect provides a way to replicate such behavior automatically, without the need for keyframing its Intensity. It can be controlled by the following settings:

Intensity - controls the amplitude of the flickering effect. The higher the value, the more extreme the changes in the flare's brightness will be.

Speed - determines the speed at which the flare's brightness will change over time. Increasing this value will cause the flare to flicker faster, lowering will result in slower flickering.

Noisiness - controls the randomness of the flare's flickering. Low values will cause the flare's brightness to oscillate in a regular fashion, higher ones will cause it to change more randomly.

- LUT

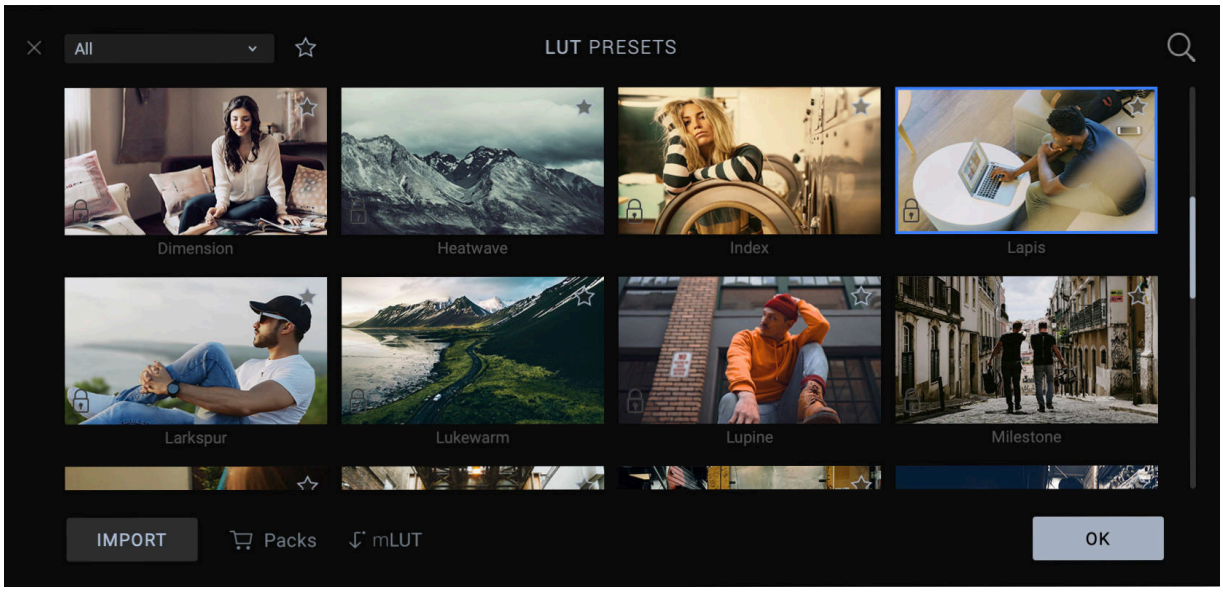


A clip without (left) and with a 3D LUT applied (right).

LUT files quickly became a standard for rapid color grading, mainly because they are extremely easy to use and produce professional quality grades. mFilmLook includes a fully-featured LUT library that can be used to load one of the built-in LUTs as well as import third-party .cube files. It also provides a set of tools for organizing the imported LUTs in a quick and convenient way and even allows to import entire LUT libraries from the widely-known mLUT plugin.

- Enable - allows to enable or disable the LUT effect. It's an equivalent of the effect's On/Off button located next to its icon on the OSC bar.

- LUT Presets - clicking on this button will launch the LUT Presets window that contains the plugin's LUT library.



The LUT Presets library contains both built-in and imported LUT files.

Once the LUT Presets window is open, clicking on one of the LUTs' previews will apply it as the currently used one. Specific LUTs can be quickly found by typing in their name in the search field located in the upper-right corner of the library window. Each LUT can be marked as favorite by clicking on the star icon in the upper-right corner of its preview. To display all favorite LUTs, click on the star icon in the upper-left corner of the library window.

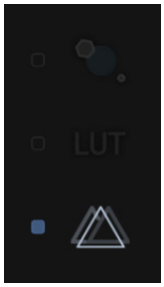
To import third-party LUTs, click on the Import button located in the lower-left corner of the window and point to the desired .cube file. Once you do that, mFilmLook will allow you to change the file's name as well as assign it to a specific category. If you wish to import it to a completely new category, you can create one by clicking on the “Choose Category” list, and picking “Add New Category” at the bottom.

The imported LUT files can be renamed, removed or moved to a different category at any time. To access these options, right-click on the LUT's preview and pick the desired action. Additionally, LUT files can be renamed by simply clicking on their names.

The LUT Presets library can also be launched via OSC by clicking on its icon near the bottom of the screen canvas.

- Intensity - allows to blend between the image without the LUT effect and the image with the effect applied. This value can also be controlled through its dedicated OSC slider.

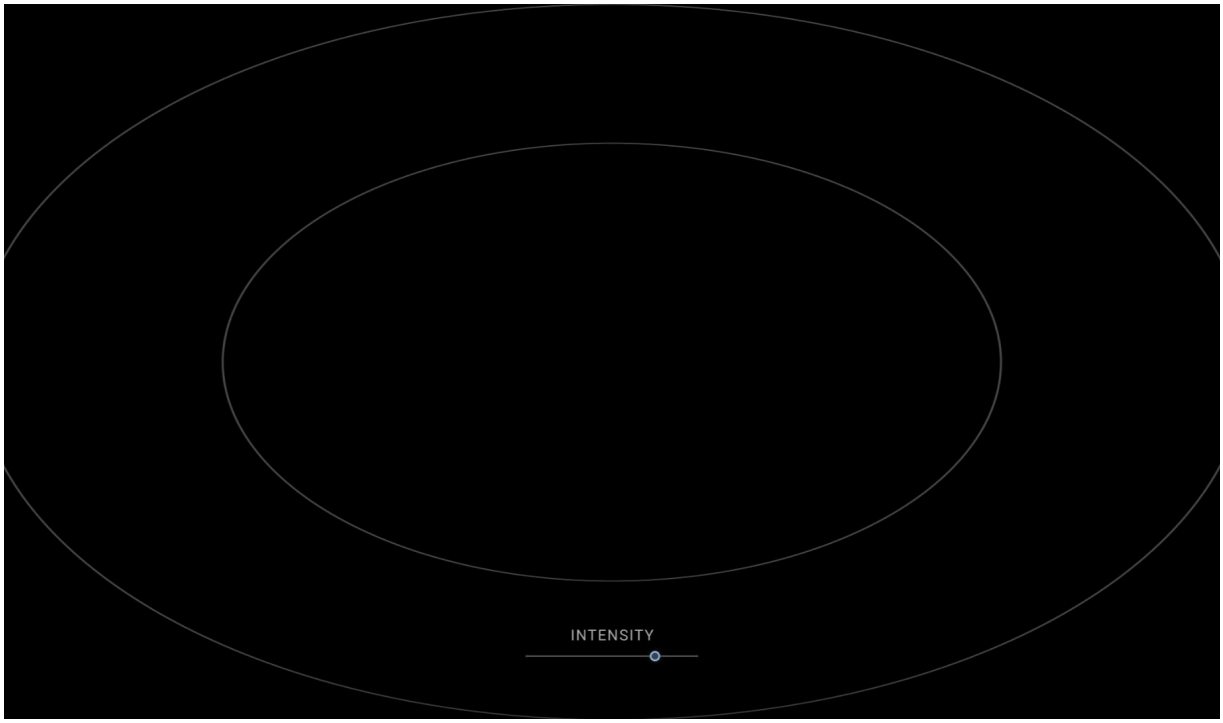
- ABERRATION



A clip without (left) and with the aberration effect applied (right).

Even though chromatic aberration is usually associated with low quality lens, it also occurs in wide anamorphic lens (especially the older ones). Additionally, applying it to extremely sharp clips recorded using modern lens can help reduce their “digital feel”.
- Enable - enables or disables the chromatic aberration effect. It's an equivalent of the effect's On/Off button located next to its icon on the OSC bar.

- Intensity - controls the amount of the aberration's RGB split. Intensity can also be controlled through its dedicated OSC slider.



- Range - chromatic aberration is most visible near the edges of the image. Increasing this value will cause it to reach further to the center of the screen. This value can also be controlled through its dedicated OSC ring.

- Softness - allows to smooth out the edge determined by the Range parameter. It can also be controlled through its dedicated OSC ring.

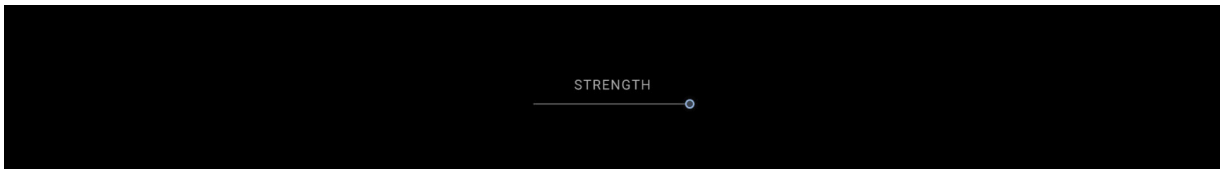
- DISTORTION

A clip without (left) and with the distortion effect applied (right).

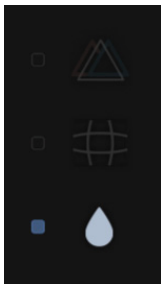
Due to the shape of the lens, some distortion of the recorded scene is inevitable. This becomes more apparent for very wide, as well as anamorphic lens. mFilmLook's Distortion effect simulates the barrel distortion caused by such optics.

- Enable - allows to enable or disable the lens distortion effect. It's an equivalent of the effect's On/Off button located next to its icon on the OSC bar.

- Intensity - controls the amount of the barrel distortion and can also be controlled through its dedicated OSC slider.



- LENS BLUR



A clip without (left) and with the lens blur effect applied (right).

The Lens Blur effect can be used to achieve multiple different results, from slight blurring at the edges of the image (often specific to very wide shots) to simulating realistic depth of field. It can also be used to easily create the popular tilt-shift effect.

- Enable - allows to enable or disable the Lens Blur effect. It's an equivalent of the effect's On/Off button located next to its icon on the OSC bar.

- Intensity - controls the blurriness of the area outside the focus mask. This value can also be controlled through its dedicated OSC slider.

- Range - simple lens blurring is most visible near the edges of the image. Increasing this value will cause it to reach further to the center of the screen. This value can also be controlled through its dedicated OSC ring.

- Softness - allows to smooth out the edge determined by the Range parameter and can also be controlled through its dedicated OSC slider.

- Gain - in real life, light can shine at extremely high intensities. When capturing it with a camera, it needs to be clipped to a value that can be stored in a video file so we end up with a pixel that is completely white. When blurring an image that lacks this high intensity information, these light sources can be darkened by their surrounding pixels instead of spreading onto them. The Gain parameter can be used to boost the bright pixels' intensities and produce a much more pronounced bokeh shape.

- Threshold - determines the minimum brightness, at which a pixel will start to get affected by the Gain parameter.

- Focus Mask Settings - mFilmLook provides several tools for determining which areas of the image should be blurred and which should remain in focus.

Center X - allows to move the focus mask horizontally.

Center Y - allows to move the focus mask vertically.

Aspect Ratio - determines the proportional relationship between the focus mask's width and its height. Higher values will make the mask higher, lower ones will make it wider. Setting it to any of the extreme values allows to achieve a tilt-shift effect. This value can also be controlled through its dedicated OSC slider.

Mask Rotation - controls the rotation of the focus mask.

Invert Focus - allows to invert the focus mask and thus can be used to easily change focus to the background or the other way around.

- Mode - mFilmLook provides two methods for blurring the image:

Bokeh - the default mode that produces a sharp and clearly visible bokeh. Because of this, it is the best choice for simulating depth of field.

Blurry - when using this mode the shape of the bokeh is much less apparent, making it a good fit for adding slight blur near the edges of the image.

- Bokeh Sides - controls the shape of the bokeh. Increasing its value will eventually result in a fully circular bokeh.

- GRAIN

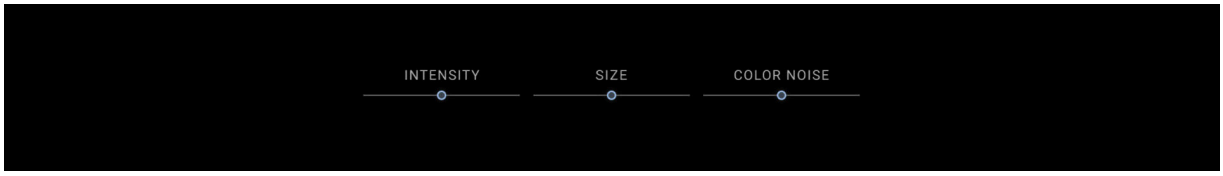
A clip with the grain effect applied.

The grainy appearance of an image captured on film is caused by the fact that its photosensitive surface is built out of very small particles. mFilmLook's Grain effect allows to simulate this phenomena in real time.

- Enable - enables or disables the Grain effect. It's an equivalent of the effect's On/Off button located next to its icon on the OSC bar.

- Intensity - controls the amount of grain in the image. Grain intensity can also be controlled through its dedicated OSC slider.

- Size - allows to modify the size of the grain's particles. This value can also be controlled through its dedicated OSC slider.



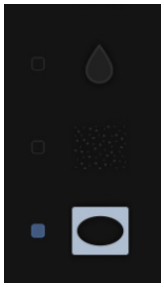
- Speed - due to the film's structure, its grain is completely different in each frame. That being said, there are times when a less rapid change is desired. This parameter allows to adjust the speed at which grain changes its shape.

- Granularity - controls the distortion of the image caused by the film grain. The higher the value, the more grainy it will appear.

- Color Noise - controls the amount of color dispersion caused by film grain. Low values will result in a monochromatic noise, higher ones will split it into colored noise. This value can also be controlled through its dedicated OSC slider.

- Luma Influence - film grain is mostly visible in the dark areas of the image. This parameter allows to reduce the amount of grain in brighter parts of the picture.

- VIGNETTE

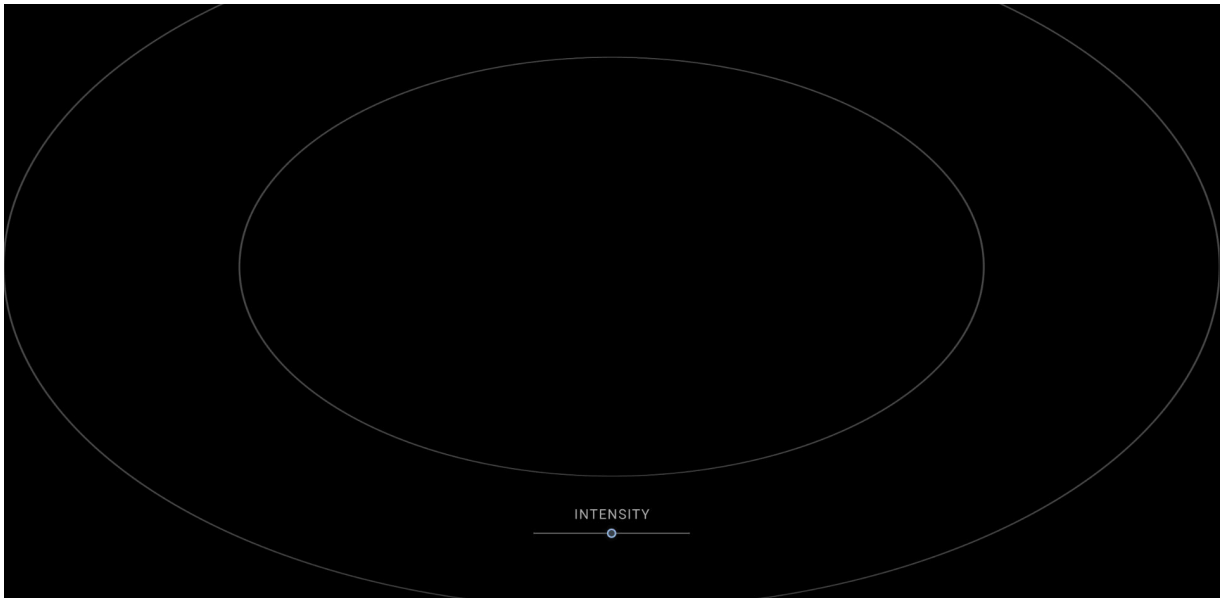


A clip without (left) and with the vignette effect applied (right).

Vignetting is usually perceived as reduced lighting near the edges of the image. mFilmLook's Vignette effect not only darkens these areas with a natural, soft gradient, but also increases their contrast to prevent from unnaturally dimming their colors:

- Enable - allows to enable or disable the Vignette effect. It's an equivalent of the effect's On/Off button located next to its icon on the OSC bar.

- Intensity - controls the amount of vignetting in the image. It can also be controlled through its dedicated OSC slider.



- Range - vignetting is most visible near the edges of the image. Increasing this value will cause it to reach further to the center of the screen. This value can also be controlled through its dedicated OSC ring.

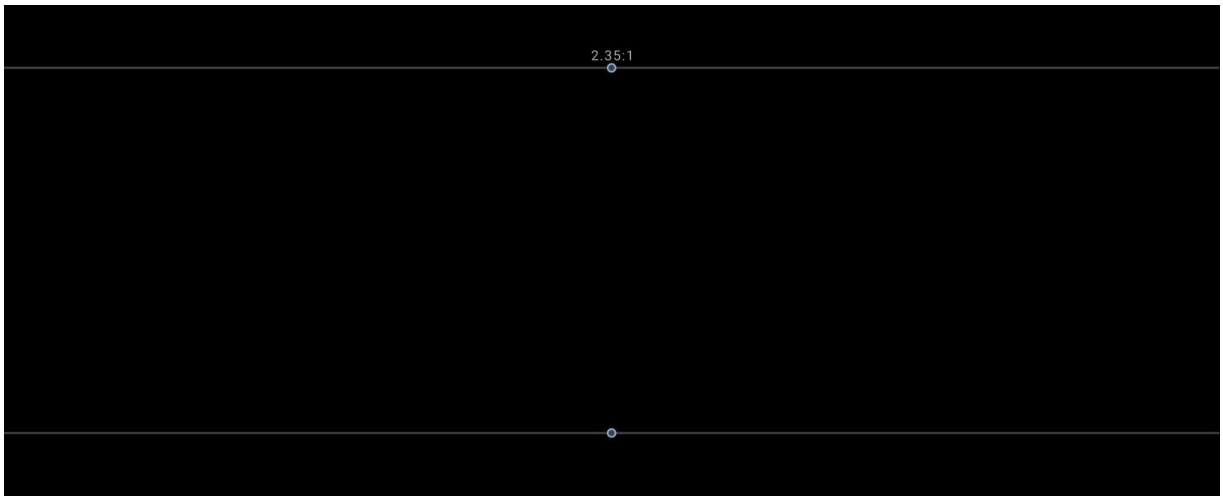
- Softness - allows to smooth out the edge determined by the Range parameter. It can also be controlled through its dedicated OSC ring.

- LETTERBOX

The black bars are generated automatically by the letterbox effect.

Originally letterbox was created to adapt movies shot in widescreen image aspect ratio to regular 4:3 and 16:9 screens. Since most movies use such wide ratio, this effect is now often used to achieve a more cinematic look.

- Enable - allows to enable or disable the Letterbox effect. It's an equivalent of the effect's On/Off button located next to its icon on the OSC bar.



- Mode - determines whether the letterbox bars are going to be displayed at the top and bottom (horizontal) or on the left and right sides of the image (vertical).

- Preset - a list of presets that contains the most common image aspect ratios used in the film industry. Choosing one will automatically set the corresponding value to the Aspect parameter's located below it.

- Aspect - determines the proportional relationship between the width and height of the image resulting from applying the letterbox effect. This value can also be controlled through OSC by clicking and dragging the edges of the letterbox. When moving them via OSC, closing in to a value dedicated to any of the presets will cause them to snap to it as well as display the preset's name.

- Position Offset - allows to frame the image better between letterbox bars. This can also be adjusted by clicking and dragging the footage between the letterbox's bars on the OSC.