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What is Flared2?

Flared2 is an add-on developed by Beniamino Della Torre for Blender 4.11 and later (for earlier versions of Blender, Flared XT is available).

It was designed to allow anyone to create lens flares in real-time directly within Blender's viewport, speeding up production workflows and avoiding the need to work in compositing.

It offers many properties, maximizing creative freedom for the user.
In the following pages, we will explain how all the features of the add-on work.

About me

Thank you for purchasing this product: the development of Flared2 required many days and nights that I could have spent with my family.

Since this project was created by just one person (actually, two, since Alfonso provided essential technical support), it cannot rely on large financial backing.

I developed this add-on for two reasons:

1. **Professional need** (I required a tool like this for some projects I was working on)

2. **Economic necessity** (I suffer from a chronic illness, and with this add-on, I can afford the daily treatments I need).

Therefore, I thank you from the bottom of my heart for helping me continue this fantastic journey. And I truly hope that the result of so much work can bring satisfaction to many users.

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Installing the Add-on

Versions Before Blender 4.2

1. From the "Edit" menu, select "Preferences."
2. In the left-hand column, select the "Add-ons" tab.
3. At the top-right, search for and click the "Install..." button.
4. In the window that opens, select the .zip file that contains the add-on you downloaded (do not unzip it).
5. Click the "Install Add-on" button at the bottom-right.
6. Make sure the Flared2 add-on is selected in the Add-ons list.
7. Close the Preferences window.
8. Go to the viewport and press the "n" key on your keyboard to reveal the side panel.
9. The Flared2 tab will now appear in the panel.

Blender 4.2 and Later

1. From the "Edit" menu, select "Preferences."
2. In the left-hand column, select the "Add-ons" tab.
3. At the top-right, click the downward arrow and select "Install from Disk..."
4. In the window that opens, select the .zip file that contains the add-on you downloaded (do not unzip it).
5. Click the "Install from Disk" button at the bottom-right.
6. Make sure the Flared2 add-on is selected in the Add-ons list.
7. Close the Preferences window.
8. Go to the viewport and press the "n" key on your keyboard to reveal the side panel.
9. The Flared2 tab will now appear in the panel.

Follow the next chapter to learn how to create a lens flare.

Creating a Lens Flare

1. **Select the object(s)** in the viewport or in the outliner that you want to use as the source emitting your flare. You can use a light, a solid, or an empty as the flare's origin.

2. **Choose a preset** to use.

3. Then, **click the "+" button** on the right, wait a few seconds, and the flare will be created in the scene, using the active camera. Flared2 automatically adjusts to the active camera, so it works with multiple cameras without needing your intervention.

4. To view the flare, you must **enter the camera view** (press "0" on the numeric keypad) and select the Render mode in the viewport at the top-right.

5. If you are using Eevee, the flare should display correctly. **If you're using Cycles, go to the next page** to learn how to set up Cycles correctly.
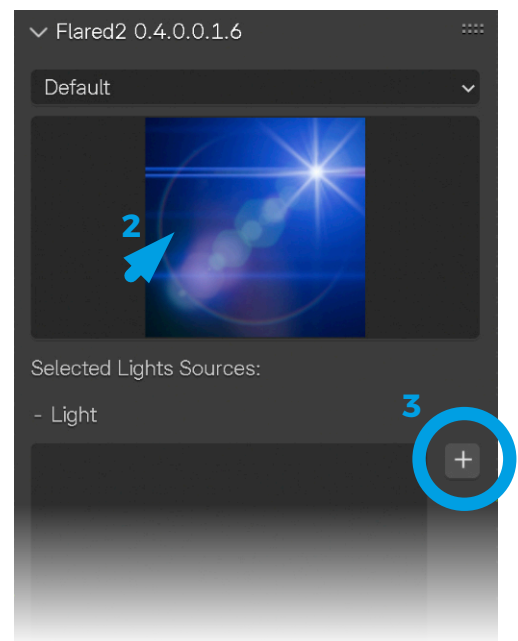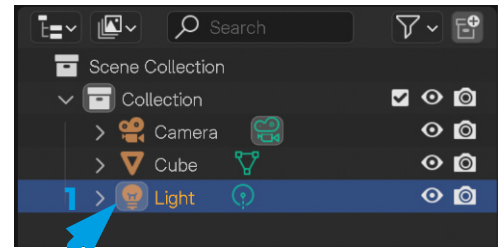
Using Cycles

If you are using Cycles, you will need to provide the rendering engine with the correct light paths to display transparencies properly (since Flared2 produces various transparent elements, from sun rays to ghosts). The more transparent elements generated, the higher you will need to raise the "Transparent Paths" value. This parameter can be found in Blender's Properties panel, usually at the bottom-right.

1. Select the **Render Properties** tab.

2. Scroll down to "Light Paths", open the tab and increase the "Transparent" value. **Try 100 if you have just one flare.**

3. It is generally advisable to use the minimum value necessary to correctly display the flare. The higher this value, the slower the render.

TIP: There is a way to render flares very quickly. See the **Render Options** section of this manual.
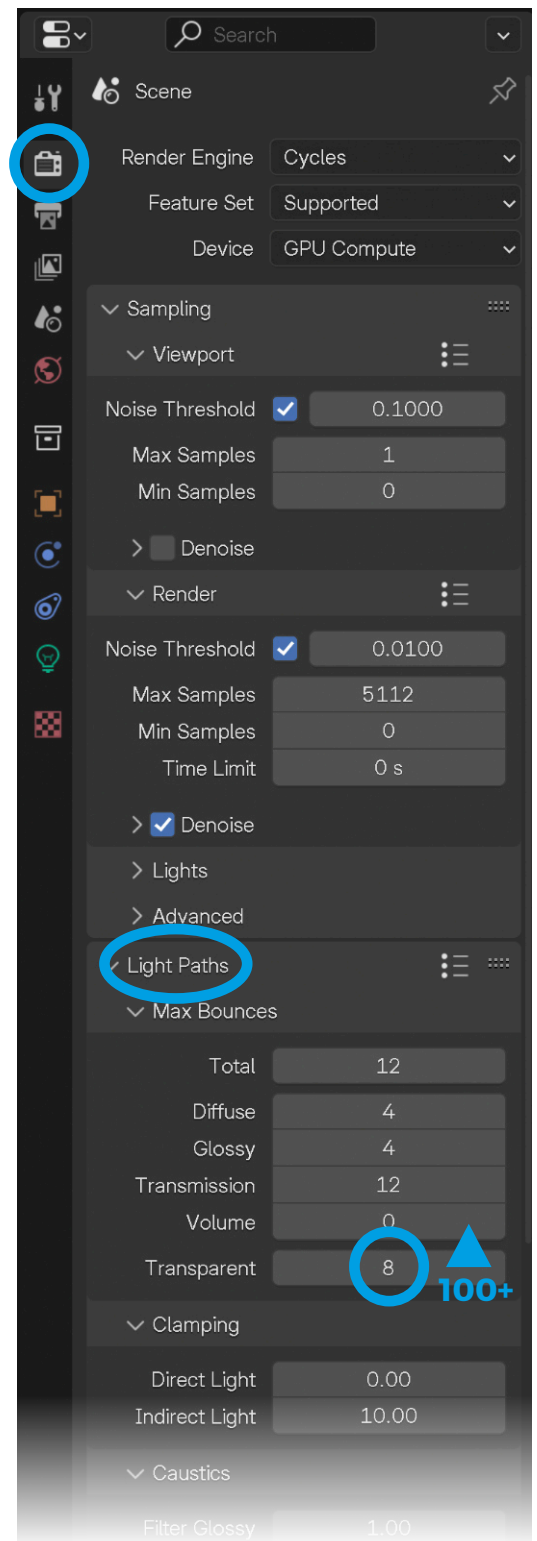
User Interface

The Flared2 interface is quite simple, yet it offers many editable properties. At the top, you can choose from which folder to load the presets to be used:

Default Folder: Contains factory presets.
Custom Folder: Contains all the presets you've created or imported.

Clicking on the icon of the displayed preset will allow you to see all available presets. When you have at least one flare in the scene, additional parts of the interface will appear as described below:

Flare Selector: This allows you to perform various operations and is particularly useful if multiple flares are present. For information on managing multiple flares, go to the "Working with more flares" section of this manual.
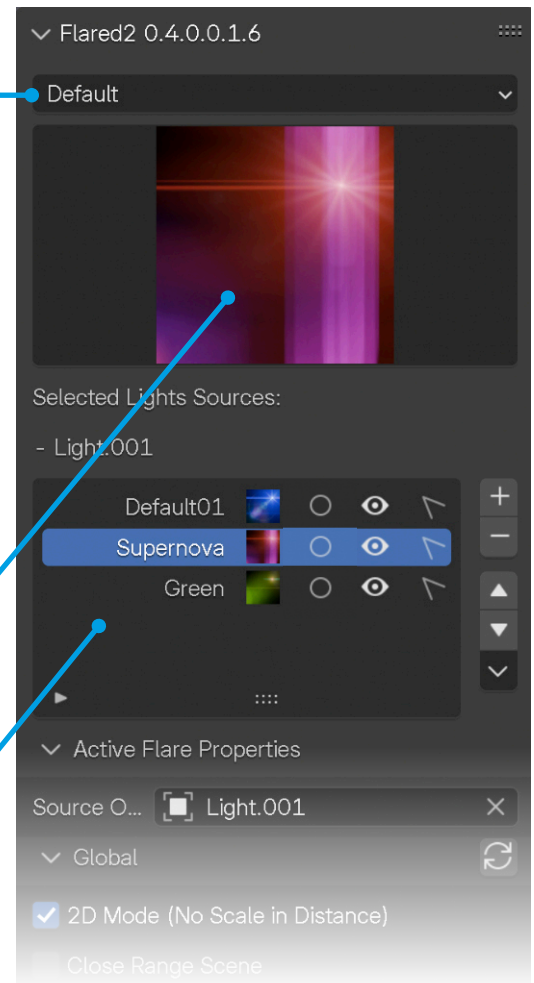
In the selector, each flare shows:

- The **name** and **icon** of the used preset.

- The **circle icon**, which links multiple flares (as described in the **Working with more flares** section).

- The **eye icon**, which activates/deactivates both the visualization and rendering of each individual flare.

- The **arrow icon**, which allows you to select multiple flares for bulk management (as described in the **Working with more flares section**).
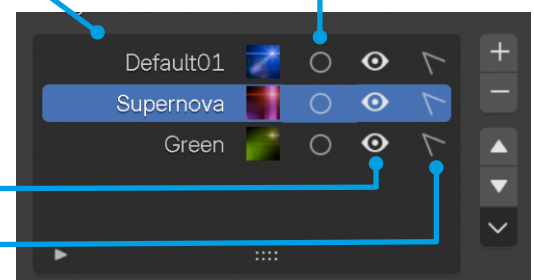
- The flare highlighted with a blue stripe is the active flare.

When you click on a flare in the selector, the object it is attached to is highlighted in the viewport.

To the right of the selector is the "+" button, which adds a flare to the active object (or multiple flares to multiple selected objects). If the active object already has a flare, it will be replaced with the currently active preset. The "-" button removes flares (but not the objects they are attached to), even in bulk mode.
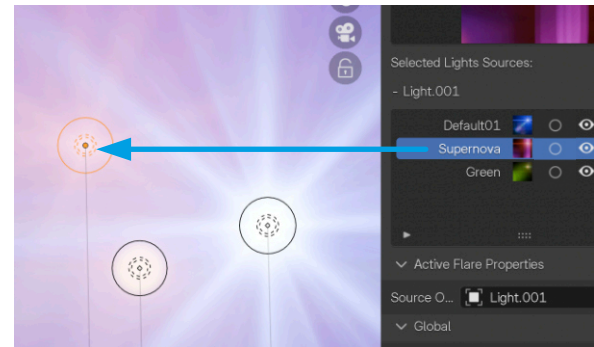
The up and down arrows allow you to move flares within the selector.

The darker button with the downward arrow opens the extra menu, containing additional features that are explained in the relevant chapters of this manual.
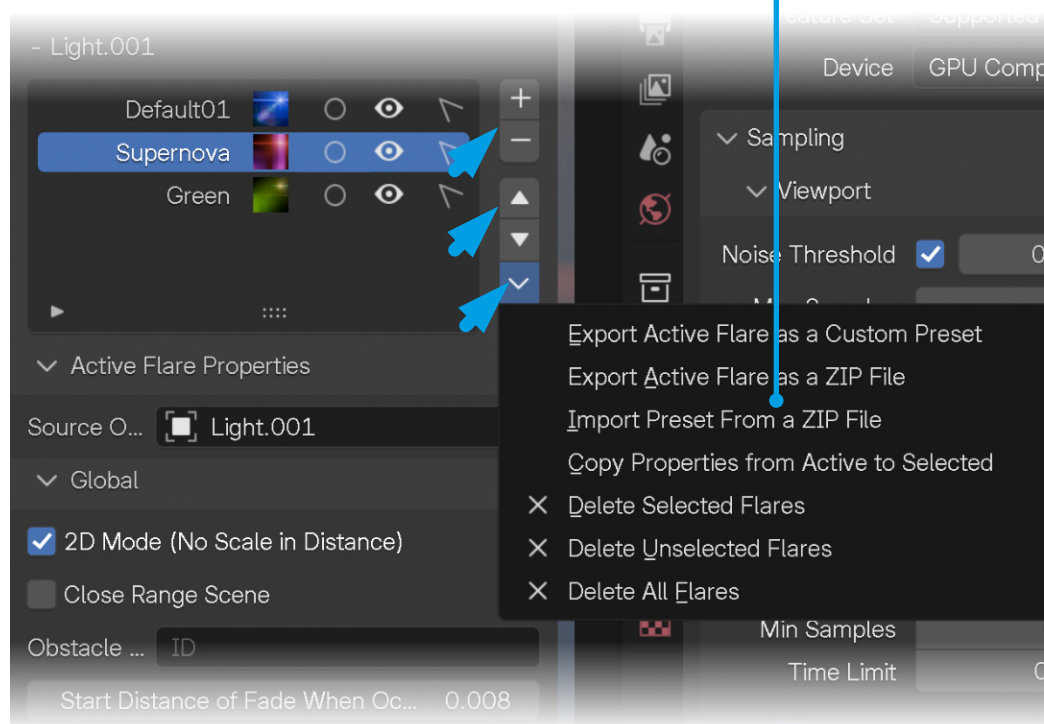
Active Flare Properties

The properties shown below always exclusively refer to the **active flare** in the upper selector (**highlighted by a blue stripe**).

There is a way to "link" certain parameters between multiple flares, which is very useful when using multiple flares in the same scene (you can find all the details in the **Working with more flares** section of this manual).
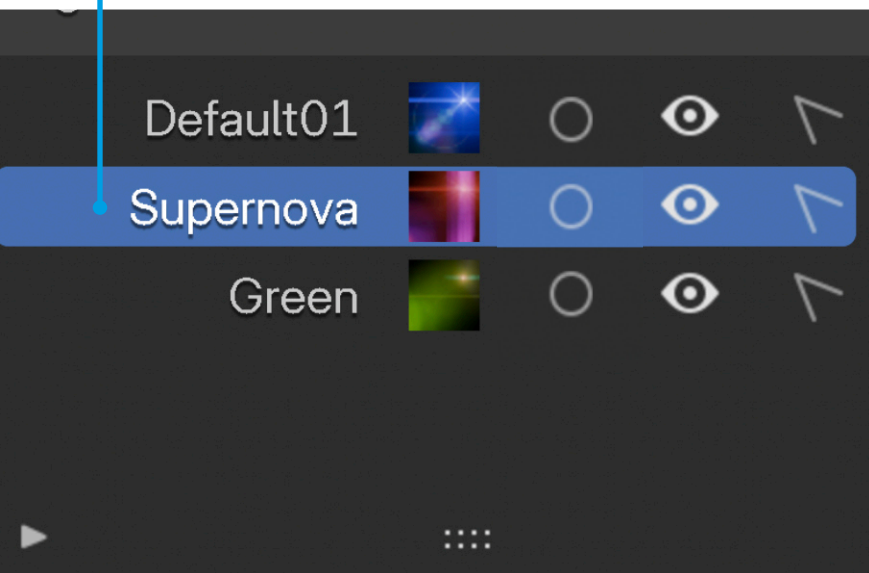
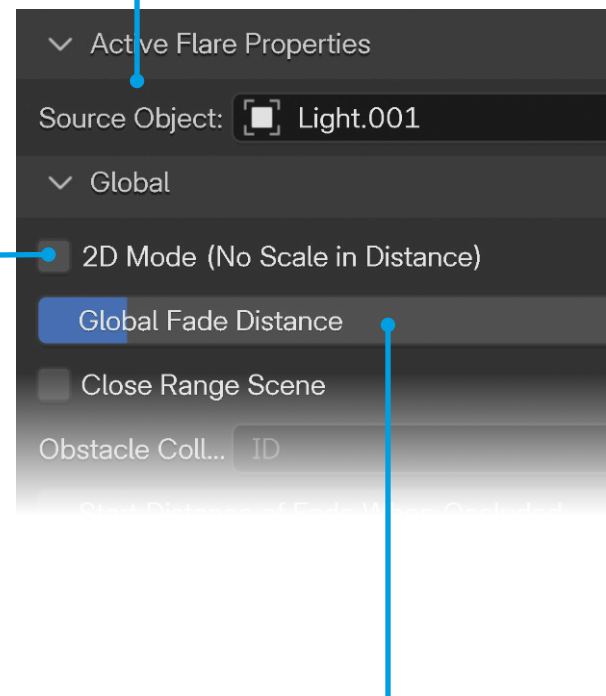|	
Global Scale	1.00
Global Brightness	1.00
Brightness Reduction at Center of Screen	0.00
Dirt Texture Scale of Shaders	3.00
☐ Activate Anamorphic	
☐ Activate Blinking	
∨ Sun Beams	
☑ Activate Sun Beams	
Number of Sun Beams	18
Sun Beam Width	0.10
Sun Beam Width Randomness	0.10
Sun Beam Length	0.50
Sun Beam Length Randomness	0.05
Sun Beam Brightness	2.00
∨ Starburst	
☑ Activate Starburst	
Starburst Ty... 8-Pointed	
Ray Width	0.10
Ray Width Randomness	0.10
Ray Length	0.40
Ray Length Randomness	0.05
Starburst Brightness	5.00
∨ Light - Glow - Streak - Leaks	
☑ Activate Point Light	
Light Scale	4.00
Light Brightness	2.00
Light Sharpen - Blur	0.70
☑ Activate Light Reflection	
Light Reflection Scale	2.07
Light Reflection Brightness	0.17
Light Reflection Saturation	2.00
Light Reflection Hue	0.50
Light Reflec... Light 04	
☑ Activate Glow	
Glow Scale	35.00
Glow Brightness	8.00
Glow Reflection Brightness	0.97
☑ Activate Streak	
Streak Height	25.00

Default01

Supernova

Green

Source Object

Shows the source of the active flare. It can be modified as needed.

2D or 3D?

The 2D mode ensures that the size of the flare elements remains unchanged even when the camera moves closer to or further away from the flare. This is particularly useful in motion graphics, titling, and similar effects.

On the other hand, 3D mode causes the flare to shrink or enlarge depending on its distance from the camera. This is more useful in 3D scenes, where you need landscapes or interiors to appear perspectively realistic. In 3D mode, a **Global Fade Distance** property appears, which defines the distance at which the flare elements begin to fade. The higher the value, the more visible the elements will be on screen, even at long distances, and vice versa.

It's important to note that in both 2D and 3D modes, the size and intensity of the flare can be easily adjusted using the two properties below: **Global Scale** and **Global Brightness**.

Active Flare Properties

Source Object: Light.001

Global

2D Mode (No Scale in Distance)

Global Fade Distance

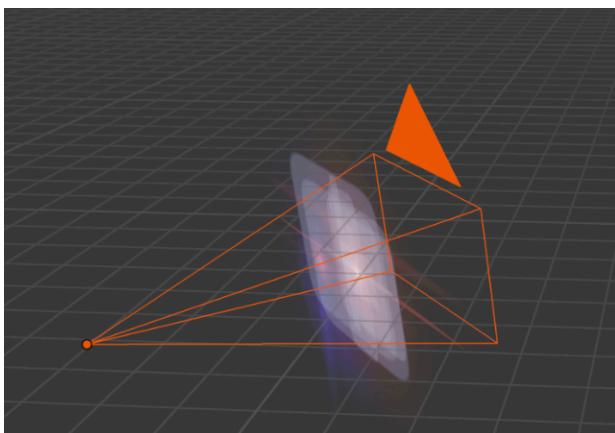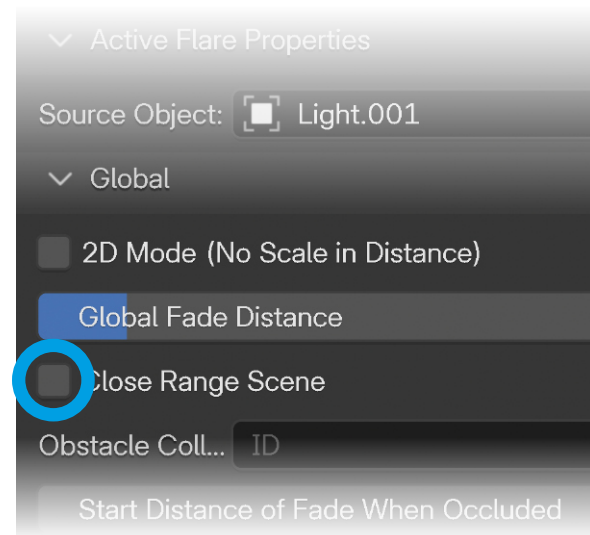Close Range Scene

Obstacle Coll... ID
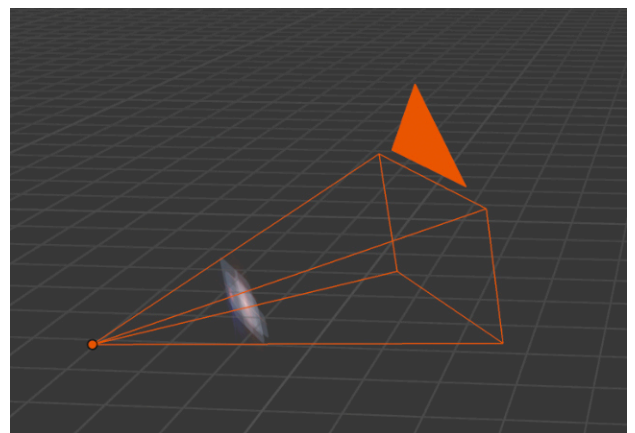
Close Range Scene

Since Flared2 produces elements positioned in the camera's space, it is possible that, in certain situations, some scene elements may intersect with the flare elements, creating incorrect effects. In such cases, you can activate the **Close Range Scene** button, which moves Flared2's elements even closer to the center of the camera, to avoid intersections.

It's worth noting that activating close range modifies how some of Flared2's features operate, so the flare may appear quite different compared to normal mode.
There is a second option to completely avoid intersections. Go to the "Render Options" section of this manual for more information.

Close Range Scene OFF

Close Range Scene ON

Obstacle Detection

Flared2 automatically detects obstacles between the flares and the camera. You only need to place these obstacles inside a collection, which you then select in the **Obstacle Collection** option.
At this point, you will have two properties that define how the flare fades when obstructed.

The fading behavior changes depending on the distance of the obstacle from the camera. In scenes with obstacles both near and far, it can be tricky to find the right combination of values to use.

The **Start Distance of Fade When Occluded** property is the most important and allows you to decide at what distance from the object the flare starts to fade.

The **Fade Slowdown when Occluded** property determines the speed at which the fade occurs. While the combination of these two properties can result in very different outcomes, keep in mind that if you want a slow fade but the flare starts to fade exactly when it aligns with the edge of an obstacle, you will never achieve a slow fade, as otherwise, the flare's light would enter the obstacle (which can happen if values are arbitrarily set).

TIP: at the moment, collision management requires demanding calculations for the CPU. For this reason, it is recommended to use collisions only where strictly necessary to avoid slowdowns in the viewport.

Obstacle Coll...   ID
Start Distance of Fade When Occluded   1.000
Fade Slowdown When Occluded   2.900
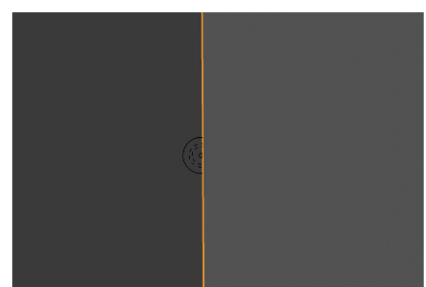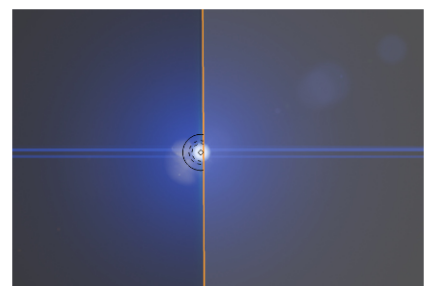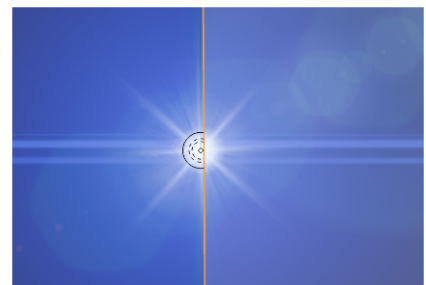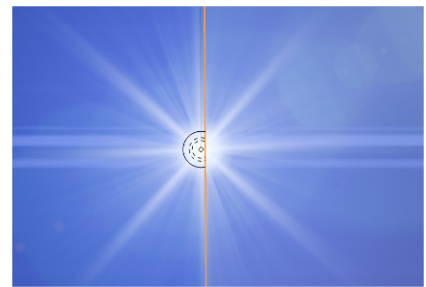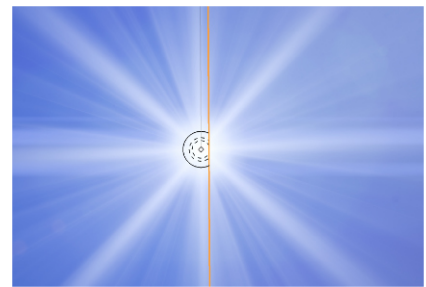
Global Values

Global Scale controls the overall size of the flare, adjusting the size of all the elements that compose it, except for Hoop and Halo, which are independent of the scale.

Global Brightness controls the brightness of the entire flare. Remember that all properties can receive keyframes and be animated over time.

Brightness Reduction at Center of Screen regulates the brightness of certain flare elements when they reach the center of the screen. Increasing the value makes the brightness stronger, while lowering the value reduces it (as happens naturally). It is usually left at zero.

Dirt Texture Scale Of Shaders adjusts the size of the texture that simulates the dirt on the lens, which is enlarged and projected in the flare. This affects various elements. When set to zero, the dirt effect disappears.

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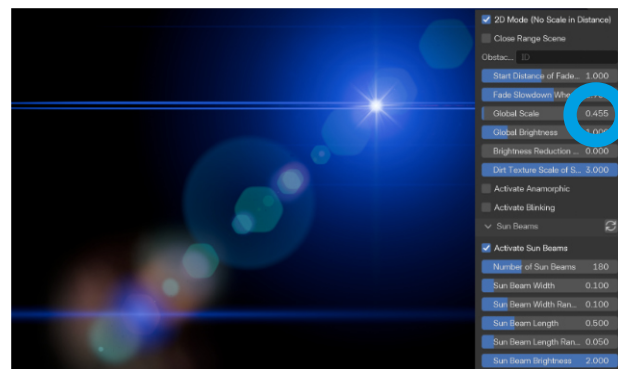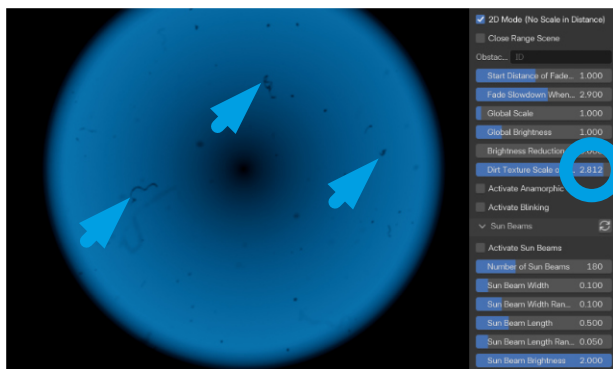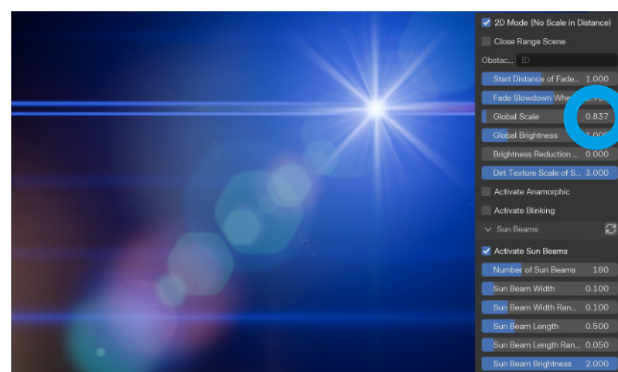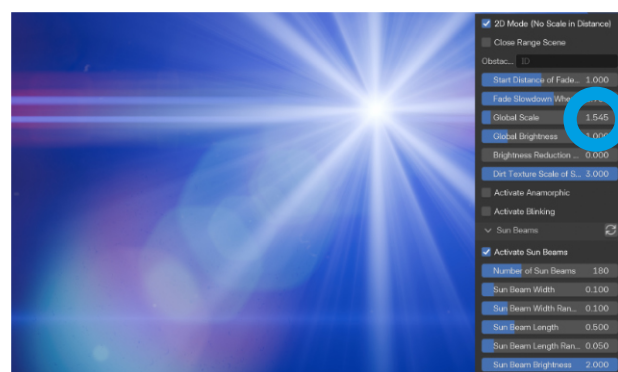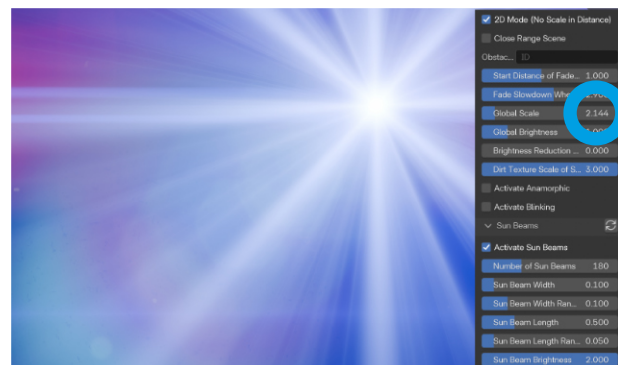
Anamorphic

Activating this parameter allows you to distort the flare either horizontally or vertically to simulate anamorphic lenses.

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Blinking

Activating this parameter causes the flare to create a blinking effect, which can be subtle (like sunlight filtering through leaves in a forest) or intense (like the flashing lights of a police car).

Blinking Speed controls the speed of the effect.

Blinking Intensity regulates the intensity, but in a particular way: when set to maximum, the effect is no longer noticeable. When set to minimum, the effect becomes very evident, though the flare loses brightness (which can be compensated for using **Global Brightness**).

Flared2 OFF   Flared2 ON

Sun Beams

Here, you can activate the rays that form the radiant sun shape.

Number of Sun Beams determines how many rays are created. More rays will give a fuller effect but will also be harder to render in Cycles (increasing render times and requiring higher Transparent Light Paths). See the **Using Cycles** chapter of this manual.

Sun Beams Width allows you to widen or narrow the individual rays.

Sun Beams Width Randomness adds randomness to the width of the rays.

Sun Beams Length allows you to lengthen or shorten the individual rays.

Sun Beams Length Randomness adds randomness to the length of the rays.

Sun Beams Brightness controls the brightness of this portion of the flare.

To modify the color of the rays, see the **Custom color** section in this guide.

Starburst

This is an optical effect that occurs with a strong light source, such as the sun or a very bright light. This effect creates light rays that extend from the light source, similar to star-shaped rays.

Starburst Type allows you to choose from several presets that define the number of rays and their shape.

Ray Width allows you to widen or narrow the individual rays.

Ray Width Randomness adds randomness to the width of the rays.

Ray Length allows you to lengthen or shorten the individual rays.

Ray Length Randomness adds randomness to the length of the rays.

Ray Brightness controls the brightness of this portion of the flare.

To modify the color of the rays, see the **Custom color** section in this guide.
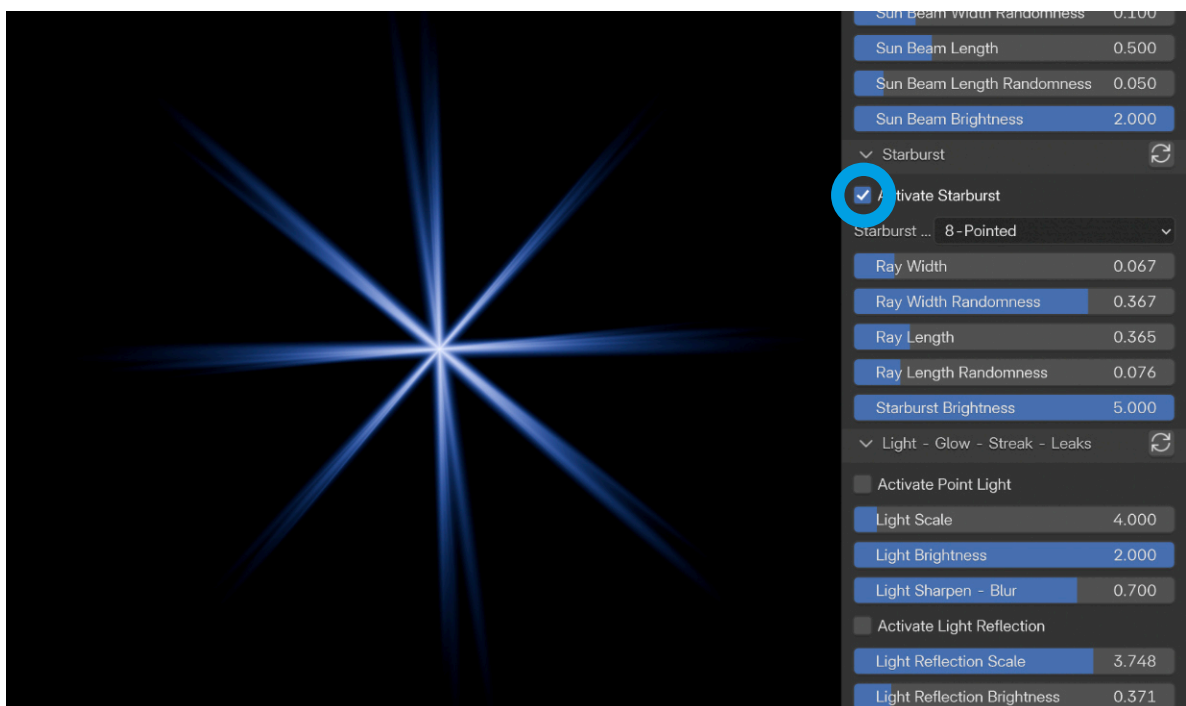
Point Light

The point light can range from fairly broad, like the sun, to almost non-existent, like a small light source.

Light Scale defines the size of the circle.

Light Brightness defines the brightness of the circle.

Light Sharpen - Blur adjusts the sharpness or blurriness of the circle.

Light Reflection

Creates a reflection on the side opposite the light source. I have decided to include a series of elements extracted from photographic material to make them appear more organic and realistic. Typically, this reflection echoes the shape and type of lamp/source emitting the light.
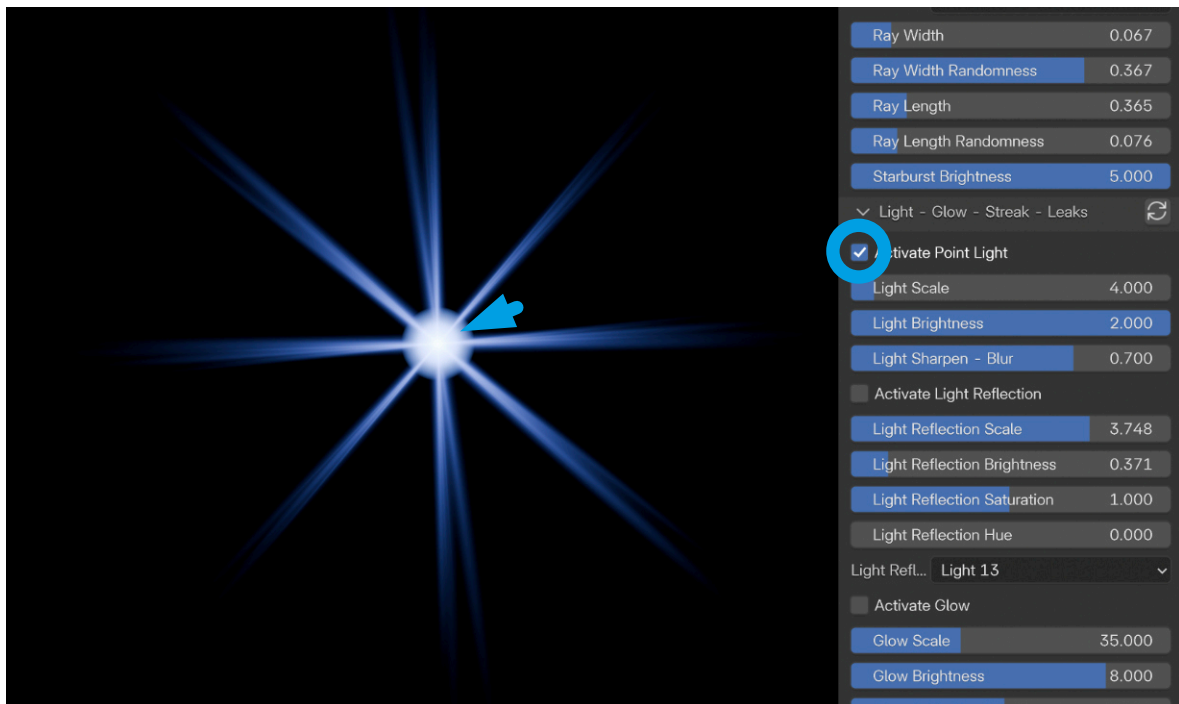
Light Reflection Scale adjusts the size of the reflection. For engaging artistic effects, I used very high scales in some presets.

Light Reflection Brightness defines the brightness of this element.

Light Reflection Saturation adjusts the saturation or color intensity of the reflection.

Light Reflection Hue modifies the general color of the reflection. In some cases, specific combinations of Saturation and Hue may lead to banding or pixelation in the image.

Light Reflection Shape allows you to choose between different shapes and colors.
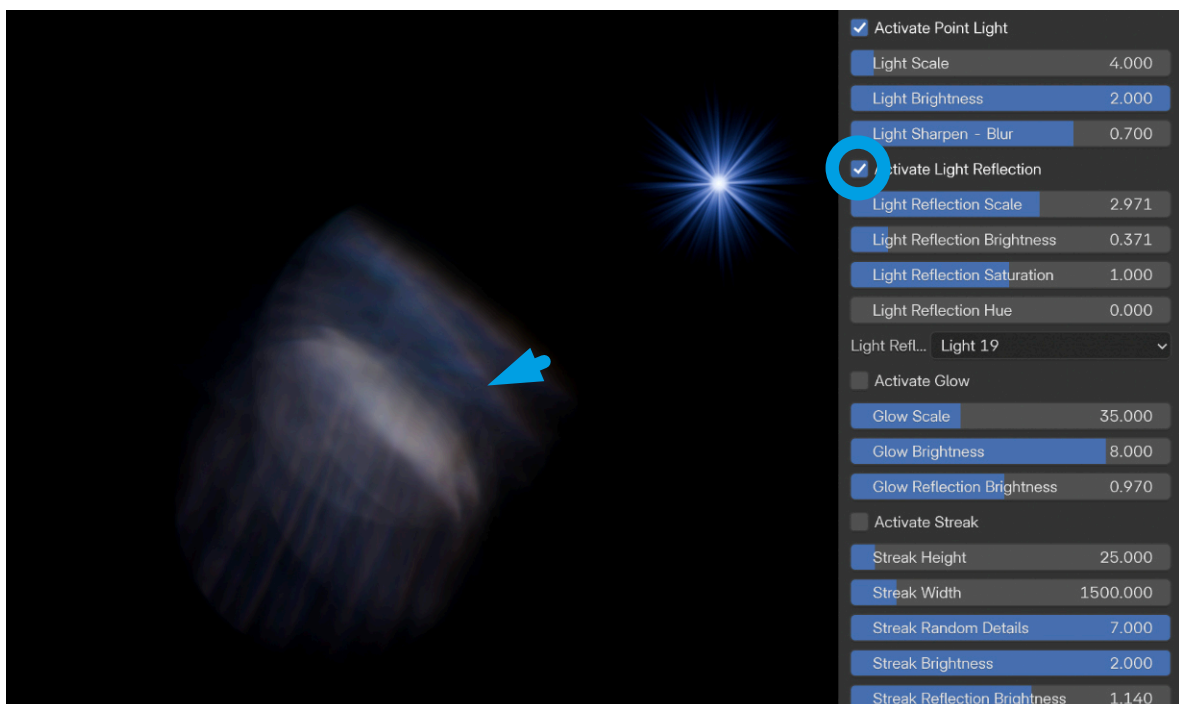
Glow

The glow is the luminous halo that appears around the light source, often with soft, blurred edges. This effect occurs when intense light enters the camera lens and bounces between the internal lenses, creating a sort of diffuse glow. The **glow** adds a sense of warmth and brilliance.

Glow Scale allows you to control the size.

Glow Brightness controls the brightness.
Since the glow also generates its opposite in the "light reflection" area, which depends on the main glow for both size and brightness, I decided to add a parameter:

Glow Reflection Brightness allows you to control the brightness of the opposite glow that occurs when the main glow is present.

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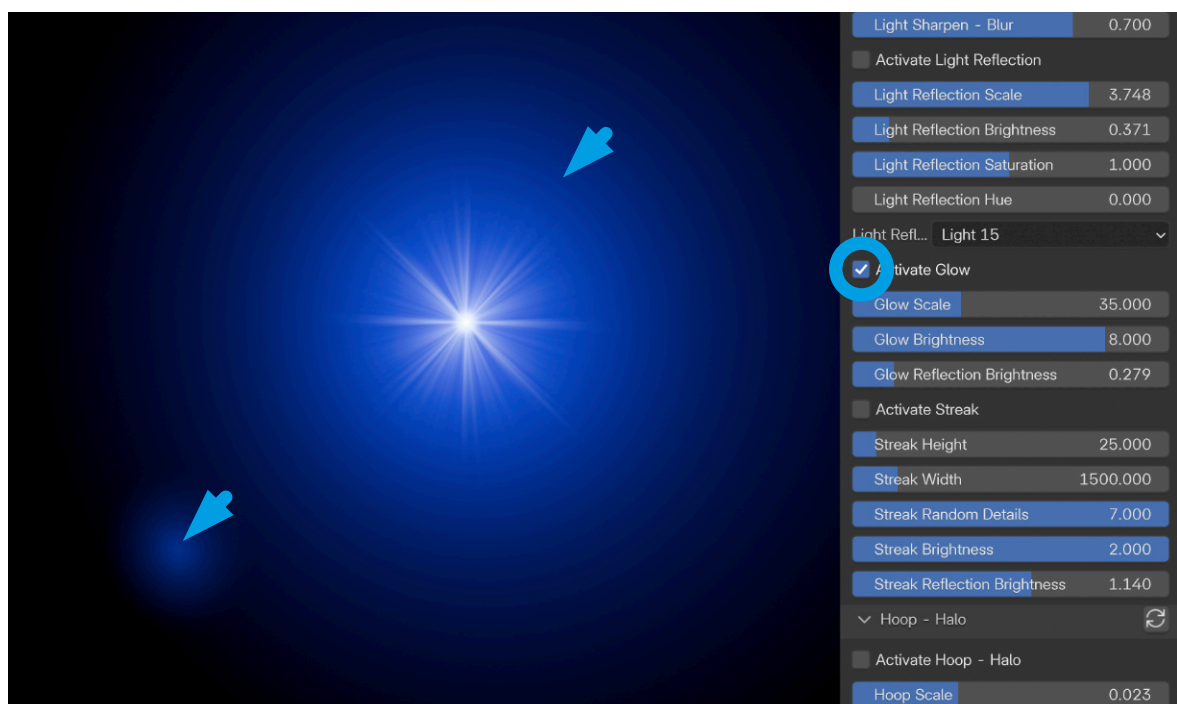
Streak

The streak occurs when light passes through the lens and is refracted or reflected in such a way as to create a bright, often long and thin line, spreading across the scene. Streaks are typical in shots with strong, point-like lights, such as the sun or headlights, adding a dynamic and cinematic element to the lens flare.

Streak Height defines the height of the line.

Streak Width defines the horizontal spread of the line.

Streak Random Details generates variations within the streak, as often happens in reality, where its shape changes with camera or light source movement. Currently, this effect produces different results depending on whether Eevee or Cycles is used. Both are valid but remain distinct.

Streak Brightness allows control over the brightness. Since the streak also generates its opposite in the "light reflection" area, which depends on the main streak for both size and brightness, I added the following parameter:

Streak Reflection Brightness allows you to control the brightness of the opposite streak that occurs when the main streak is present.
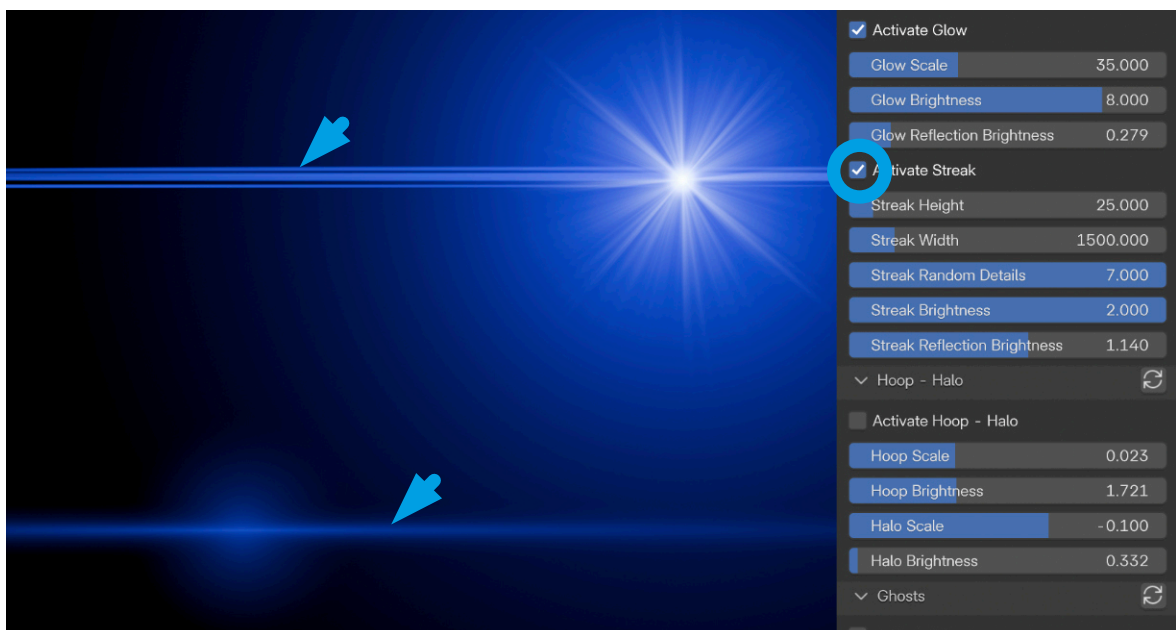
Hoop

This is a circular or ring-like effect that appears around the light source or along the optical axis. The hoop has variable brightness depending on the intensity of the light and the angle of incidence, and it often displays rainbow-like coloring.

Hoop Scale defines the size of the hoop.

Hoop Brightness defines the hoop's brightness.

The size of the hoop is independent of the size of the other flare elements. It doesn't decrease with distance but fades until it disappears. For this reason, even in 2D, the hoop is only visible at certain distances and is not adjustable with the Global Scale value.

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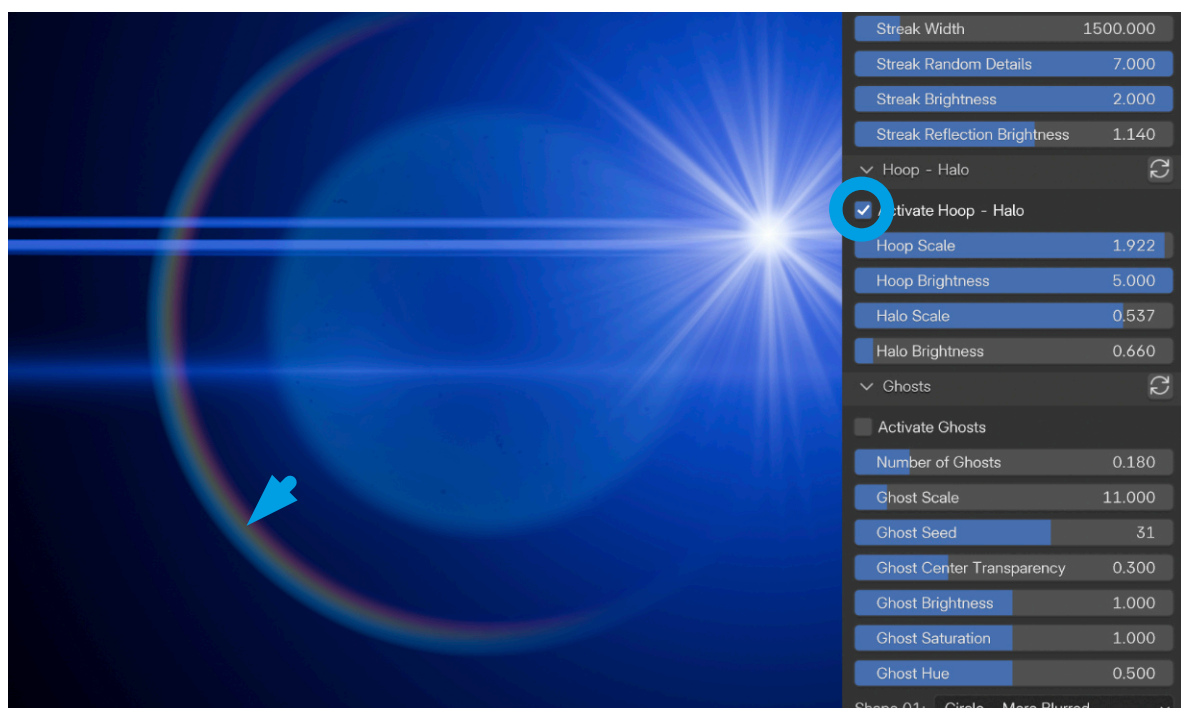
Halo

The halo is a circular glow that always stays centered on the screen, regardless of the light source's position. It tends to disappear as the light source moves out of the scene.
Like the hoop, the halo's size is independent of the other flare elements. It doesn't shrink with distance but fades until it disappears. For this reason, even in 2D, the halo is only visible at certain distances and is not adjustable with the Global Scale value.

Halo Scale defines the size of the halo.

Halo Brightness defines the brightness of the halo.

At the moment, the halo is very bright, so it's advisable to use relatively low brightness values. However, it tends to fade when the anamorphic mode is activated (in which case, higher brightness values may be more appropriate).
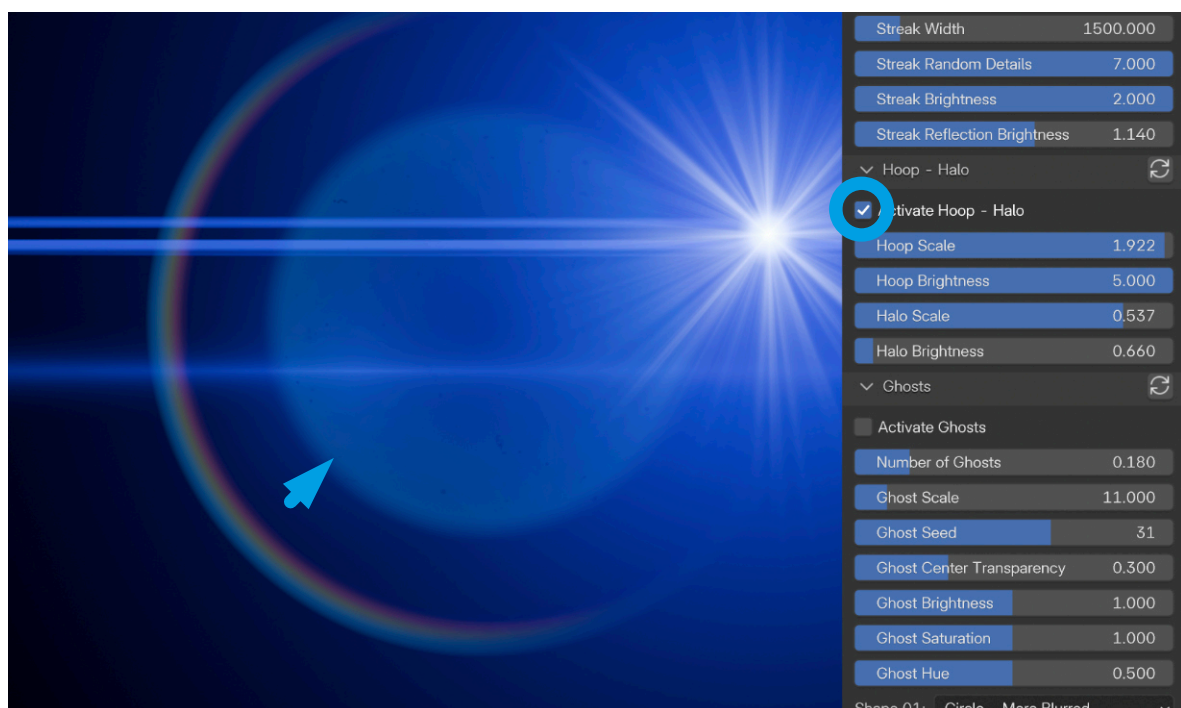
Ghosts

The series of ghosts is a sequence of light artifacts that appear as semi-transparent spots or discs of varying sizes and intensities, arranged along an axis starting from the light source. These "ghosts" often appear as circular or elliptical shapes that can vary in color and transparency. The series of ghosts adds complexity and an interesting aesthetic to the image, emphasizing the presence of intense light.

Number of Ghosts defines the number of elements to generate. More ghosts will create a fuller effect but will also be more challenging to render in Cycles (increasing render times and making it necessary to increase Transparent Light Paths. See the **Using Cycles** chapter in this manual).

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Ghost Scale defines the scale of all ghosts.

Ghost Seed modifies the random generation seed to try and achieve different effects from the default one.

Ghost Center Transparency defines how much all ghosts tend to become transparent towards their centers.

Ghost Brightness defines the brightness of all ghosts.

Ghost Saturation adjusts the saturation or color intensity of the ghosts.

**Ghost Hue** modifies the overall color of all ghosts.

To adjust the color of the ghosts, see also the **Custom color** entry in this guide.

Shape 01 allows you to choose the shape to use for a portion of the generated ghosts. The most typical shapes for this effect are available.

Shape 01 Blur - Sharpen adjusts the blurriness or sharpness of the ghost.

Shape 01 Scale adjusts the scale of Ghosts of type 01 independently from the others.

Shape 01 Deformation allows you to deform all Ghosts of type 01. This function is currently experimental. If you are looking for an anamorphic effect, it's better to use the anamorphic parameter mentioned earlier in this manual.
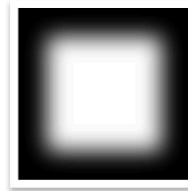
FL_Mask01.png   FL_Mask02.png   FL_Mask0

FL_Mask03.png   FL_Mask03b.png   FL_Mask0

FL_Mask04b.png   FL_Mask05.png   FL_Mask0

FL_Mask06.png   FL_Mask06b.png   FL_Mask

FL_Mask07b.png   FL_Mask08.png   FL_Mask0

FL_Mask09.png   FL_Mask09b.png   FL_Mask

Shape 01 Accent Color Positioning allows you to shift the ideal point the shader uses to color the ghosts in order to achieve different iridescent effects from the base one.

Shape 02 allows you to choose the shape to use for a portion of the generated ghosts. The most typical shapes for this effect are available.

Shape 02 Blur - Sharpen adjusts the blurriness or sharpness of the ghost.

Shape 02 Scale adjusts the scale of Ghosts of type 02 independently from the others.

Shape 02 Deformation allows you to deform all Ghosts of type 02. This function is currently experimental. If you are looking for an anamorphic effect, it's better to use the anamorphic parameter mentioned earlier in this manual.
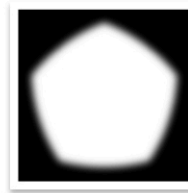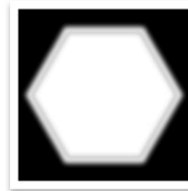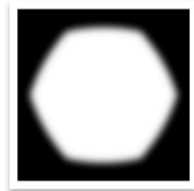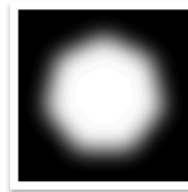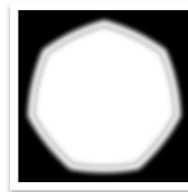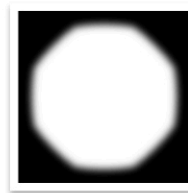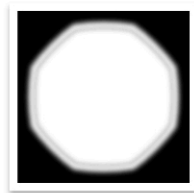
Shape 02 Accent Color Positioning allows you to shift the ideal point the shader uses to color the ghosts in order to achieve different iridescent effects from the base one.

Ghost Line Extension allows you to extend or shorten the virtual line on which the ghosts (and other elements of the flare) are placed.

Ghost Offset allows you to shift the ghosts along the line, moving them closer to or further away from the flare source.

Imprecision in Ghost Positioning arises from the fact that in certain types of lenses, ghosts are not positioned perfectly on a line but show some irregularities. With this parameter, you can create imprecision in their placement. At minimal values, it can look realistic, while at higher values, it becomes more suitable for artistic effects.

Ghost Geometry Convolution is a parameter that allows ghosts to change scale independently depending on camera movements, producing a very interesting artistic effect.

Horizontal Ghosts

This part of the effect stems from my artistic passion for lens flares. It is the least realistic but still allows for the creation of very interesting presets. Essentially, it enables the generation of a series of ghosts on the horizontal axis, which extend based on light and camera movements.

Number of Horizontal Ghosts defines the number of elements to generate. More ghosts will create a fuller effect but will also be more challenging to render in Cycles (increasing render times and making it necessary to increase Transparent Light Paths. See the "Using Cycles" chapter in this manual).

Horizontal Ghost Random Seed modifies the random generation seed to try and achieve different effects from the default one.

Horizontal Ghost Thickness defines the height of the group of ghosts.

Horizontal Ghost Height defines the height of the virtual grid on which the elements are arranged.

Horizontal Ghost Length defines the width of each individual element.

Horizontal Ghost Width defines the width of the virtual grid on which the elements are arranged.

Horizontal Ghost Center Transparency defines how much all ghosts tend to become transparent towards their centers.

Horizontal Ghost Brightness adjusts the brightness of the ghosts.

Horizontal Ghost Saturation adjusts the saturation or color intensity of the ghosts.

Horizontal Ghost Hue modifies the overall color of the ghosts.

Horizontal Ghost Blur - Sharpen adjusts the blurriness or sharpness of the ghosts.

To adjust the color of the ghosts, see also the **Custom color** entry in this guide.

At the moment, these elements are affected by a discrepancy between the 2D and 3D versions, which we hope to resolve soon. If you encounter difficulties, the only thing to keep in mind is that the 2D version requires certain settings, while the 3D version requires others to achieve the same result.
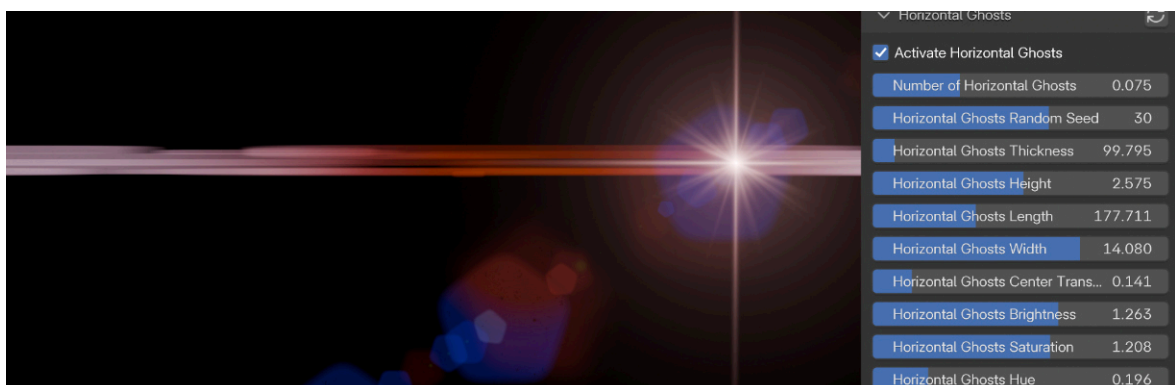
Other Streaks

Here, various additional horizontal streaks are created that react to camera movements.

Multiple Streaks Height defines the height of the area covered by the multiple streaks.

Multiple Streaks Width defines the width of the multiple streaks.

Multiple Streaks Thickness defines the thickness of each individual multiple streak.

Multiple Streaks Brightness adjusts the brightness of the multiple streaks.

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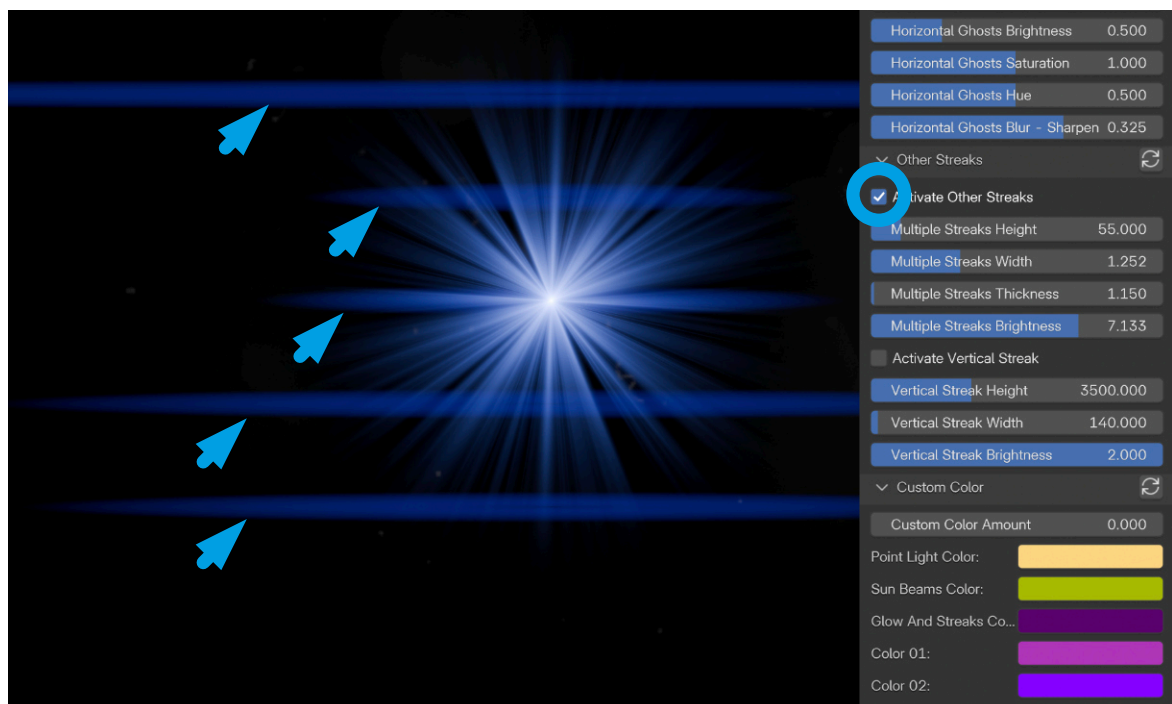
Vertical Streak

Adds a vertical streak tangent to the center of the flare's light source.

Vertical Streak Height defines the height of the vertical streak.

Vertical Streak Width defines the width of the vertical streak.

Vertical Streak Brightness adjusts the brightness of the vertical streak.

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Custom Color

Custom Color Amount controls how much the colors defined in this section are used instead of the default colors of all flare elements. By setting the value to 1, the default colors will be ignored, and the colors defined in this section will be applied.

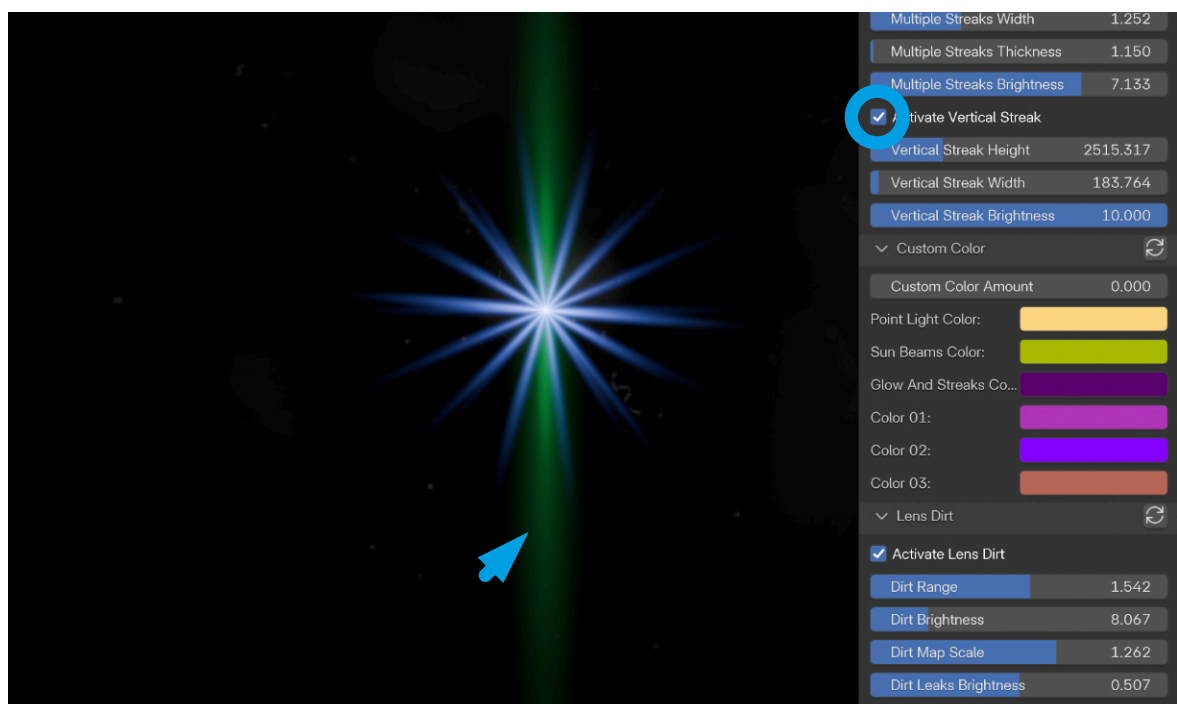**Point Light Color** defines the color of the central point light as well as the Lens Dirt (see the "Lens Dirt" entry later in this manual).

Sun Beams Color defines the color of the sun beams and the starburst.

Glow and Streaks Color defines the color of the glow and streaks.

Color 01, 02, 03 define the other colors used by the various flare elements.

Remember that some colors can also be modified by the individual Hue and Saturation values present in most flare elements.
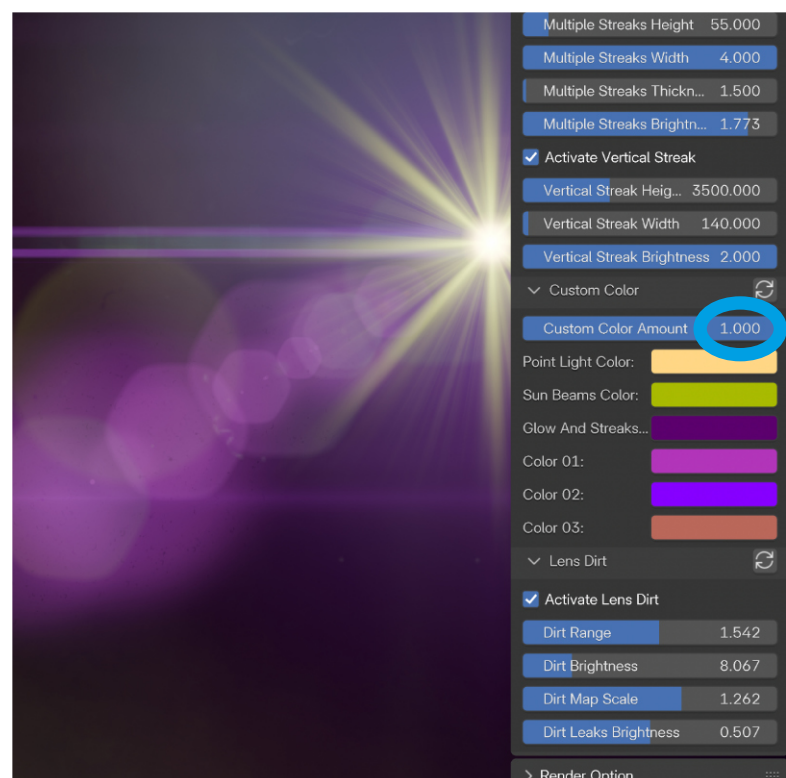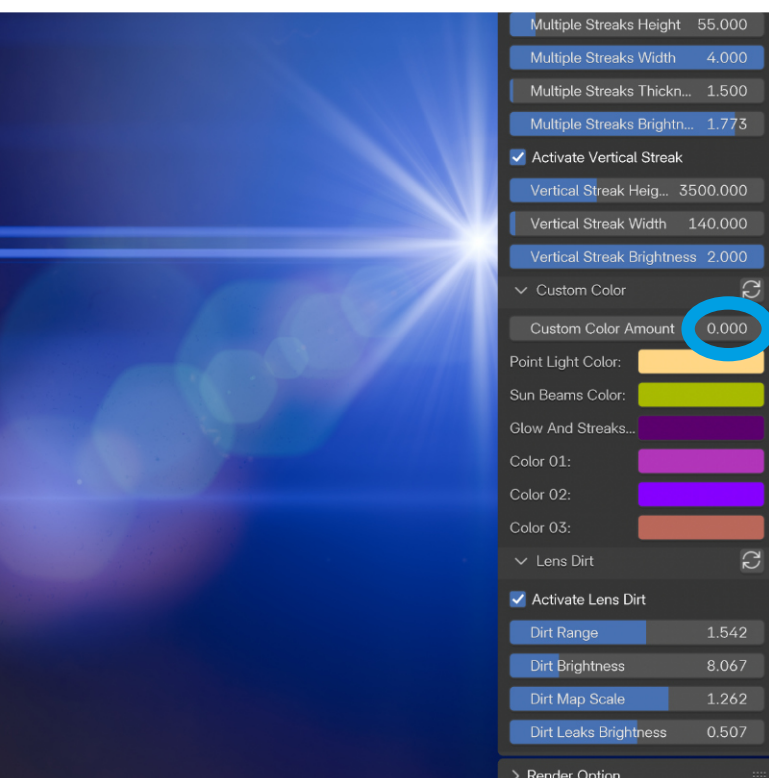
Lens Dirt

This effect aims to simulate the presence of particles on the camera sensor and lens.

Dirt Range defines how wide the circular area around the flare source will be that generates lens dirt spots.

Dirt Brightness defines how bright the visible spots will be. The color of the spots is defined in the "Custom Color" section mentioned above.

Dirt Map Scale defines the size of the texture that simulates the dirt spots on the lens.

Dirt Leaks Brightness defines how visible the effect is, which is only generated when the camera is very close to the light source and becomes dazzled, highlighting spots and dirt.

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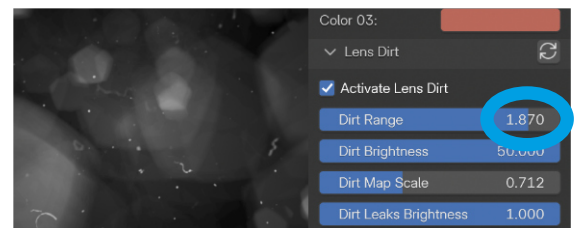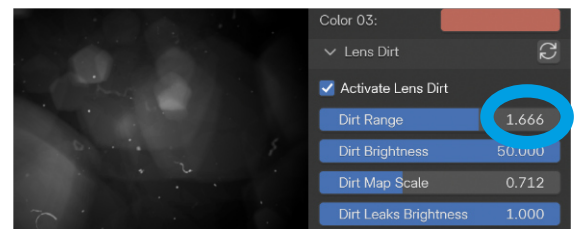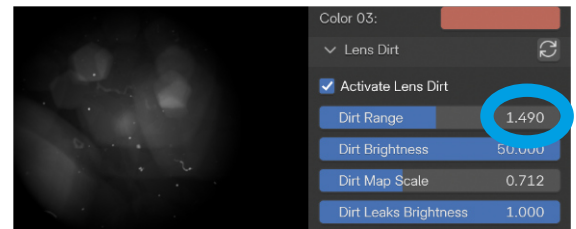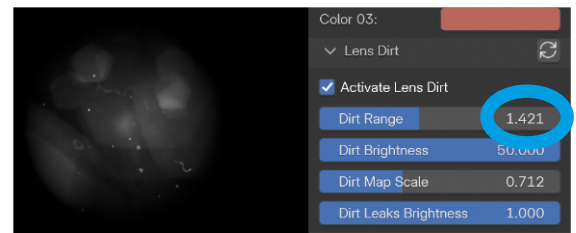
Render Option

This option is directly inherited from Flared1. It can be very useful for various purposes:

1. Rendering the flares separately for later **compositing in external applications**.

2. Always rendering the flares with Eevee (even though the scene is rendered with Cycles) **to greatly speed up render times**.

3. Rendering the flares in such a way as to **avoid problems with subjects that are too close** to the camera.

This function creates a separate render layer that allows the flares to remain in the viewport, providing a quick preview. However, at the moment of rendering, it uses the Eevee layer exclusively for the lens flare. This is possible thanks to the use of multiple scenes organized through the compositor.

If you are an expert with the compositor, you can manually create the nodes to control the various functions. If you have no idea how to use the compositor, let the add-on build the nodes through the **auto setup compositing nodes** function. Keep in mind that this option will delete any existing nodes in the compositor.

Note that it is possible to export the flares and the background into separate files or into a single EXR file with different layers. To do this, you need to manually set the **File Output** nodes.
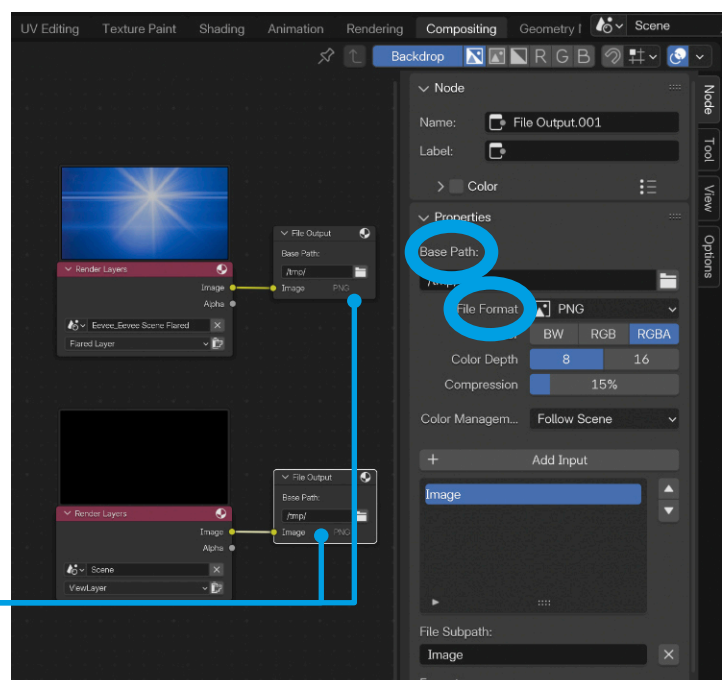
What about Alpha Channel?

In digital graphics, lens flare is a light effect and doesn't have an alpha channel to define transparency as a regular image with transparency would. This is because lens flare is not an opaque object with sharp edges, but a luminous phenomenon that behaves like light, interacting with the background based on brightness.

Therefore, the way the flare blends with the background is primarily determined by a blending mode, such as Screen or Add. These modes work by overlaying the flare on the background, increasing the brightness values of the underlying areas, simulating how light behaves in real life. The alpha channel, which controls opacity, is not essential in this case because the blending mode takes care of how the light adds up to the underlying pixels, creating the desired visual effect. What matters is that the flare's background is black (which is what Flared2 does when the render mode is activated on a separate layer).

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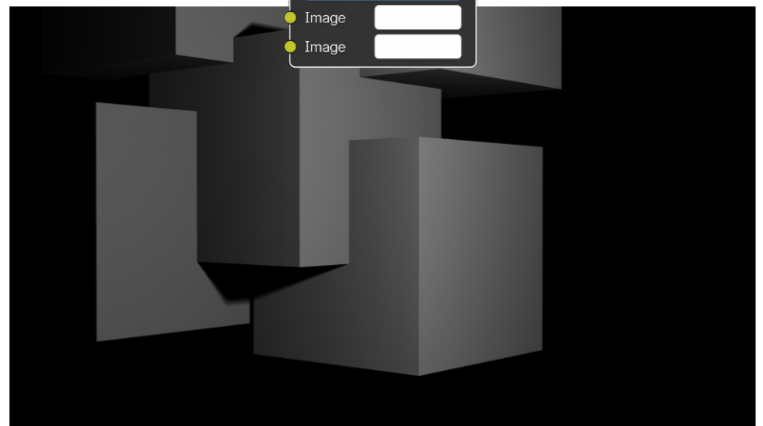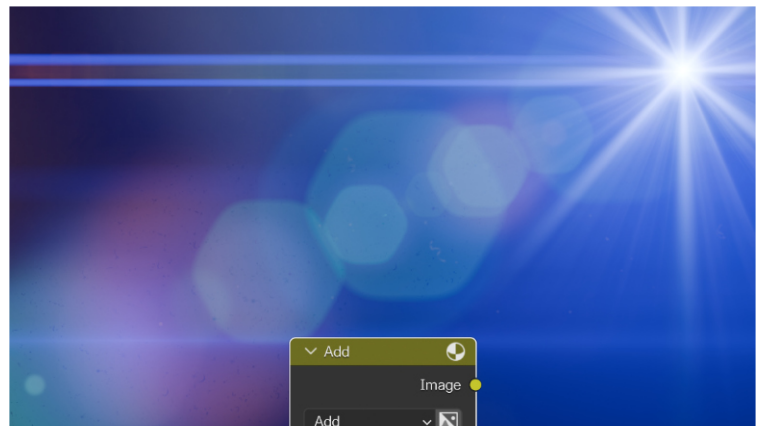
Working with More Flares

Working with multiple flares in a scene can be difficult, especially when it comes to distinguishing between different types of existing flares. For this reason, we have introduced two types of controls that can be helpful in these situations.

Linking Properties

The simplest way to link different flares for simultaneous modification is by clicking on the circle icon. Any changes made to the active flare will be replicated in the linked flares after refreshing the modification panel*. This allows all linked flares to reflect the adjustments made to the active one.

Copying Properties

You can also copy properties from the active flare to selected flares. First, select the flares to which you want to apply the properties, then go to the extra menu and choose the option **Copy Properties from Active to Selected**. This will open a panel where you can choose which properties to copy. This method allows you to copy multiple properties with a single click, offering more control than the linking feature.

Deleting Flares

Flares can be deleted in bulk using the extra menu options:

Delete All Flares: Removes all flares.

Delete Selected Flares: Deletes only the selected flares.

Delete Unselected Flares: Deletes all flares except for the selected ones.

Linked Flares

*Click this icon near the title of each panel to copy the properties of this panel to all the linked flares

Selected Flare

Active Flare

Export Active Flare as a Custom Preset
Export Active Flare as a ZIP File
Import Preset From a ZIP File
Copy Properties from Active to Selected
✕ Delete Selected Flares
✕ Delete Unselected Flares
✕ Delete All Flares

Copy Properties

☑ Global
☑ Sun Beams
☑ Starburst
☑ Light - Glow - Streak - Leaks
☑ Hoop - Halo
☑ Ghosts
☑ Horizontal Ghosts
☑ Other Streaks
☑ Custom Color
☑ Lens Dirt

Use this panel to select which properties to copy from the active flare to the selected ones

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Presets

The core of Flared2 is the ability to use its various properties as a palette for creating custom presets. A preset can store unique information to define a specific type of lens flare. You can create, export, and import an unlimited number of presets, which can be shared with others. This turns Flared2 into a workshop for crafting and managing limitless types of lens flares.

Default and Custom Presets

Default Presets: These are factory presets designed by me and trusted collaborators. Some presets are more photographic in style, while others are illustrative or purely artistic.
Custom Presets: These are user-generated presets that can be shared and installed at will. You can specify the folder where these presets are stored.
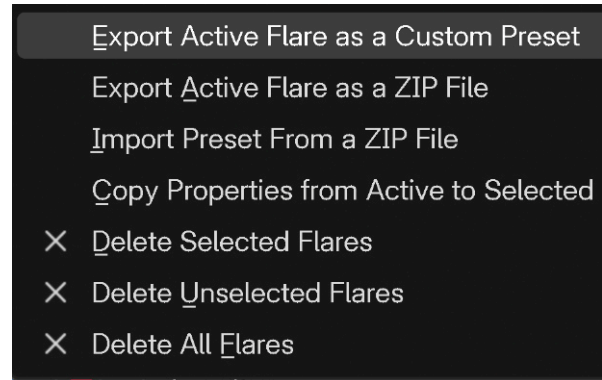
Exporting Presets

From the extra menu, you can use the **Export Active Flare as a Custom Preset** option to export the currently active flare as a preset. Each preset consists of an automatically generated icon and a user-defined name. By manually copying the icon and preset file to the desired folder, you can transfer your lens flares between computers. There is also a simplified option: **Export Active Flare as a ZIP File**, which can then be imported automatically via **Import Flare as a ZIP File**.

Importing Presets

Use the **Import Flare as a ZIP** File option to select a ZIP file exported from Flared2. This will import the flare into your custom preset folder.

Export Active Flare as a Custom Preset
Export Active Flare as a ZIP File
Import Preset From a ZIP File
Copy Properties from Active to Selected
× Delete Selected Flares
× Delete Unselected Flares
× Delete All Flares

We are working on creating a space where all the flares built by you, the users, can be hosted, so that you can share what you've created with the community and also benefit from the presets made by other users. When everything is ready, you will receive a message through the store where you made the purchase with the necessary instructions. Thank you!

Keyframes
and Animation

Every numerical property discussed here can be keyframed for animation. Simply hover over the desired property, move to the desired frame on the timeline, and press the "i" key. This will save the current value of the property at the selected frame.

By moving to another frame and repeating the process with a different value, Blender will automatically animate the transition between keyframes.

If you want to share the animation of certain properties across multiple flares, the easiest way is to use Blender's Drivers. Right-click on the value you want to copy and select 'Copy as New Driver'. Then go to the target value, right-click on it, and select 'Paste Driver'. The field should turn purple and will behave exactly like the original.
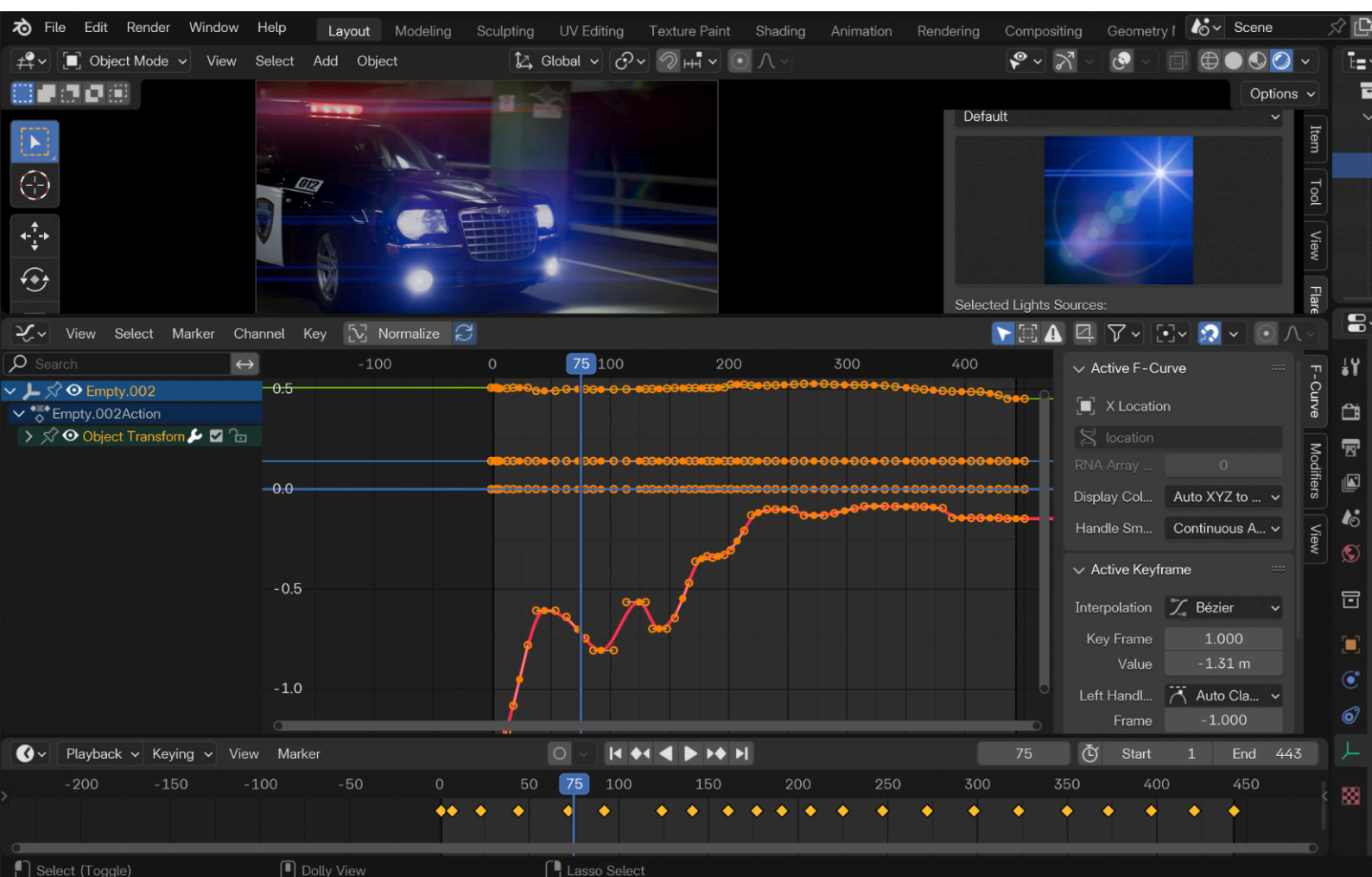
Current Limitations

In addition to the limitations mentioned in previous sections, Flared2 currently has the following key limitations:

Object Clipping: Objects very close to the camera origin may clip through the polygons created by Flared2. There are workarounds available, such as using the "Close Range Scene" and "Render Option" settings.

Extreme Values: Some extreme value combinations may result in flares behaving abnormally.

Depth of Field (DOF): When DOF is active, the flare may appear out of focus because it is positioned in front of the camera's origin. This behavior mirrors how real lens flares work.

Collision Detection: The system may struggle to detect collisions when objects near and far from the camera are in the same scene. We recommend using "middle" settings to balance both. At the moment, collision management requires demanding calculations for the CPU. For this reason, it is recommended to use collisions only where strictly necessary to avoid slowdowns in the viewport.

2D vs. 3D: Flares may change slightly when switching between 2D and 3D, or when enabling the **Close Range** or **Anamorphic Mode**. This is due to fundamental changes in flare behavior. We suggest manually adjusting the elements for the desired results in the selected mode.

Flared as an Artistic Tool: Flared is designed to add drama, realism, and emphasis to scenes. It is not a physics-based tool.

Artifacts: In some situations, Cycles may render artifacts that are not noticeable in Eevee (caused by overlapping or intersecting planes). This issue can be bypassed by slightly adjusting some flare settings or by using the functions in the Render Option panel, which are explained in this manual.

Troubleshooting

Installation Errors

If Flared2 shows errors after installation, it may be due to a failed add-on installation. To fix this:

1. Uninstall the add-on from the Preferences panel.
2. Save the preferences.
3. Quit Blender.
4. Navigate to the Blender add-ons directory (on Win: C:\Users\USER\AppData\Roaming\Blender Foundation\Blender\YOURVERSION\scripts\addons\ or on Mac: Macintosh HD/Users/USER/Library/Application Support/Blender/YOURVERSION/scripts/addons/). Replace "USER" with your username and "YOURVERSION" with your Blender version.
5. Delete anything called "flaredvfx."
6. Restart Blender, reinstall Flared, and activate it.
7. Test the add-on in a new, clear scene.

Black Spots in Cycles

If you see black spots instead of lens flares in Cycles, increase the value of **Transparent Light Paths** in the Render Properties panel. The correct value depends on the number of flare elements, so experiment to find the minimum value that removes the spots. See the **Using Cycles** chapter of this manual.

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Contact

For any reports or requests for new features, feel free to contact me at:
info@blenderlensflare.com