

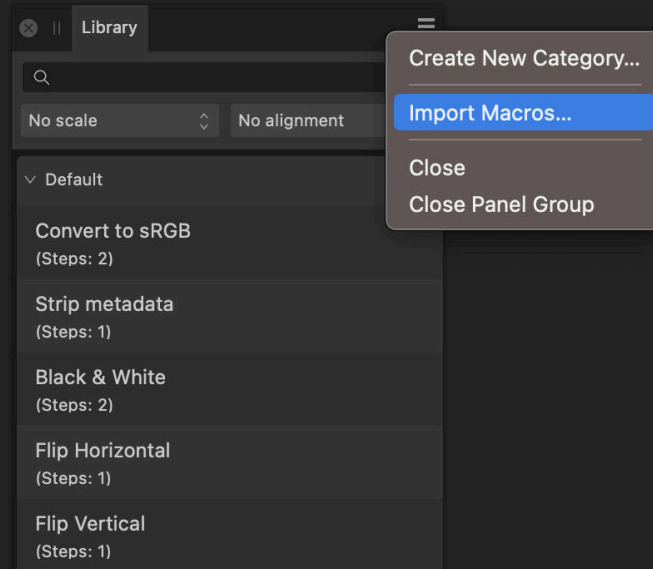


Introduction

This macro pack contains various tools for 3D and 2D render post production workflows.

Such tools include using any layer non-destructively as a mask (allowing for externally linked alpha/mask passes), using normal map passes to relight scenes, structure and local contrast enhancement, black level remapping and manipulation for 'matte' looks, light diffusion and bloom effects, HDR tone mapping and more.

Many of the macros are intentionally non-destructive, preventing the need to continually merge layers—this is especially useful for complex documents as it maintains smaller file sizes and allows for changes to be made quickly to underlying layers.



Installation

1. Extract the *.afmacros* file to a directory of your choice.
2. In Affinity Photo, you will need to expose the **Library** panel. Go to **Window>Library**.
3. Click the small icon at the top right of the **Library** panel and choose **Import Macros**.
4. Navigate to the directory containing the *.afmacros* file and select it, then click **Open** (or double click the file).
5. The **Library** panel will then be populated with the macros from that category. If you are installing any other macro packs, repeat the process for those categories.

Tip: you can also drag-drop the *.afmacros* file onto a blank area of the app and it will immediately import and be shown on the Library panel. You can bulk import multiple *.afmacros* files this way.



Enhance Depth & Contrast + Enhance Local Contrast

Macro

Use Layer as Mask (Weighted)
Use Layer as Mask (Full)

NEW:

Use Inverted Layer as Mask (Weighted)
Use Inverted Layer as Mask (Full)

Functionality

Add to a layer whose contents you wish to use as masking data.

Non-destructively converts the selected layer to alpha data. You can then click-drag the layer onto the *thumbnail* of another layer and it will become a mask.

This is useful for workflows where you might have an alpha pass as an image, especially if it is a linked placed layer that can be updated externally. Normally, you would use **Rasterise to Mask**, but this is destructive and will break the external link.

Using this macro enables you to retain that link, so the alpha pass can be updated externally and any image copies in your document will update as well.

The **Weighted** macro will use a weighted RGB intensity that favours green, red then blue—useful for masking with colour imagery.

The **Full** macro will simply sum the RGB channel data with no weighting. This is more useful for greyscale alpha passes, or if you simply want a full colour image to behave more like a black and white alpha mask.

The Inverted versions will also invert the mask data non-destructively, so white becomes black and vice versa.

Use Layer as Pixel Mask

Add to a layer whose contents you wish to use as masking data.

Converts the selected layer to rasterised alpha data. You can then click-drag the layer onto the *thumbnail* of another layer and it will become a mask.

This is similar to **Use Layer as Mask**, but the layer will become a Pixel layer, which means you can easily add or subtract pixel data in order to modify the masking data.

For example, you could create a rectangular marquee selection of a black area on the layer and go to Edit>Fill to fill it with white—in masking behaviour, this would then “show” the area rather than hide it.

Mask to Pixel Mask

Use on a Mask Layer.

Converts an explicit Mask Layer to a Pixel Layer that behaves as a mask, enabling the behaviour described above with the **Use Layer as Pixel Mask** macro.



Macro

ID Pass to Colour Range Mask

Functionality

Use on a placed or copy-pasted ID render pass layer, e.g. Material ID bitmap.

Non-destructively converts an ID pass to a colour range mask, enabling you to mask based on its colour data.

Click the **Colour Range Mask** thumbnail and use the hue range colour wheel to pick the range of colour tones you want to mask with. The **Hue Range Blur Radius** slider can be adjusted for edge antialiasing.

Once you have the desired colour masking, click-drag the ID pass layer onto the *thumbnail* of another layer to mask it.

Normal Map Relighting (Basic) Normal Map Relighting (Bump)

Use on a placed or copy-pasted normals render pass layer.

Converts an XYZ normals pass to greyscale information and uses it to alter the lighting balance of a render.

With the **Basic** version, Click the **Normals Adjustment** thumbnail and use the **Rotation** slider to control the lighting balance.

With the **Bump** version, click the **Normals to Bump Map** thumbnail and use the **Light direction** elevation-rotation input to control the lighting balance.

Mist / Z-Depth Pass Blending

Use on a placed or copy-pasted Z-depth pass or Mist pass layer (from Blender).

Sets up a Z-depth or Mist render pass layer for compositing, allowing you to add atmosphere to your scene. There are several adjustments placed inside the render layer:

- **Levels Remapping** allows you to control the contrast of the atmospheric effect by modifying the **Black** and **White** level thresholds.
- **Single Colour Toning**, when enabled, tints the atmospheric 'mist'. Click the layer thumbnail to change the **Hue** and **Saturation**.
- **Gradient Colour Toning**, when enabled, tints the atmospheric 'mist' with a range of colours. Click the thumbnail to change the gradient colours.



Normal Map Relighting (Basic)

Macro

Emission Pass Blending

Functionality

Takes an Emission render pass (e.g. from Blender) and non-destructively adds a gaussian blur whilst also setting an appropriate Screen blend mode. The strength of the emission can be controlled with the layer opacity.

Blend Bright Detail (Screen)

Add to any layer you want to blend.

Quickly changes the target layer's blend mode to Screen and applies a live luminosity mask that blends through the brighter detail from the layer.

Useful for additional render passes (e.g. Specular, Reflection, Refraction, Glossy, Transmission) where you may want to blend through just the brighter parts.

Inferred Atmosphere Pass

Uses a dark channel prior analysis method to create a faux-atmosphere render pass that can be used to composite haze or fog into the image.

Change the *Inferred Atmosphere Pass* layer opacity to control its strength. You can also expand the layer and click the **Brightness & Contrast** layer thumbnail to modify the atmosphere tonality.

Multiply By Alpha

Add to a layer with an alpha channel, or a layer/group that has a mask layer clipped to it.

Non-destructively multiplies the alpha channel values by the composite RGB pixel values. Useful if you are applying straight alpha to a pixel layer or group.

Divide By Alpha

Add to a layer with an alpha channel, or a layer/group that has a mask layer clipped to it.

Non-destructively divides the alpha channel values by the composite RGB pixel values, also known as unpremultiplication. Useful if your pixel layer's alpha channel has been premultiplied by the RGB colour channels and you need to perform further edits.



Inferred Atmosphere Pass

Macro

Alpha Matte Control (Curves)

Functionality

Add to a layer with an alpha channel, or a layer/group that has a mask layer clipped to it.

Allows you to control blending of anti-aliased alpha pixels, which is very useful if a mask's result isn't quite suitable for the compositing requirement (e.g. pixels are too transparent, or not transparent enough).

Click the **Alpha Matting (Curves)** thumbnail, then switch from **Master** to **Alpha** on the channel target to change the curve.

NEW:

Reduce Path Tracing Noise (Global) Reduce Path Tracing Noise (Clipped)

Adds a non-destructive filter group that uses two passes of general noise filtering to remove excessive noise in path traced imagery.

Nowadays, the final render composite usually has some noise reduction applied (e.g. with OpenImageDenoise). This macro is still very useful for additional render passes you may be compositing with, however, such as volume passes that tend to be quite noisy.

Global will insert the noise reduction group as a parent layer affecting all layers beneath it.

Clipped will insert it into the currently selected layer—e.g. you could put it straight into a noisy volumetric render pass.

Reduce Fireflies (Global) Reduce Fireflies (Clipped) 16-bit/8-bit formats only

Adds a non-destructive filter that uses median filtering to remove fireflies (excessively bright single pixels). It's also good for reducing noise generally in render passes.

Global will insert the **Reduce Fireflies** layer as a parent layer affecting all layers beneath it.

Clipped will insert it into the currently selected layer.

Soften Monte Carlo Noise

Adds a non-destructive filter that softens monte carlo noise (harsh noise from path tracing) slightly.



Macro

NEW:

Local Contrast & Texture (Merge)
Local Contrast & Texture (Single Layer)

Functionality

Creates a very strong local contrast enhancement that is very useful for accentuating detail and texture. Not designed to be used at 100% strength, so reducing layer opacity and masking is recommended.

This macro creates a mask layer and selects it so you can immediately start applying the effect selectively. You can easily use CMD+I / Ctrl+I to invert the mask and paint back in with white over the areas you want to enhance.

The **Merge** macro will create a merged layer at the top of the layer stack with all your work so far. The **Single Layer** version only enhances the layer you currently have selected.

Local Contrast Structure

Performs a broad structural enhancement of edge detail in the image. Good for adding some extra 'punch' and drama. Change the opacity of the **Local Contrast Structure** layer to control its strength.

Enhance Structure (Midtone Blend) Enhance Structure (Full Blend)

Enhances structure and texture in the image. **Midtone Blend** limits it to shadow and mid-tone regions, preventing white halos around bright detail. **Full** has no tonal restrictions and allows highlights to be affected as well.

Enhance Local Contrast

Increases contrast, particularly of bright regions in the image. Provides a subtle enhancement compared to the options above.

Enhance Depth & Contrast

Performs a very broad enhancement of contrast detail—great for making an overall scene 'pop' more. Performance may be slow with this filter, so you can always hide it temporarily whilst editing and show it before exporting.

NEW:

Luma Masked Curves
Luma Masked Curves (Weighted)

Adds three Curves adjustment layers that target shadows, mid-tones and highlights. This allows you to make very specific changes to each tonal range.

The **Weighted** version will ensure the adjustments only affect weighted luminosity and not colour intensity.

NEW:

Luma Masked HSL

Adds three HSL adjustment layers that target shadows, mid-tones and highlights. This lets you make more specific adjustments to colour range intensity and luminosity.



Enhance Depth & Contrast

Macro

Functionality

Shadow & Midtone Boost

Uses negation blending to enhance brightness of shadow and mid-tone regions. Alter the *Shadow and Midtone Boost* group opacity to control its strength.

Matte Black Tone Curve

Adds a Curves adjustment with an aggressive 'toe' to flatten and push black tones up, creating a matte black appearance.

NEW: Matte Black Look

Produces a 'matte' black appearance that lifts and compresses black levels and also reduces colour intensity.

Click the *Matte Black Look* layer thumbnail for configurable options such as Per Channel Offset, Min/Max Blend and a Gamma transform slider.

Moody Matte Look

Creates a more complex matte black effect with more options. Change the opacity of the *Moody Matte Look* layer to control its overall strength. You can also click the thumbnail and use the Offset slider to change the black level compression.

Faded Matte Effect

Provides another option for achieving a matte black effect using Lighten blending.

Click the *Faded Matte Effect* layer thumbnail for **Matte Strength** and **Matte Clamping** options.

NEW: Light Diffusion Effect

Diffuse Glow

Bloom

Dreamy Glow

Various macros to create a non-destructive glow effect that blurs highlight detail and makes it more intense.

Light Diffusion Effect creates the most subtle glow effect.

Diffuse Glow produces a balanced all-round light diffusion.

Bloom affects more mid-tone range and has slightly more contrast enhancement.

Dreamy Glow produces a powerful highlight diffusion that is more overpowering and affects a wider tonal range.



Diffuse Glow and Dreamy Glow

Macro

Light Streaks (Global)
Light Streaks (Clipped)

Functionality

Creates a fully configurable light flare effect across the image.

The **Global** version will create a new parent group, and the effect will be created from all the layers beneath it.

The **Clipped** version will use the currently selected layer as the effect base. It's recommended to run this on a suitable render pass such as Emission, Volumetric etc.

For both versions, you will have several options upon expanding the parent layer:

- **Tonal Threshold** allows you to control the black and white points. This determines how much of the image the light streaks will composite with.
- **Direction** and **Blur** will let you alter the direction of the light streak effect, and also how much blur to apply (you will need to manually type in any value above 100px).
- **Additional Low Pass**, when enabled, will blur the effect and make the individual light streaks less visible.
- **Streak Colour**, when enabled, will explicitly colourise the light streaks rather than them inheriting their colour from the composition (click the layer thumbnail to change the hue and saturation).
- **Saturation** will alter the overall colour intensity of the light streaks.

Dramatic Lighting

Uses a faux bump-map greyscale conversion to alter lighting detail in the image.

Click the **Dramatic Lighting** layer thumbnail and change the **Angle** input to control the lighting direction.

Blurry Grain

Adds an organic-looking, slightly soften grain effect to the image.

Change the **Blurry Grain** group opacity to alter the overall strength.

Expand the **Blurry Grain** group and click the **Blur** layer thumbnail to alter the direction and strength of the blur effect.



Light Streaks (Global)

Macro

Chromatic Aberration (Distortion)
Chromatic Aberration (Distortion Strong)
Chromatic Aberration (Transform)
Chromatic Aberration (Channel Transform)
Chromatic Aberration (Blur)

Functionality

Please note: for the Distortion variant, ensure you have changed the macro scaling option to Max fit or Stretch, otherwise the distortion filters will not scale to the size of your document.

Simulates the optical issue of chromatic aberration, where the colour planes are out of alignment.

Distortion provides the most 'organic' and flexible result. You can expand the Red, Green and Blue layers, click the corresponding **Aberration** layer thumbnail and adjust the distortion amount to fully customise the effect. *Please ensure you read the above note about changing the macro playback scale.*

Distortion Strong is as above, but with a stronger distortion effect.

Transform will shift each colour plane spatially. You can further control the effect by selecting the **Red**, **Green** and **Blue** layers then nudging (arrow keys) with the **Move Tool (V)** selected.

Channel Transform will shift each colour plane spatially but only using one pixel layer and channel masking. The effect is very subtle and is not controllable further. Recommended for lower resolution imagery (the effect may be too subtle at higher resolutions).

Blur produces a very subtle aberration between the colour planes. You can expand the **Red**, **Green** and **Blue** layers then click the corresponding **Blur** layer thumbnail to adjust the amount of blur.

Weighted Greyscale Conversion

Performs a non-destructive black and white conversion using a weighted intensity greyscale model, producing a more natural and balanced result.

Inside the **Weighted Greyscale Conversion** group you will find options such as **Tone Control** and **Colour Tinting**, which can be enabled (it defaults to a sepia tint).

Tone Compression

Performs logarithmic, non-linear tonal compression. This is simply a quick way to 'flatten' an image that might have a very high contrast—it is not intended for use with HDR imagery.



Chromatic Aberration (Distortion)

Credits

Photography by James Ritson. Imagery used from Shutterstock under license. Archviz 3D render original project from CGTrader.

