

10.1.9 Editors - Shader Editor - Header - Add Menu - Color

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Detailed table of content

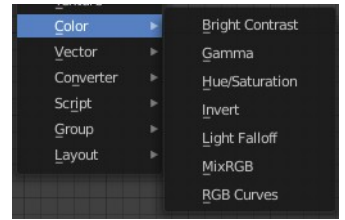
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Add menu - Color

Here you find color related nodes.



Bright/Contrast

Inputs

Color

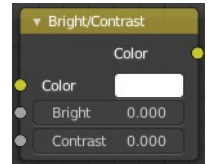
Standard input.

Brightness

An additive-type factor by which to increase the overall brightness of the image. Use a negative number to darken an image.

Contrast

A scaling type factor by which to make brighter pixels brighter, but keeping the darker pixels dark. Higher values make details stand out. Use a negative number to decrease the overall contrast in the image.



Outputs

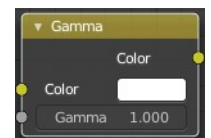
Color

Standard output.

Note. It is possible that this node will put out a value set that has values beyond the normal range, i.e. values greater than one and less than zero. If you will be using the output to mix with other images in the normal range, you should clamp the values using the Map Value node (with the Min and Max enabled), or put through a Color Ramp node (with all normal defaults).

Gamma

Use this node to apply a gamma correction.



Inputs

Color

Standard image input.

Gamma

An exponential brightness factor.

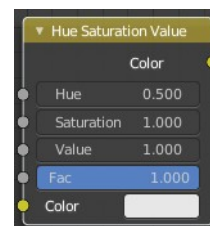
Outputs

Color

Standard output.

Hue Saturation

The Hue Saturation Node applies a color transformation in the HSV color space. Called “Hue Saturation Value” in shader and texture context.



Inputs / Properties

The inputs also works as properties when nothing is connected.

Hue

Specifies the hue rotation of the image. 360° are mapped to (0 to 1). The hue shifts of 0 (-180°) and 1 (+180°) have the same result.

Saturation

A saturation of 0 removes hues from the image, resulting in a grayscale image. A shift greater than 1.0 increases saturation.

Value

Value is the overall brightness of the image. De/Increasing values shift an image darker/lighter.

Factor

Controls the amount of influence the node exerts on the output image.

Color

Standard input.

Outputs

Color

Standard output.

Hue/Saturation Tips

Some things to keep in mind that might help you use this node better:

Hues are vice versa

A blue image, with a Hue setting at either end of the spectrum (0 or 1), is output as yellow (recall that white,

minus blue, equals yellow). A yellow image, with a Hue setting at 0 or 1, is blue.

Hue and Saturation work together.

So, a Hue of 0.5 keeps the blues the same shade of blue, but Saturation can deepen or lighten the intensity of that color.

Gray & White are neutral hues

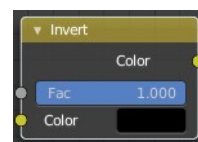
A gray image, where the RGB values are equal, has no hue. Therefore, this node can only affect it with Value. This applies to all shades of gray, from black to white; wherever the values are equal.

Changing the effect over time

The Hue and Saturation values can be animated with a Time Node or by animating the property.

Invert Node

The Invert Node inverts the colors in the input image, producing a negative.



Inputs

Factor

Controls the amount of influence the node exerts on the output image.

Color

Standard input.

Outputs

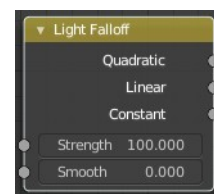
Color

Standard image output.

Light Falloff

Cycles Only

The Light Falloff node allows you to manipulate how light intensity decreases over distance. In reality light will always fall off quadratically; however, it can be useful to manipulate as a non-physically-based lighting trick. Note that using Linear or Constant falloff may cause more light to be introduced with every global illumination bounce, making the resulting image extremely bright if many bounces are used.



Inputs

Strength

Light strength before applying falloff modification.

Smooth

Smooth intensity of light near light sources. This can avoid harsh highlights, and reduce global illumination noise. 0.0 corresponds to no smoothing; higher values smooth more. The maximum light strength will be strength/smooth.

Outputs

Quadratic

Quadratic light falloff; this will leave strength unmodified if smooth is 0.0 and corresponds to reality.

Linear

Linear light falloff, giving a slower decrease in intensity over distance.

Constant

Constant light falloff, where the distance to the light has no influence on its intensity.

MixRGB

The Mix Node mixes images by working on the individual and corresponding pixels of the two input images. Called “MixRGB” in the shader and texture context.

Inputs

Factor

Controls the amount of influence the node exerts on the output image.

Color 1

Usually the background image. The image size and resolution sets the dimensions of the output image.

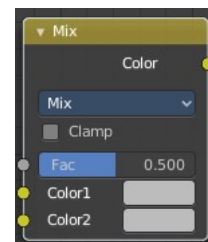
Color 2

Usually the foreground image.

Properties

Mix

Here you can choose the different blending modes.



Add, Subtract, Multiply, Screen, Divide, Difference, Darken, Lighten, Overlay, Color Dodge, Color Burn, Hue, Saturation, Value, Color, Soft Light, Linear Light.

Clamp

Limit the highest color value to not exceed 1.

Outputs

Color

Standard output.

RGB Curves

The RGB Curves Node allows color corrections for each color channel and levels adjustments in the compositing context.

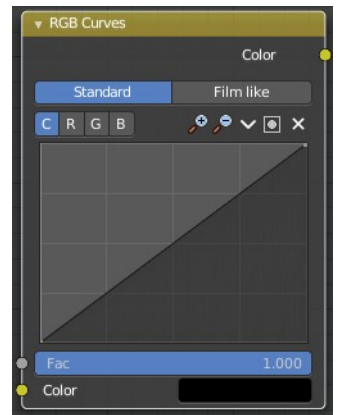
Inputs

Factor

Controls the amount of influence the node exerts on the output image.

Color

Standard image input.



Properties

Tone

What tone mapping to use. Standard or Film like.



Channel buttons

Clicking on one of the channels displays the curve for each.

C (Combined RGB), R (Red), G (Green), B (Blue).



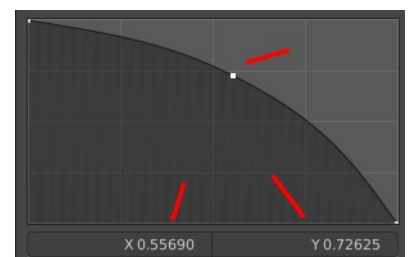
Curve edit field

Here you can create and tweak a Bézier curve that varies the input levels (X axis) to produce an output level (Y axis).

Selecting Points

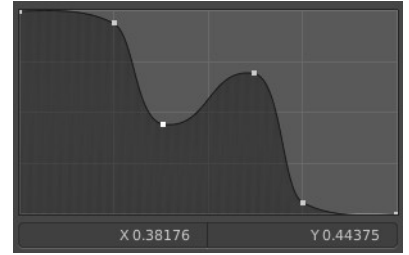
You can select curve points. This reveals two edit boxes for the x and y coordinate of this point.

Selected points can be moved around. Left click at them, hold the mouse button down and move them to a new location.



Adding Points

You can add new curve points by simply left clicking at the curve. Move the mouse to position them where you need it.



Navigation elements

The navigation elements at the top are described from left to right.

Zoom in and out

The two buttons with the magnifying glass at it zooms in and out in the curve window.

Tools

Tools is a menu where you can find some cuve related tools.

Reset View

Resets the curve windows zoom.

Vector Handle

Set handle type to Vector.

Auto Handle

Set handle type to Auto.

Auto Clamped Handle

Set handle type to Auto Clamped.

Extend horizontal

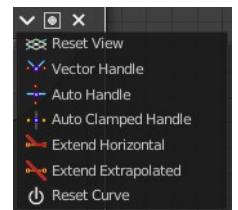
Extends the curve before the first curve point and behind the last curve point horizontally.

Extend extrapolated

Extends the curve before the first curve point and behind the last curve point extrapolated.

Reset Curve

Resets the curve to the initial shape.



Use Clipping

Clipping options. Here you can set up clipping for the stroke.

Delete Points

Deletes selected curve points.

Outputs

Color

Standard output.

