# **Color Corrections Tab**

This page offers information about the Color corrections tab in Chaos Vantage.

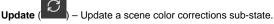
## Overview

The Color corrections tab allows control over the post-rendering effects such as Highlight burn, Contrast, Filmic Tonemap, LUTs, Bloom, Hue /Saturation, Color balance, and Chromatic aberrations.

#### Scene sub-state

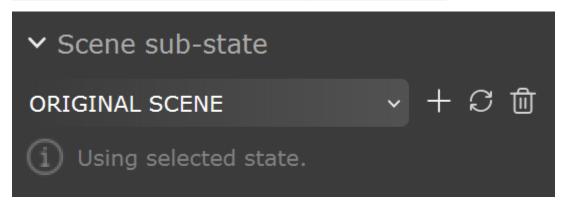
Scene sub-state - A dropdown list of all saved scene color corrections sub-states.





Delete ( ) – Deletes a scene color corrections sub-state. Double-click to delete.

Note that the default scene color corrections sub-state cannot be updated or deleted.



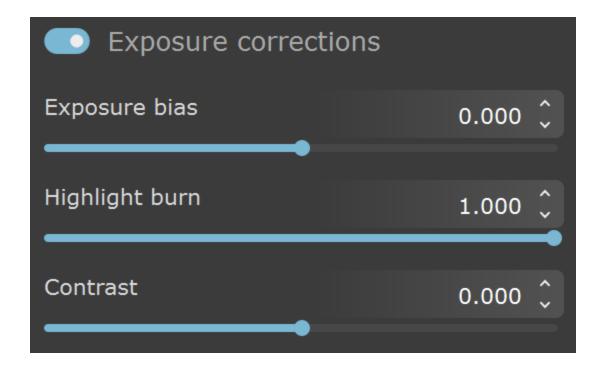
## **Exposure corrections**

**Exposure corrections** – Turns on/off exposure corrections.

Exposure bias - Adjusts the Exposure bias value.

 $\label{eq:highlight} \textbf{Highlight burn} - \text{Applies exposure corrections to highlights in the image. This option is hidden when \textbf{Filmic tonemap} is on.$ 

**Contrast** – Positive values push the colors away from the medium gray value to increase image contrast. Negative values push the colors closer to medium grey.



## Filmic tonemap

Filmic tonemap – Applies a parametric mapping curve and gamma correction.

**Type** – Specifies the type of curves used for the tone mapping. You can choose between *Hable* and *AMPAS*.

**Gamma** – Specifies the gamma correction. It is applied before the operator.

## Hable

**Shoulder strength** – Determines how sharp the shoulder is. Higher values sharpen the shoulder, which results in an overall brighter image.

**Linear strength** – Determines the strength of the effect from changing **Linear angle**.

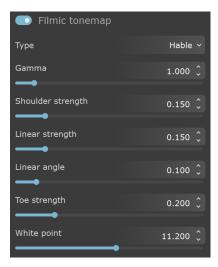
Linear angle - Determines the angle of the curve at the base. Higher values increase the angle.

**Toe Strength** – Low to mid tone compression. Higher values darken the low and mid tones.

White point – The intensity, which gets mapped to 1. This parameter scales the whole curve evenly.

## **AMPAS**

AMPAS mode applies an approximate ACES standard curve.



## **LUT**

LUT - Applies a lookup table file to the scene.

Amount – Specifies the LUT weight, where 0 is no LUT effect and a value of 1.0 applies fully the effect.

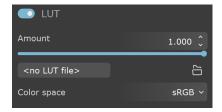
Load LUT file... - Loads a LUT (lookup table) file.

**Color space** – Specifies the color space for the loaded LUT file.

 $\label{linear-linear} \textbf{Linear} - \textbf{The loaded LUT file is interpreted in linear color space}.$ 

sRGB - The loaded LUT file is interpreted in sRGB color space.

V-Ray Log. – The loaded LUT file is interpreted in a V-Ray logarithmic color space.



#### **Bloom**

**Bloom** – Applies bloom to the scene.

Intensity – Multiplier for the bloom source. Increasing the value can boost the effect.

**Threshold** – Sets a minimum value for the rendered pixels to be considered as lens effects source. The Bloom is generated only regarding pixels with larger value than the specified threshold.

**Iterations (spread)** – Specifies the size of the bloom spread. Larger values increase the spread but impact performance.



#### **Hue / Saturation**

Hue / Saturation - Applies HSL transformation on the image colors.

Hue - Changes the overall hue of the image colors (grey colors remain intact).

**Saturation** – Specifies the image colors' intensities. Positive values produce a more vibrant, saturated image while negative values desaturate and dull the image colors.

**Lightness** – Adds or removes white from the image. Positive values add white to the image, making it lighter. Negative values remove white from the image, making it darker.



## Color balance

Color balance - Applies color balance adjustments:

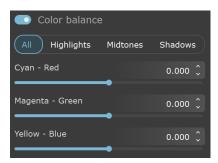
All - Applies adjustments to the overall color tone of the image.

**Highlights** – Applies adjustments to the bright (highlight) colors of the image.

Midtones - Applies adjustments to the medium (midtones) colors of the image.

**Shadows** – Applies adjustments to the dark (shadow) colors of the image.

The color corrections are additive in that the **All** correction affects all colors of the image, and the **Shadows/Midtones/Highlights** options adjust the individual components in the image on top of the All correction.

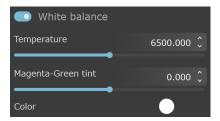


## White balance

**Temperature** – Adjusts the white balance of the image by specifying the color temperature in Kelvin. Lower values make the image bluer, higher ones make it more amber.

**Magenta-Green tint** – Adjusts the white balance of the image to make it greener (positive values) or more purple (negative values).

**Color** – Chooses a color to be the new "white point" for the image, adjusting all colors. Use it to pick a neutral color from the image (e.g. one that should be white or gray).



## **Chromatic aberration**

**Chromatic Aberration** – Applies a chromatic aberration effect to the scene.

Value – Specifies the amount of chromatic distortion from the center to the edges of the viewport.

