

GI

This page gives an overview of the Global Illumination render element and explains how it is used in compositing.

Overview

The Global Illumination Render Element is a color image that stores indirect lighting information coming from reflected diffuse light in a scene (without direct light and reflection contributions) when Global Illumination is enabled in Render Settings. This element may be used directly in Back to Beauty compositing and adjusted for brightness and color to control the final image easily.

For even more control of indirect illumination without re-rendering the scene, the Global Illumination render element may be re-assembled by multiplying the [Raw Global Illumination Render Element](#) by the Diffuse Render Element:

$$\text{Raw GI} \times \text{Diffuse} = \text{GI}$$



Attributes

The parameters for this render element appear in the [V-Ray RenderChannelColor](#) render channels node.

Deep Output – Specifies whether to include this render element in deep images.

Color Mapping – When enabled, the [Color Mapping](#) options in the render settings are applied to the current render channel.

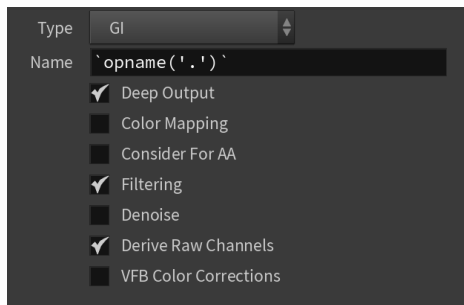
Consider For AA – When enabled, anti-aliasing is used where possible.

Filtering – Applies the image filter to this channel. Image filter settings are in the [Image Sampler tab](#) of the [Sampler tab](#) of the [V-Ray Renderer node](#).

Denoise – Enables the render element's denoising, provided the [V-Ray Denoiser](#) render element is present.

Derive Raw Channels – Generates data in the raw channels by combining the respective color and the filter color channels.

VFB Color Corrections – Applies the post render color adjustments made from the VFB.



Common Uses

The Global Illumination Render Element is useful for changing the appearance of Indirect lighting after rendering in a compositing or image editing software. See below how a scene looks before and after compositing.

Before
After





Compositing Formula

$$\text{Raw GI} \times \text{Diffuse} = \text{GI}$$



Raw Global Illumination



Diffuse



Global Illumination