

# V-Ray Material Complex

This page provides information about the V-Ray Material Complex in V-Ray for Houdini.

## Overview

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V-Ray Material Complex represents a network of connected V-Ray nodes that can be used for various purposes. It is basically a preset V-Ray Material Builder, that has its interface exposed for easier tweaking of the settings.

All assigned texture maps can be made visible in the Houdini viewport. The tabs of the V-Ray Material Complex have two options of displaying the parameters - in default mode, where the most common settings reside, and in advanced mode, where you can have finer control.



## Surface

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## Reflection

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## Transmission

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## Textures

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## Displacement

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## Options

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## Wrapper

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**Enabled** – Enables the Wrapper options.

## Main

**Generated GI Mult.** – A multiplier for the amount GI generated by the material.

**Received GI Mult.** – A multiplier for the amount GI received by the material.

**Generated Caustics Mult.** – A multiplier for the amount of caustics generated by the material.

**Received Caustics Mult.** – A multiplier for the amount of caustics received by the material.

**Subdivs Mult.** – A multiplier for the subdivisions of all secondary ray tracing done for the particular surface.

## Matte Properties

**Alpha Contribution** – Determines the appearance of the object in the alpha channel of the rendered image. A value of *1.0* means the alpha channel is derived from the transparency of the base material. A value of *0.0* means the object does not appear in the alpha channel at all and shows the alpha of the objects behind it. A value of *-1.0* means that the transparency of the base material is cut out from the alpha of the objects behind. Matte objects are typically given an alpha contribution of *-1.0*. Note that this option is independent of the Matte surface option (i.e. a surface can have an alpha contribution of *-1.0* without being a matte surface).

**Generate Render Elements** – When enabled, V-Ray generates zDepth, velocity, extra tex and multi matte render element for matte objects. When this check box is disabled V-Ray does not generate any render elements for matte objects.

**Matte Surface** – Makes the material appear as a matte material, which shows the background, instead of the base material, when viewed directly. Note that the base material is still used for things like GI, caustics, reflections, etc.

**Shadows** – When enabled, makes shadow visible on the matte surface.

**Affect Alpha** – When enabled, makes shadows affect the alpha contribution of the matte surface. Areas in perfect shadow produce white alpha, while completely unoccluded areas produce black alpha.

**Shadow Tint** – An optional tint for the shadows on the matte surface.

**Shadow Brightness** – An optional brightness parameter for the shadows on the matte surface. A value of *0.0* makes the shadows completely invisible, while a value of *1.0* shows the full shadows.

**Reflection Amount** – Shows the reflections from the base material.

**Refraction Amount** – Shows the refractions from the base material.

**GI Amount** – Determines the amount of GI shadows.

## Advanced Options

**Dive To Wrapper Node** – Press this button to dive into the Complex Material network of nodes and select the Wrapper Node.

## Wrapper

☒ Enabled

### Main

Generated GI Mult.	<input type="text" value="1"/>	<input type="range"/>
Received GI Mult.	<input type="text" value="1"/>	<input type="range"/>
Generated Caustics Mult.	<input type="text" value="1"/>	<input type="range"/>
Received Caustics Mult.	<input type="text" value="1"/>	<input type="range"/>
Subdivs Mult.	<input type="text" value="1"/>	<input type="range"/>

### Matte Properties

Alpha Contribution	<input type="text" value="1"/>	<input type="range"/>
	<input checked="" type="checkbox"/> Generate Render Elements	
	<input type="checkbox"/> Matte Surface	
	<input type="checkbox"/> Shadows	
	<input type="checkbox"/> Affect Alpha	
Shadow Tint	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	
Shadow Brightness	<input type="text" value="1"/>	<input type="range"/>
Reflection Amount	<input type="text" value="1"/>	<input type="range"/>
Refraction Amount	<input type="text" value="1"/>	<input type="range"/>
GI Amount	<input type="text" value="1"/>	<input type="range"/>

## Advanced Options

Dive To Wrapper Node