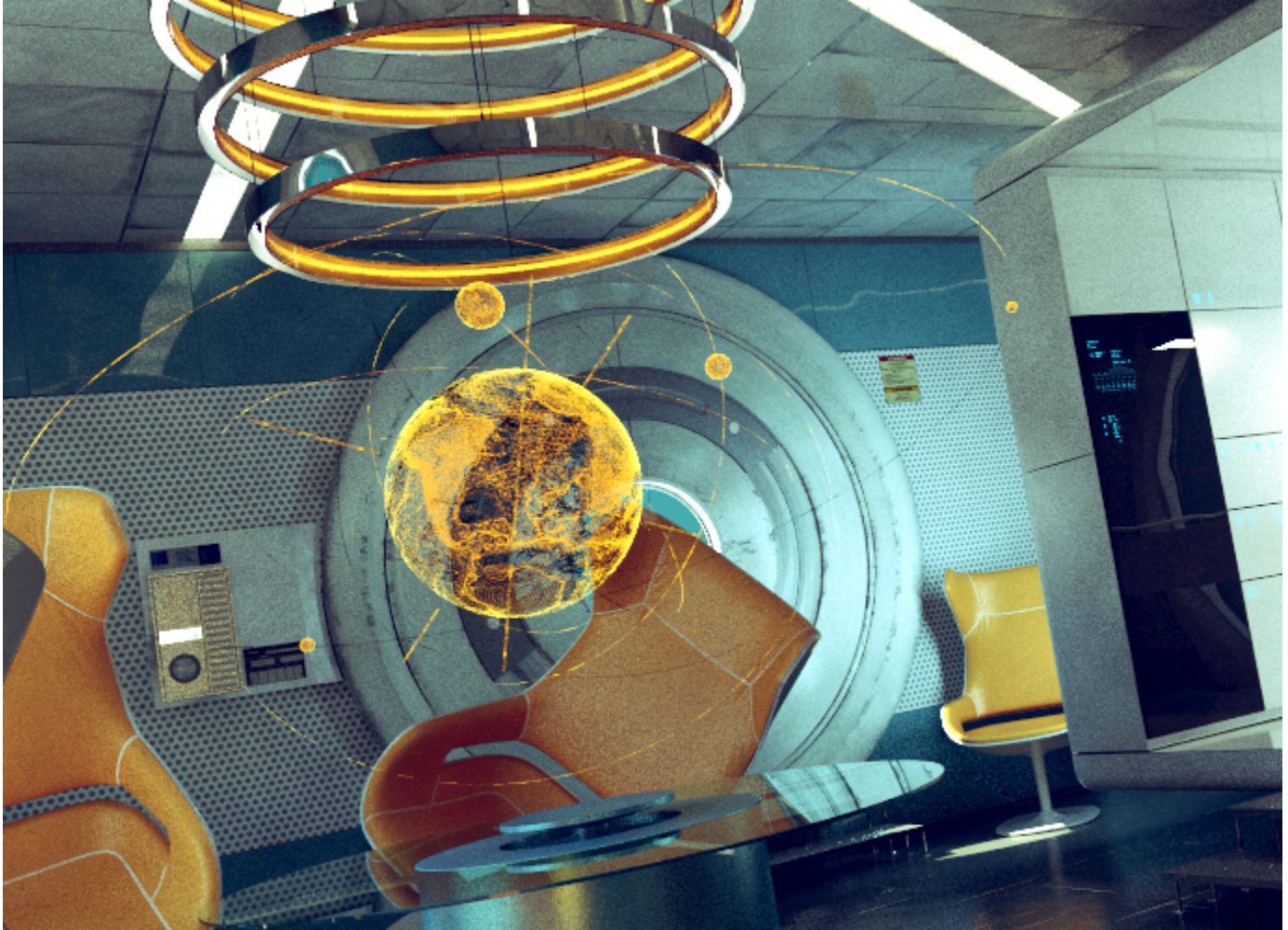


Stereoscopic Camera Attributes

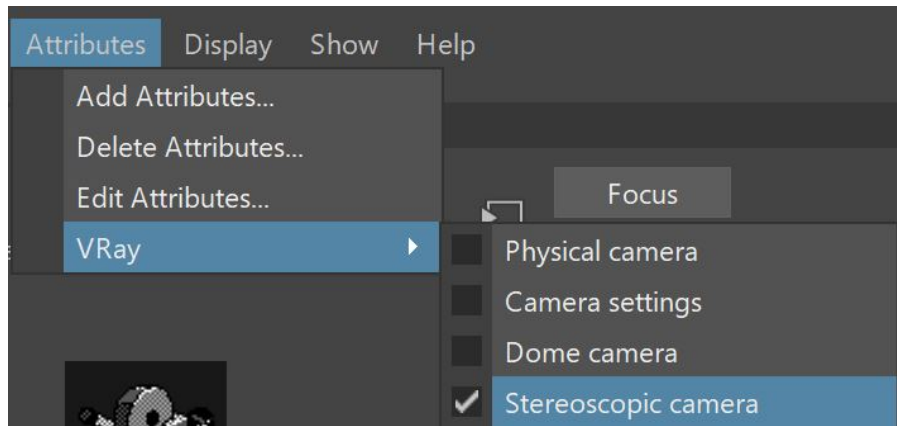
This page provides information on the Stereoscopic camera attributes that are part of the V-Ray Camera Attributes.

Overview

The Stereoscopic Camera Extra Attributes provide parameters to create a stereoscopic rendering from any camera in the scene. The attributes define two virtual cameras based on the current camera, one for each in a pair of stereoscopic images, and control the parameters necessary for a stereoscopic rendering.



UI Path: ||Select camera|| > Attribute Editor > Attributes menu > V-Ray > Stereoscopic camera



Parameters

Treat as V-Ray Stereoscopic camera – Turns the V-RayStereoscopic attributes on or off.

Eye Distance – Specifies the eye distance for which the stereoscopic image is rendered.

Specify Focus – When enabled, allows a point of focus to be defined.

Focus Distance – Defines the point of focus.

Focus method – Specifies the focus method for the two views. Possible values are:

None – Both cameras have their focus points directly in front of them.

Rotation – Achieves the stereoscopic effect by rotating the left and right views, so that their focus points coincide at the distance from the eyes. That is where the lines of sight for each eye converge (known as fusion distance).

Shear – The orientation of both views remains the same, but each eye's view is sheared along the Z axis so that the two frustums converge at the fusion distance.

Interocular method – Specifies how the two virtual cameras are placed in relation to the real camera in the scene.

Shift Both – Both virtual cameras are shifted in opposite directions at a distance equal to half of the eye distance.

Shift Left – The virtual cameras are shifted to the left so that the right camera takes the position of the original camera. The left camera is shifted to the left at a distance equal to the eye distance.

Shift Right – The virtual cameras are shifted to the right so that the left camera takes the position of the original camera. The right camera is shifted to the right at a distance equal to the eye distance.

View – Specifies which of the stereoscopic views are rendered.

Both – Both views are rendered side by side.

Left – Only the left view is rendered.

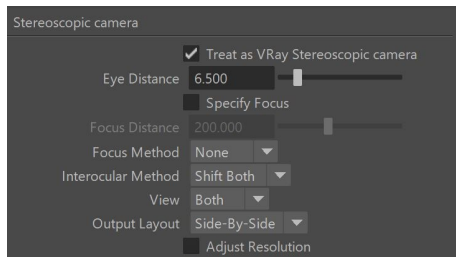
Right – Only the right view is rendered.

Output Layout – Specifies the format in which the Stereoscopic renders are output. *For more information, please see the [Output Layout example](#) below.*

Side-by-Side – Arranges the rendered images for each eye side by side.

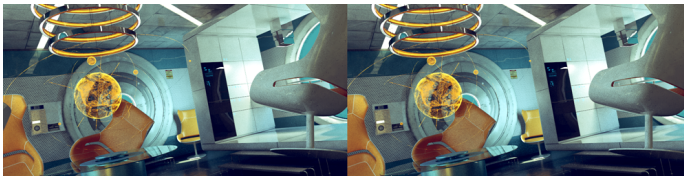
Top-Bottom – Arranges the rendered images for each eye one on top of another.

Adjust Resolution – When this option is enabled, the resolution of the final image is automatically adjusted. For example, if rendering both views of a 640x480 image, V-Ray renders one image with a resolution of 1280x480 that includes both images side by side.

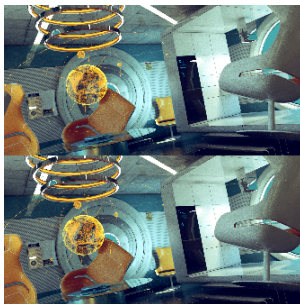


Example: Output Layout

The V-Ray Stereoscopic camera attributes allows two ways of arranging the rendered stereo images. **Side-by-Side**, which places the two images besides each other horizontally; and **Top-Bottom**, which places the images one above the other.



Side-by-Side



Top-Bottom

Panoramic pole merging

The options in this section are used when rendering a panoramic view with stereoscopy (for example a Spherical camera with FOV=360 degrees). These options help avoid artifacts when the camera looks upward and downward. This is achieved by gradually decreasing the eye distance and thus the stereoscopic effect. The eye distance value is kept the same until the viewing angle reaches the angles specified, after which the eye distance is gradually decreased until it reaches a value of 0 when looking directly downwards or upwards.

Top/Bottom merge angle – Specifies the viewing angle from the horizontal plane at which the pole merging effect starts. The horizontal plane is considered to be at 0.

