

Bump Normals

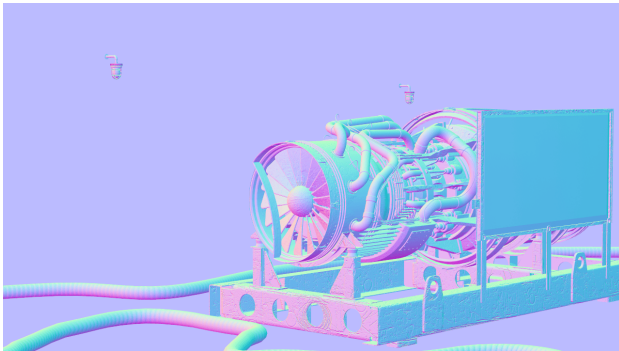
This page provides information on the Bump Normals Render Element which creates a normal-style image from the camera view from bumps and normals in the scene.

Overview

V-Ray Bump Normals is a render element that stores the camera view as a normal map. The normals are generated using screen space which uses the XYZ orientation of the camera view. With Screen space, the X axis runs left-right across the view, Y runs up-down, and Z points out of the screen. Bump maps are also represented in this render element.

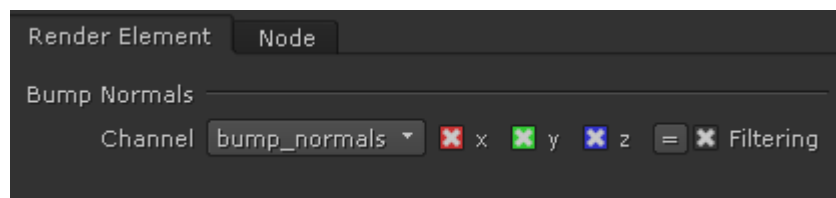
This render element is similar to the [Normals Render Element](#) Render Element that does not include bump maps.

The Bump Normal Render Element is useful for adjusting lighting that comes from a particular direction. For example, faces of objects pointing toward the camera will be predominantly blue in the bump normals, so the lighting on such objects can be adjusted by using the blue channel in compositing software.



UI Path: ||Toolbar|| > **V-Ray Menu icon** > **Render** > **VRayRenderElement** > **Type: Bump Normals**

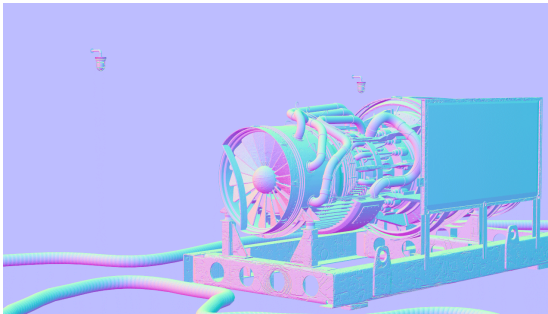
Properties



Filtering – Applies the image filter to this channel. Image filter settings are in the [Image Sampler](#) tab in the [VRayRenderer](#) properties.

Common Uses - Relighting

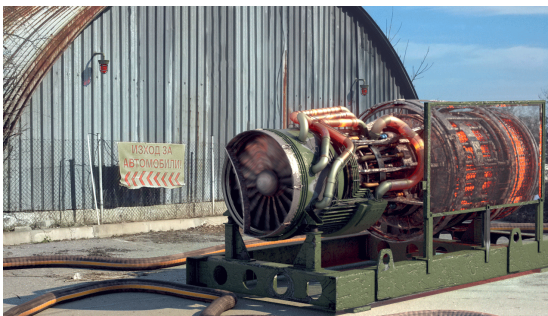
The Bump Normal Render Element is useful for changing the appearance of lighting in a scene in a composite without the need for re-rendering. In the example below, a lighting workflow is used at a composite level to change the lighting in the scene. Note that it does not create any extra shadowing. While the Bump Normal Render Element provides information about how lights will affect each surface, the Point Position element passes the spacial location of each pixel. When used together, it allows lights added in compositing to react to the pixels as if they were on the surface of the model.



Bump Normals Render Element



The World Positions pass



Original Beauty Composite



The resulting relit composite
(2 point lights of varying intensities and colors were used along with a directional light and a spotlight)

