Bitmap

This page provides information on the V-Ray Bitmap Texture.

Overview

The Bitmap texture has a versatile use, allowing a bitmap image to be loaded as a texture.

The Bitmap texture settings are organized in *Basic* and *Advanced* modes. You can switch the mode from the toggle button under the **Preview Swatch**.

The **Switch To Advanced Settings** () toggle activates the Advance Settings mode, giving you access to a larger number of settings for modification of the Bitmap texture.

Any texture can be replaced via the **Replace With New Texture** (button, which activates when you select the texture to be replaced. If the texture is an instance, all copies are changed as well.

V-Ray supports the Revit texture colorization functionality. Note that for Bitmap textures it does not affect the material preview in the Asset Editor but only the appearance of the rendered image.



Image File

Some options are available only in Advanced mode.

File - Specifies the file from which the bitmap is loaded.

Filter Type – Specifies a type of filter to be applied to the bitmap.

No Filter – No filter is applied.

Mip-map – Depending on the distance from the camera, the texture is rendered in full detail (when closer to the camera) or blurred, if it is far away.

Summed-area – Applies a summed-area filter. It is not recommended to use this filter.

Filter Blur – Specifies the strength of the blur filter applied to the bitmap.

Color Space – Specifies the type of color space used by the bitmap.

Screen Space (sRGB) Rendering Space (Linear) Custom Gamma Curve



Sequence

These settings are currently not supported in V-Ray for Revit.

Start Frame - Specifies the start frame at which the map animation begins.

Playback Speed - This options speeds up or slows down the animation rate.

Playback Type¹ – Determines what happens after the last frame of the bitmap animation, in case the animation is shorter than the scene.

Loop – Causes the animation to repeat over again from the beginning.
Ping-Pong – Causes the animation to be played forward and then backwards repeatedly, making every animated sequence loop smoothly.
Hold – Freezes the bitmap animation on the last frame.



Color Manipulation

Invert Texture - Inverts the RGB texture values.

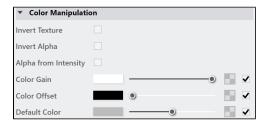
Invert Alpha - When enabled, inverts the bitmap alpha values.

Alpha from Intensity – Uses the texture RGB intensity/luminance as alpha channel.

Color Gain – Corrects the color of the texture by multiplying the RGB color values in the texture with the RGB color values specified here. A texture map can be assigned here.

Color Offset – Corrects the color of the texture by adding the RGB color values specified here to the RGB color values of the texture. A texture map can be assigned here.

Default Color – Specifies a default color used for polygons with no valid UVs. In case the map is not tiled, specifies a default color that is used outside the texture square. When a texture is selected, it overrides the color as long as the texture checkbox is enabled.



Crop/Place

These settings are available only when you switch to the Advanced mode.

Placement - Specifies the type of placement to be used.

Whole Texture – Uses the whole bitmap.

Crop – Uses a section of the bitmap.

Place – Adjusts of the position of the image.

Width/ Height - Specifies the width/height of the bitmap. A value of 1 specifies the full width /height

Lock button - Locks the Width / Height.

Jitter Placement – Specifies the amount of displacement to be applied in order to produce better anti-aliasing.



UV Noise

These settings are available only when you switch to the Advanced mode.

UV Noise - Enables or disables UV Noise.

Amount - Controls the amount of noise.

Size - Controls the scale of the noise function.

Levels - Controls the noise color distribution.



Texture Placement

Type – Controls how the texture is positioned on the geometry.

2D (UV Channel) - The texture uses the object UV coordinates.

Environment – This mode is applicable if the map is connected to an Environment slot or a Dome light.

Mapping Source - The texture uses an external UV placement source.

2D (UV Channel)

UV Channel/Set – Specifies the index of the mapping channel data to use. A value of 1 takes the first available channel.

Repeat U/V – Determines how many times the texture is repeated in the 0 to 1 UV square.

Lock U/V Repeat - Locks the U/V Repeat.

Offset U/V – Controls the texture offset in the U and V direction.

Rotate - Rotates the texture (in degrees).

Tile U/V - Tiles the texture in the U and V direction. If the option is disabled, the Default texture color is used outside the 0 to 1 UV square. Default color is found in Parameters > Color Manipulation.

Mirror U/V – Mirrors the texture in the U and V direction separately. The option cuts the texture in the half flipping one side vertically or horizontally. This can be used to avoid seams in-between non-tileable repeated textures.

Environment

Mapping – Specifies the type and shape of the texture.

Angular Cubic Spherical Mirror Ball Screen

Rotate H – Rotates the environment sphere horizontally.

Flip H - Flips the environment sphere horizontally.

Rotate V – Rotates the environment sphere vertically.

 $\mbox{{\bf Flip V}}-\mbox{{\bf Flips}}$ the environment sphere vertically. This option is active only in Spherical Mapping.

Ground – Enables ground projection of the texture.

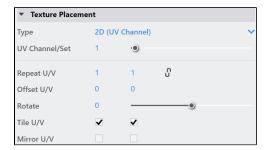
Position X/Y/Z - Offsets the ground projection along the X/Y/Z axis.

Radius – Specifies a projection radius. Can be used to control the scale of the projection.

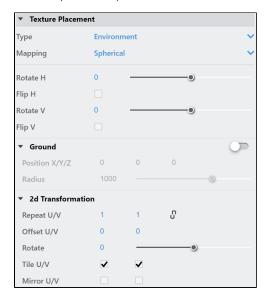
2d Transformation – see 2D (UV channel) parameters.

Mapping Source

UV Placement Source – External UV placement source to be used for the texture placement.



2D (UV Channel)



Environment



Mapping Source

Notes

• The playback options are currently not supported.