# **VRayPtex**

- VRayPtex Overview
- General
- Gamma Correction
- IFL Parameters

## VRayPtex Overview

VRayPtex node allows you to load and use Ptex textures with V-Ray. Ptex is a mapping system that applies a separate texture to each face of a subdivision or polygon mesh and therefore requires no UV assignment. A Ptex file can store an arbitrary number of textures along with mipmaps and adjacency data used for filtering across face boundaries.

### General

Ptex File Name - specifies the .ptex file that is going to be used as a texture.

**Use Image Sequence** - enables the loading of .ptex sequences. If this is unchecked only the specified .ptex will be used even if it is a part of a sequence.

**Image Number** - this parameter can be animated and allow us to specify a frame of the Ptex sequence for each frame of the actual animation.

**Image Offset** - this parameter allows us to offset the beginning of the playback of the ptex sequence from the beginning of the Softimage animation.

Cache Size (MB) - the information in a Ptex file is compressed for storage. In order to be used it has to be uncompressed and stored in the RAM. This parameter controls how much memory is available for the current texture. If the value is large enough for the whole texture the information is extracted only once and is stored during the entire rendering. Otherwise the information is constantly read from the hard drive, extracted and used when necessary

Filter Type - specifies the type of filtering that is going to be applied to the texture

Blur - specifies the amount of the blurring.

Width - the width of the filter

**Sharpness** - this option is only available when the **Filter Type** is set to Bic ubic and controls the amount of sharpening applied by the filter

Interpolation between mipmap levels - a ptex texture may have several mipmap levels which are basically versions of the texture at different resolutions. This allows a higher resolution texture to be applied to parts of the object closer to the camera and a lower resolution version to be applied to parts of the object that are far away. When this option is enabled V-Ray will interpolate between different mipmap levels to create a smooth seamless texture in the end

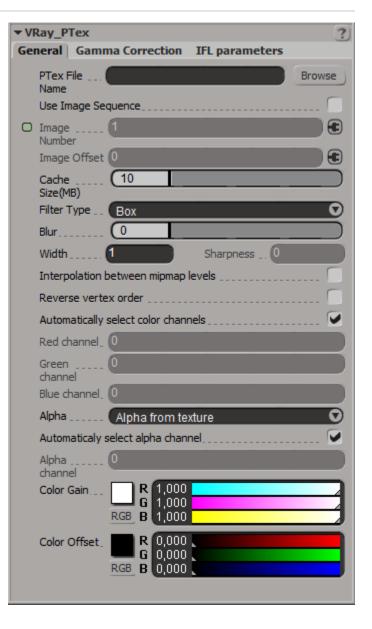
Reverse vertex order - a ptex is generated for a specific mesh. Sometimes the program generating the ptex numbers the vertices of the mesh in the reverse order. When this happens the object is not properly textured and enabling this option fixes the issue.

**Automatically select color channels** - a ptex may have an arbitrary number of channels and there is no sure way to determine which channel contains which information. When this option is enabled V-Ray tries to select the correct channel for Red Blue and Green. When this option is off the user manually specifies which channel contains which information.

**Red/Green/Blue Channel** - manually specify the channel numbers for Red Green and Blue

Alpha - specifies the mode in which alpha is applied

- Solid all alpha information is ignored
- Alpha from texture the information for the alpha is taken from the specified Alpha channel in the texture
- Alpha from luminance the alpha information is taken from the Luminance of the RGB channels.



Automatically select alpha channel - when on V-Ray automatically selects the alpha channel from the ptex file

Alpha channel - manually specify which channel from the ptex is the alpha channel

Color Gain - this parameter applies a scaling factor to all colors in the texture. All colors are multiplied by the Color Gain color - this allows you to add a tint to the texture. By default this value is white and has no effect

**Color Offset** - this parameter applies an offset factor to all colors in the texture by adding the Color Offset color to all colors in the texture. For example to brighten a texture you can "add" a shade of grey effectively shifting all colors closer to white. The default value is black and has no effect.

### Gamma Correction

This group allows you to specify additional color conversions when the bitmap is read from disk in order to bring its color data to linear color space (linear in the physical sense, not perceptual).

Enable input texture gamma - when enabled, the settings in this group will take offect

Color Space - specifies the color space for the input bitmap data:

- Linear the bitmap data is already in physical linear space, so no correction required and none is performed
- Gamma the bitmap data is gamma corrected with the specified gamma value specified by the Texture input gamma, so V-Ray will need to remove this gamma correction for rendering
- sRGB the bitmap data is in the sRGB color space, so V-Ray will need to convert it to linear physical space for rendering.

Texture input gamma - specifies the gamma value for the bitmap data

### **IFL Parameters**

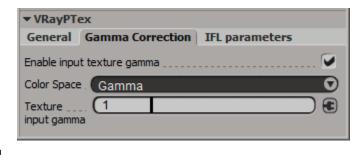
The options in this group deal with cases when the texture is animated through an IFL file.

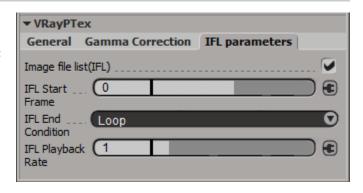
Image file list (IFL) - when enabled, the settings in this group will take effect

IFL Start Frame - specifies the starting frame for the sequence

**IFL End Condition** - specifies what happens when the sequence end is reached

- Loop the animation will jump back to the start frame
- Ping Pong the texture is looped alternatively forward and backward
- Hold the last image in the sequence is used for all subsequent frames





IFL Playback Rate - a coefficient for the playback rate of the animated texture. It allows you to slow down or speed up the playback rate of the texture