

# PxrPtexture

Provides access to per-face texture (ptex) files. Unlike other texture nodes, this texture always operates over the default parameterization on the surface. There is no manifold to be provided, instead a special primitive variable called `__faceindex` is used.

## PxrPtexture

### Filename

The filename of the texture. This parameter must be supplied.

You can reference a constant string primvar in your filename to make it easy to reuse a texture across different pieces of geometry, where the primvar dictates a filename convention.

- `<primstr:primvarname>` - will substitute the value of the named constant string primitive variable, such as the name of an asset in for example `"/assets/<primstr:model>/diffuse.tex"` on an apple with `"const string model" ["apple"]` would be expanded to `"/assets/apple/diffuse.tex"`

### First Channel Offset

Offset/Offsets the first channel to be looked up.

### Face Index Offset

If you have put more than one set of data into a ptex file, you can offset the index by the known amount.

### Invert Winding Order

If your faces are flipped or have artifacts, your bridge application may have inverted the order, this may alleviate those artifacts by reversing the order again.

### Filter

Selects different reconstruction filters that can be used during texture lookup. The filters available for PxrPtexture are:

- 0: Nearest
- 1: Box
- 2: Bilinear
- 3: Bspline
- 4: Mitchell
- 5: Catmullrom
- 6: Gaussian
- 7: Lagrangian

### Blur

Specifies how much to blur the image retrieved from the ptex file.

### Mip Interpolate

Selects whether to interpolate between adjacent resolutions in the multi-resolution texture, resulting in smoother transitions between levels.

### Missing Color

If there is an error opening the texture, use this color.

### Missing Alpha

If there is an error opening the texture, use this alpha.

### Linearize

Apply the reverse sRGB transform your texture. If you are painting textures in sRGB space (default for most paint packages) but viewing your data in data linear space, your textures will look washed out. This will apply the sRGB transform to your texture, which should make it appear visually linear again.

### Adjust Output

### Color Scale

A multiplier for the color values in a texture, can be used to adjust brightness or manipulate individual color channels

## Color Offset

Apply an offset to the result, shifting the colors of the result

## Saturation

Increase (greater than one) or decrease (less than one) the saturation of the texture result

## Alpha Scale

A multiplier for the alpha channel, useful when the alpha is used to drive a parameter

## Alpha Offset

An offset for the alpha channel, useful when the alpha is used to drive a parameter

## Output Parameters

### resultRGB

The filtered color result. Note all results are looked up starting at the startChannel offset.

### resultR

The R channel result

### resultG

The G channel result

### resultB

The B channel result

### resultA

If alpha is present and resultRGB is connected it returns the channel after RGB. If RGB is not connected it returns the first channel.