

Standard Shaders | Ciconia Studio

Overview

The Double Sided Pro package is evolving. This new version offers a full set of Standard and Double Sided shaders that we use every day in our projects. Suitable for all models you may purchase on the store.

The package contains 2 types of shaders : The lite and the standard shaders.

The lite shaders are those which come closest to the Unity standard shader. We have evolved it by adding other parameters that are quite simple but which in certain situations can be very useful. These shaders have the same performance as those of Unity.

Our standard shaders offer the possibility of maximum control over secondary maps. Thus, you can create a level of detail on your models with extreme ease, and until then not possible to achieve with Unity shaders.

URP Setup

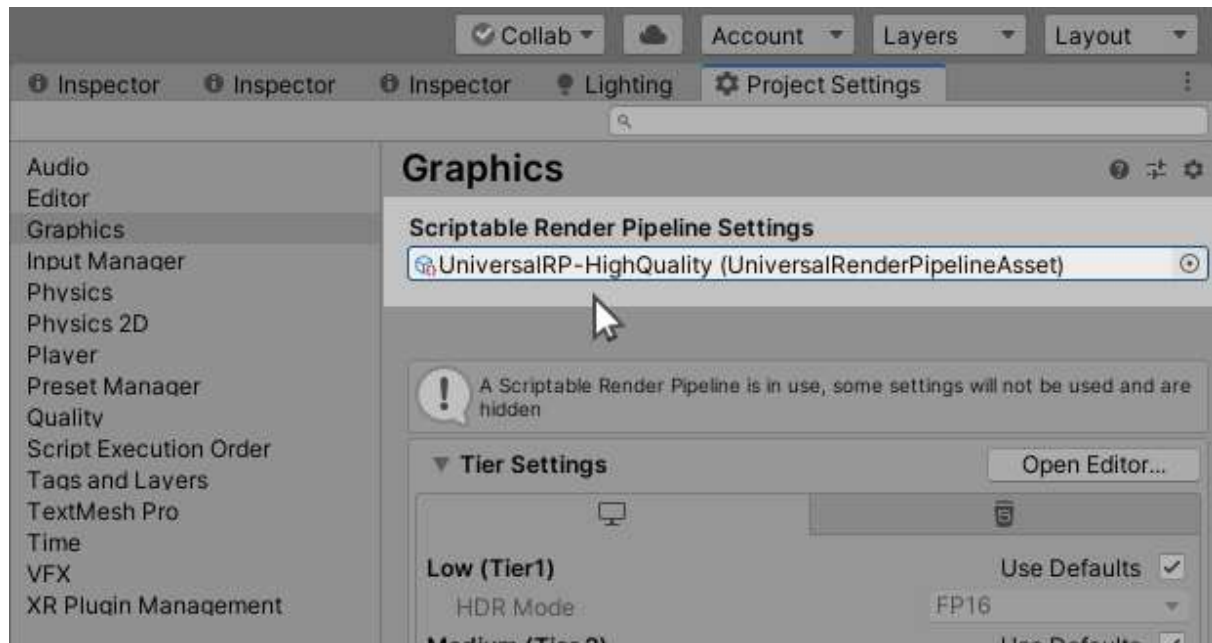
Support Unity versions

2019 LTS → **2021 LTS** (Unpack URP - Standard Double Sided Shaders_v2019 to 2021LTS)

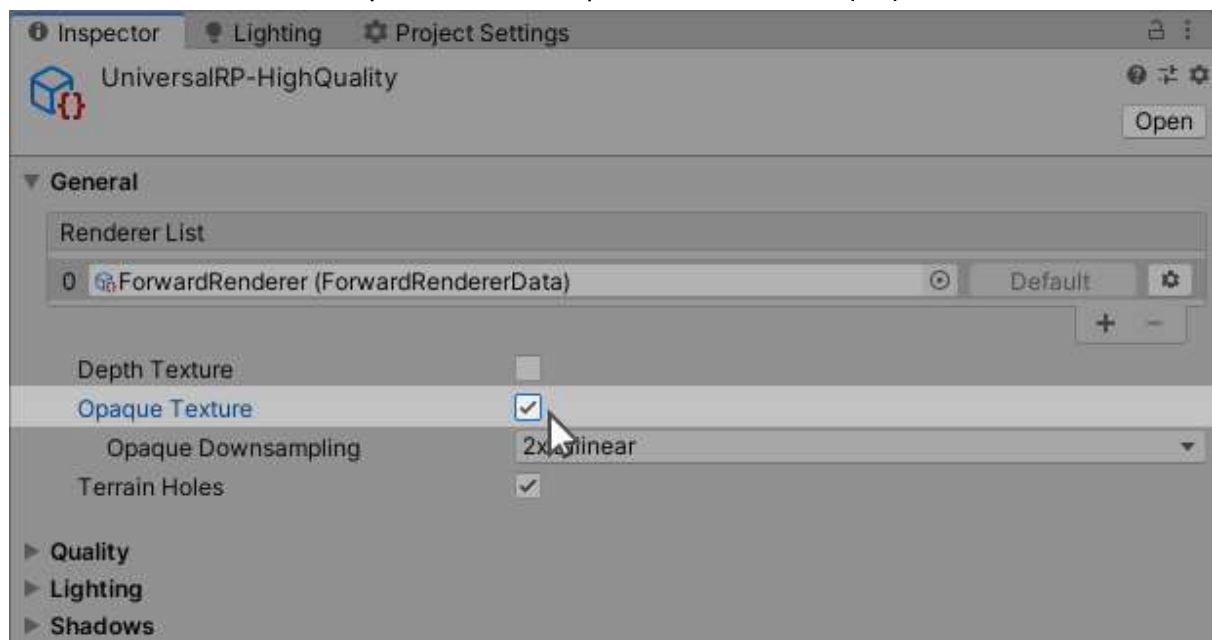
2022.LTS (Default Shaders)

In order to use the transparent shaders with the Universal Render Pipeline you will need to enable the Opaque Texture toggle in the pipeline asset inspector.

Go to Edit/Project Settings/Graphics.



Go to the UniversalRenderPipelineAsset's inspector and enable Opaque Texture.



Shader Parameter

Surface Properties |

Double Sided – Enables or disables double-sided mode

ZWrite – Enables or disables writing to the depth buffer.

ZTest – Set the conditions under which geometry passes or fails depth testing

Main Properties | These properties affect all the maps selected in the Main Properties.

Global --> XY(TilingXY) - ZW(OffsetXY) – Controls the Tiling and the Offset of all maps contained in the main properties

Color – Specifies the RGB color of the model.

Invert Alpha – Inverts the alpha channel.

Base Color -->(Mask A) – Selects a color map. A Grayscale Map can be stored in the alpha channel and be used as smoothness value or puddles Mask

Saturation – Controls the amount of saturate or desaturate of the Base Color map.

Brightness – Controls the amount of brightness of the Base Color Map

Normal Map – Selects a normal map.

Normal Intensity – Controls the normal intensity.

Metallic Map -->(Smoothness A) – Selects a metallic map. The smoothness map can be stored in the Alpha channel.

Metallic – Controls the amount of metallic reflection.

Smoothness – Controls the amount of glossiness reflection.

Source – Selects the smoothness map stored in the metallic alpha or base color alpha

Height Map – Selects a height map.

Height Scale – Controls the height intensity.

Ambient Occlusion Map – Selects an ambient occlusion map.

Ao Intensity – Controls the intensity of ambient occlusion.

Emission Color – Specifies the HDR color for the emission.

Emission Map – Selects an emission map.

Intensity – Controls the emission intensity.

Mask Properties | These properties control the mask for the puddles effects.

Enable – Enables or disables the Mask Properties.

Visualize Mask – Enables or disables the detail mask visualization.

Projection – Selects between UV or Triplanar Projection

Space Projection – Selects between Object Space or World Space Projection (Only if Triplanar Projection is selected)

Falloff – Controls the blend falloff between each projected axis (Only if Triplanar Projection is selected)

Triplanar -->XY(TilingXY) - ZW(OffsetXY) – Controls the Tiling and the Offset of the Details Mask (Only if Triplanar Projection is selected)

Invert Mask – Inverts the alpha channel. If no detail mask is selected, enabling this property will define a white color by default.

Channel Selection – Specifies in which channel RGBA the detail mask is stored.

Detail Mask – Selects a detail mask map. If no map is selected, the detail mask map will be black by default. Black value means no Detail Properties visible.

In order to see the Detail Properties without map selected, simply enable Invert Mask.

Intensity – Controls the intensity of the detail mask.

Contrast – Controls the amount of contrast of the detail mask.

Spread – Controls the diffusion amount of the detail mask.

Set the spread value to -1 to define a detail mask completely white. The result will make the Detail Properties completely visible.

The higher this value is, the less visible the Detail Properties will be.

Details Properties | These properties control the secondary maps.

Blend Mode Overlay – Enables the Overlay blend mode. Uncheck to use normal blending mode.

Color – Specifies the RGB color of the model.

For the Lite versions, the alpha value controls the smoothness intensity.

Base Color – Selects a secondary color map.

For the Lite versions, a Grayscale Map can be stored in the alpha channel and be used as smoothness map.

Saturation – Controls the amount of saturate or desaturate of the Base Color map.

Brightness – Controls the amount of brightness of the Base Color Map.

Blend Main Normal – Enables or disables the blending of the Main Normal Map with this Normal Map.

Normal Map – Selects a secondary normal map.

Scale – Controls the normal intensity.

Metallic Map -->(Smoothness A) – Selects a metallic map. The smoothness map can be stored in the Alpha channel.

Metallic – Controls the amount of metallic reflection.

Smoothness – Controls the amount of glossiness reflection.

Source – Selects the smoothness map stored in the metallic alpha or secondary base color alpha.

Use Ao From Main Properties – Enables the Main ambient occlusion to be visible in the detail properties.

Use Emission From Main Properties – Enables the Main emission color and map to be visible in the detail properties.

Cutout Properties | These properties control the cutout values of the model.

Invert – Inverts the grayscale value of the selected map. If no detail mask is selected, enabling this property will define a white color by default.

Use BaseColor Alpha – Enables or disables the use of the alpha map of the main base color map

Channel Selection – Specifies in which channel RGBA the Cutout mask is stored.

Cutout Mask – Selects a Cutout map. If no map is selected, the Cutout map will be black by default. Black value means no Transparency.

Alpha Cutoff – Controls the diffusion amount of the Cutout Mask.

Transparency Properties | These properties control the opacity of the model.

Invert – Inverts the grayscale value of the selected map. If no detail mask is selected, enabling this property will define a white color by default.

Use BaseColor Alpha – Enables or disables the use of the alpha map of the main base color map

Channel Selection – Specifies in which channel RGBA the Transparency mask is stored.

Transparent Mask – Selects a Transparent map. If no map is selected, the Transparent map will be black by default. Black value means no Transparency.

Opacity – Controls the amount of transparency.

Contrast – Controls the amount of contrast of the Transparent mask.

Spread– Controls the diffusion amount of the Transparent mask.