HDRP Glass Shader | **Ciconia Studio**

Overview

Supported Unity versions
2019.4 LTS
2020.3 LTS
2023.3 LTS (by default)

By default, the package is set up to be compatible for Unity 2022.3.x. If you are using Unity 2020.3.x or 2021.3.x,
unpack the HDRP-Glass Shaders_2020.3.x.unitypackage.

The HDRP packages contain 2 Glass shaders : CS_Glass (IOR) and CS_Glass.
CS_Glass(IOR) give a more accurate result almost instantly. It is the best choice for realistic render.
CS_Glass offers different parameters and give more freedom to create different glass renderings. Can give better result on planar objects.

Shader Parameter

Surface Options | For more information, please check the High Definition RP documentation.

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

Tiling X/Y – Controls the texture repetition on the X and Y axis.

Offset X/Y – Controls the texture offset on the X and Y axis.

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

Color – Specifies the RGB color of the model when surfaces are opaque.

Albedo -->(Mask A) – Selects a color map. The alpha channel is used if "Use AlbedoA" is checked in the transparency Properties section. Black is fully transparent.

Saturation – Controls the amount of saturate or desaturate of the Albedo map.

Brightness – Controls the amount of brightness of the Albedo map.

Metallic(SmoothnessA) – Selects a metallic map. Specifies a roughness map in the alpha. channel.

Metallic – Controls the amount of metallic reflection.

Smoothness – Controls the amount of glossiness reflection.

Normal Map – Selects a normal map.

Scale – Controls the normal intensity.

Refraction – *(Glass Only)* Controls the amount of refraction. The refraction is affected by the normal map and the surface normal.

Ambient Occlusion Map – Selects an ambient occlusion map.

Ao Intensity – Controls the intensity of ambient occlusion.

Self Illumination | *(Glass Only)* These properties simulate the amount of light passing through the glass. Enabled only if Opacity > 0.

Intensity – Controls the intensity of the lighting.

Glass Properties | *(Glass IOR Only)* These properties control the glass effects.

Color – Specifies the RGB color of the Glass. Called Transmittance Color in Unity

Index of Refraction – Specifies the index of refraction. The index of refraction defines the ratio between the speed of light in a vacuum and the speed of light in the medium of the Material. Higher values produce more intense refraction.

Glass Thickness – Controls the thickness of the model. The higher this value is, The thicker the Material is.

Iridescent Mask Map – Selects an iridescent Mask

Iridescent Thickness – Gradually change color as the angle of view or angle of illumination changes.

Distortion Vector Map – Make HDRP use the red and green channels of this Texture to calculate distortion for the light passing through the Material. The blue channel is use to manage the blur intensity between 0 and 1.

Distortion Scale – Controls the distortion intensity.

Distortion Blur – Specifies the amount of blur.

Reflection Properties | These properties control the additional reflections.

Color – Specifies the RGB color of the reflection.

Cubemap – Selects a cubemap.

Reflection Intensity – Controls the intensity of the reflection.

Blur – Specifies the amount of blur.

Color Fresnel – Specifies the RGB color of the Fresnel.

Use Cubemap – Enables or disables additional cubemap reflection on the Fresnel effect.

Fresnel Strength – Controls the intensity of Fresnel.

Power – Controls the spread amount of the Fresnel. The higher this value is, the more contrasted the Fresnel will be.

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

Opacity – Controls the amount of transparency.

Use AlbedoA – Use the grayscale map packed is the alpha channel.

Invert – Inverts the alpha channel.

Use smoothness – Use the smoothness map packed is the alpha channel.

Falloff Opacity – Enables or disables the falloff effect.

Invert – Inverts the falloff.

Falloff Intensity – Controls the intensity of the falloff.

Power – Controls the spread amount of the falloff. The higher this value is, the more contrasted the Fresnel will be.

Fade Properties | These properties control the fade of the model.

Fade – Controls the amount of fade.

Exclude Decal – Enables or disables the Decal maps from the fade effect.

Falloff – Enables or disables the falloff effect. To use it properly, set the Fade value to 0.

Invert – Inverts the falloff.

Falloff Intensity – Controls the intensity of the falloff.

Power – Controls the spread amount of the falloff. The higher this value is, the more contrasted the Fresnel will be.

Decal Properties | These properties control the decal details.

Color -->(Transparency A) – Specifies the RGB color of the decal. The alpha vector controls the transparency.

Decal Map -->(Mask A)– Selects a color map. The alpha channel is used as mask for the transparency. Black is fully transparent.

Saturation – Controls the amount of saturation of the Decal map.

Metallic– Controls the amount of metallic reflection.

Smoothness– Controls the amount of glossiness reflection.

Reflection– Controls the amount of reflection defined in the Reflection Properties section.

Normal Map– Selects a normal map.

Scale– Controls the normal intensity.

Normal Blend– Allows you to blend the decal normal map with the normal map assigned in the Main Properties.

Rotation – Determines the angle of rotation in degrees of the decal maps.