

## Projector Ortho

### Descripción



**Files:** ProjectorOrtho.shader

**Path:** “CGF/Shaders/Unlit/VFX”

**Shader menu:** “CG Framework/Unlit/VFX/Projector Ortho”

[Asset Store](#)

### Description

Projector system to project light, shadows or decals at a low GPU cost.

### Reference



Documentation

Copied: Nothing
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GPU Instancing is enabled by default.

**▼ Blend Type**

Blend Type Custom ▾  
 Source Factor One ▾  
 Destination Factor Zero ▾  
 Blend Operation Add ▾

**▼ Projector Ortho**

Color (RGBA) [Color Picker]  
 Cookie Fill Color   
 Intensity 1  
 Cookie (RGBA) None (Texture)  

|        |   |   |   |   |        |
|--------|---|---|---|---|--------|
| Tiling | X | 1 | Y | 1 |        |
| Offset | X | 0 | Y | 0 | Select |

Alpha Cutout   
 Alpha Cutoff 0.5  
 Projection Falloff 0  
 Culling Angle 180  
 Culling Falloff 0  
 Projection Smooth 0  
 High Quality Sampling

**▼ Camera Fading**  Enable

Camera Fading Near Point 1  
 Camera Fading Far Point 2  
 Camera Distance Fading Gizmo

**▼ UV Scroll**  Enable

Flip UV Horizontal   
 Flip UV Vertical   
 UV Scroll Animation   
 UV Scroll Speed X 0 Y 0

**▼ LOD Fade Mode**

LOD Fade Mode None ▾  
 LOD Dither Type Unity ▾

**▼ Stencil Options**

Stencil Reference 0  
 Stencil Read Mask 1  
 Stencil Write Mask 255  
 Stencil Compare Function Equal ▾

**▼ Other Settings**

Render Queue From Shader ▾ 2501

- **Blend Type** – [Manages the blending type.](#)
- **Projector**
  - **Color** – Color of the projection.
  - **Cookie Fill Color** – Fill the cookie with color.
  - **Intensity** – Projection level intensity.
  - **Cookie** – Projection texture.
  - **Alpha cutout** – If enabled, cutout the alpha channel.
  - **Alpha cutoff** – Alpha Cutoff value.
  - **Projection Falloff** – Falloff of the projection.
  - **Culling Falloff** – Smoothing of the occlusion for the projection based on the projection forward direction.
  - **Projection Smooth** – Edge smoothing of the projection.
  - **High Quality Sampling** – Avoid edge artifacts but increase the graphic consumption.
- **Camera Fading** – [Alpha fading by the camera distance and the object surface.](#)
- **UV Scroll** – [Scroll and Flip the UVs from a texture.](#)
- **LOD Fade Mode** – [Manages the Level Of Detail fading mode.](#)
- **Stencil Options** – [Stencil options configuration.](#)

## Use

Create a material with this shader and assign the material to the Material property of MeshRenderer component and add the CGFProjectorBehavior component to set the Projection mode (Orthographic or directional and Omni or point.) and the Lighting model type (Unlit, PBR (Standard) and PBR-like Blinn-Phong (Lit Legacy)).

To prevent to project onto some surfaces you can use the stencil options:

1. On the projector material set the Stencil options like these:
  - Stencil ZFail Operation to Keep
  - Stencil Reference to 0
  - Stencil Read Mask to 1
  - Stencil Write Mask to 255
  - Stencil Compare Function to Equal
2. On the material that should avoid the projection set the Stencil options like these:
  - Stencil Compare Function to Equal
  - Stencil Reference to 1
  - Stencil Read Mask to 255
  - Stencil Write Mask to 255
  - Stencil Comparison Function to Always
  - Stencil Pass Operation to Replace
  - Stencil Fail Operation to Replace