

Always Visible Shader Tutorial

This tutorial will showcase how to make a shader that is always visible even when the object is behind other objects. This is primarily useful for isometric games where you would want the player character to always be seen by the player.

New Scene

Firstly, you need to create a new shader by right clicking anywhere under the project window at the bottom of the screen. Once you've right clicked you go to Create > Shader > Standard Surface Shader.

Once the shader has been created load up the shader script add the pass that you see below, it goes in-between LOD 200 and CGPROGRAM. You must also add a second colour under Properties.

```

Shader "Custom/AlwaysVisible"
{
    Properties
    {
        _Color ("Color", Color) = (0,0,0,0)
        _Color2 ("Always Vis", Color) = (0,0,0,0)
        _MainTex ("Albedo (RGB)", 2D) = "white" {}
        _Glossiness ("Smoothness", Range(0,1)) = 0.5
        _Metallic ("Metallic", Range(0,1)) = 0.0
    }

    SubShader
    {
        Tags { "RenderType"="Opaque" }
        LOD 200

        Pass
        {
            Cull Off
            ZWrite Off
            ZTest Always

            CGPROGRAM
            #pragma vertex vert
            #pragma fragment frag
            #include "UnityCG.cginc"
            struct appdata
            {
                float4 vertex : POSITION;
            };

            struct v2f
            {
                float4 vertex : SV_POSITION;
            };

            float4 _Color2;

            v2f vert(appdata v)
            {
                v2f o;
                o.vertex = UnityObjectToClipPos(v.vertex);
                return o;
            }
        }
    }
}

```

Adding Shader to Material

To create a new material once again go to the project window and right click, then go to Create > Material.

Afterwards to add the shader to the material, click on the material and go to the inspector on the top right. There you will see a shader drop down menu, click on it and select Custom > and find the name of your shader script. Once done the material should have two options: Colour (which controls the base colour of the object) and the Always Visible Colour (which controls the colour of the object when it's behind the environment).

To add the material to your desired object you find your object in the scene view and drag and drop the material onto it.