



Toon Shader For Unity by Tetra Arts

v1.0.0

Documentation

Contents

[Introduction](#)

[Instalation](#)

[Tatoon2 for buit-in renderer](#)

[Tatoon2 for URP renderer](#)

[Built-in renderer](#)

[Tatoon2_Built-in](#)

[Tatoon2_Built-in_Transparent](#)

[Tatoon2_Built-in_Cutout](#)

[Tatoon2_Built-in_Dissolve](#)

[URP renderer](#)

[Tatoon2_URP](#)

[Main Color and Texture](#)

[Normal map](#)

[Shadows](#)

[Specular](#)

[Rim highlight](#)

[Gradient](#)

[Additional lights](#)

[Outline](#)

[Tatoon2_URP_Transparent](#)

[Opacity](#)

[Tatoon2_URP_Cutout](#)

[Cutout](#)

[Tatoon2_URP_Dissolve](#)

[Dissolve](#)

[Outlines passes](#)

[Global Outline](#)

[Sobel Outline](#)

[Contacts](#)

Introduction

Thank you for choosing Tatoon2. First of all, English is not my main language, I apologize for the translation mistakes.

Tatoon has been developed to try to offer you the best quality toon shader possible in the spirit of what is currently being done. Compatible with Built-In and URP rendering modes, it comes with several features like shadow customization, additional light support, additional render passes for outlines effect and many more.

Instalation

Tatoon2 for buit-in renderer

To import the package simply choose Tatoon2_Built-In_v1.x.x and import it into your project.

To create a new material with Tatoon2 you just have to create a new material and select in the shader tab of this material :

Tetrarts/Tatoon2/Built-in/Tatoon2_Built-in

Tatoon2 for URP renderer

To import the package simply choose Tatoon2_Built-In_v1.x.x and import it into your project.

Warning : you must have Universal render pipeline v10 minimum installed in your project

To create a new material with Tatoon2_URP you just have to create a new material and select in the shader tab of this material :

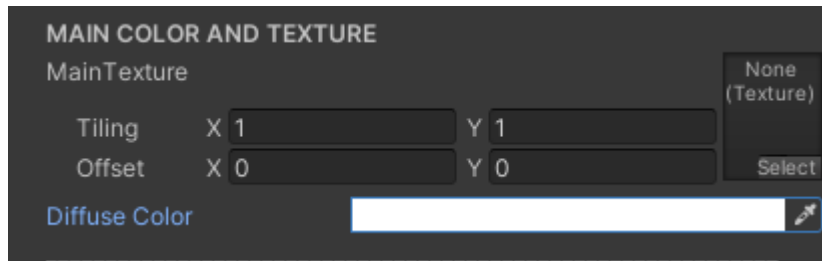
Tetrarts/Tatoon2/URP/Tatoon2_URP

Built-in renderer

Tatoon2_Built-in

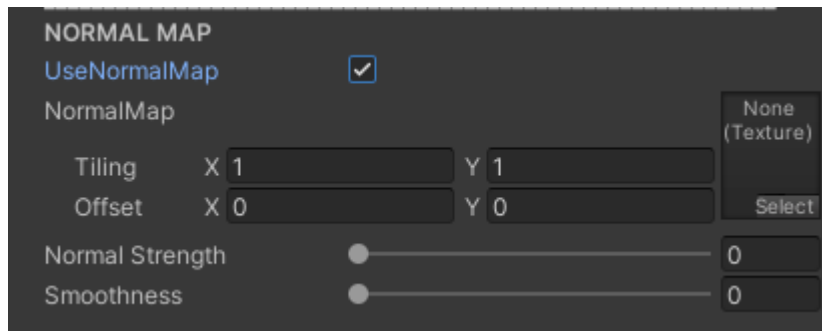
- Main Color and Texture

In this part we have a slot for the main texture of your model and a color setting. If you use a main texture it is recommended to set the color to white.



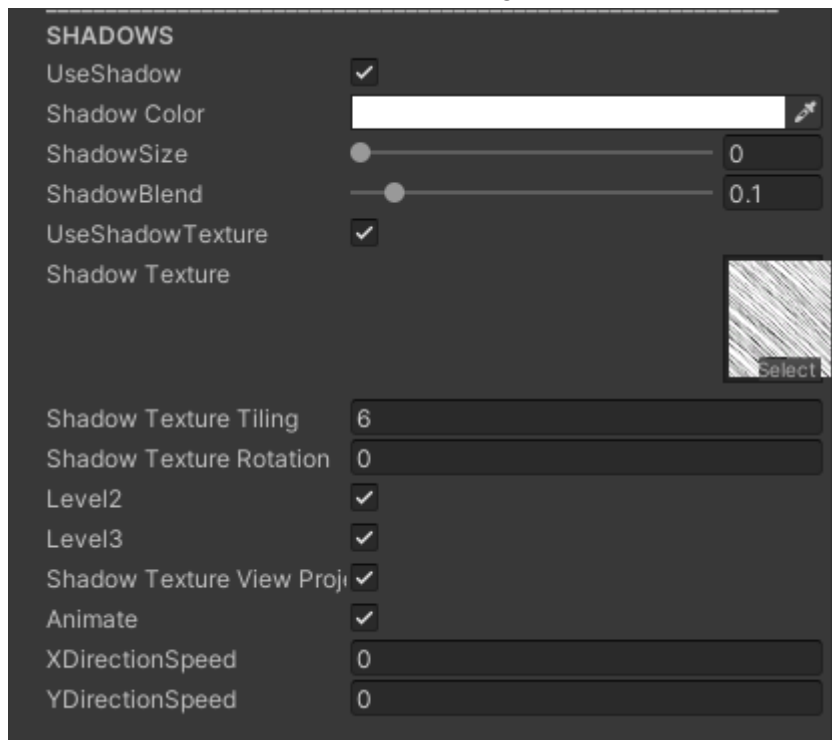
- Normal map

In this part we have a slot for the Normal map of your model and two parameters: "**Normal strength**" for the strength of the normal map and "**Smoothness**" to control the brightness of your model



- Shadows

This part is reserved for shadow settings.



Shadow Color for the color of the shadow(white = transparent) if you use shadow texture it's recommended to set this setting to white.

Shadow Size between 0 and 1, at 0 the shadow is reduced to the minimum and at 1 the shadow covers the whole object.

Shadow Blend controls the shadow attenuation. 0 = not attenuated, 1 = fully attenuated.

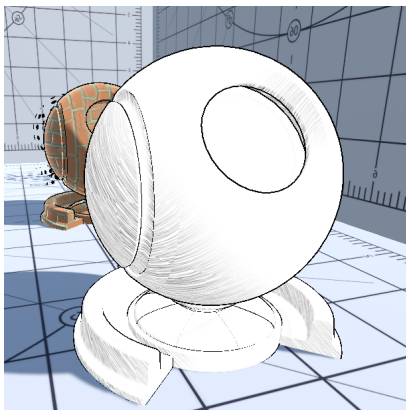
UseShadowTexture unlock shadow texture settings, Allows you to inject a texture into the shadow

ShadowTexture a slot to add a texture to the shadow

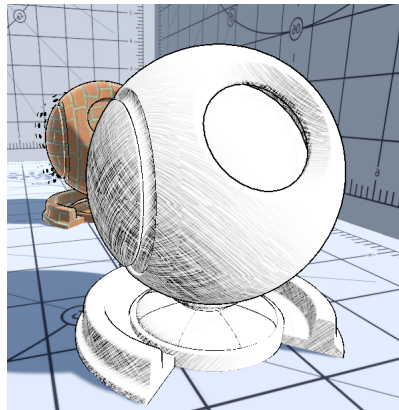
Shadow texture tiling control texture size

Shadow texture rotation control texture rotation

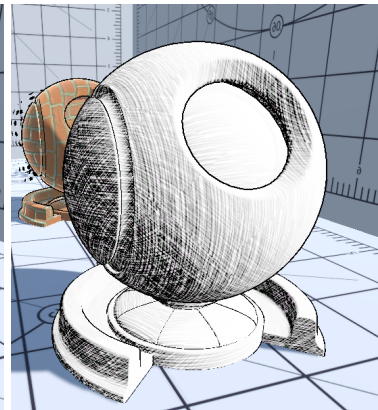
Level2, Level3 if "UseShadowTexture" is enabled , you can activate 3 levels of shadow



Level1

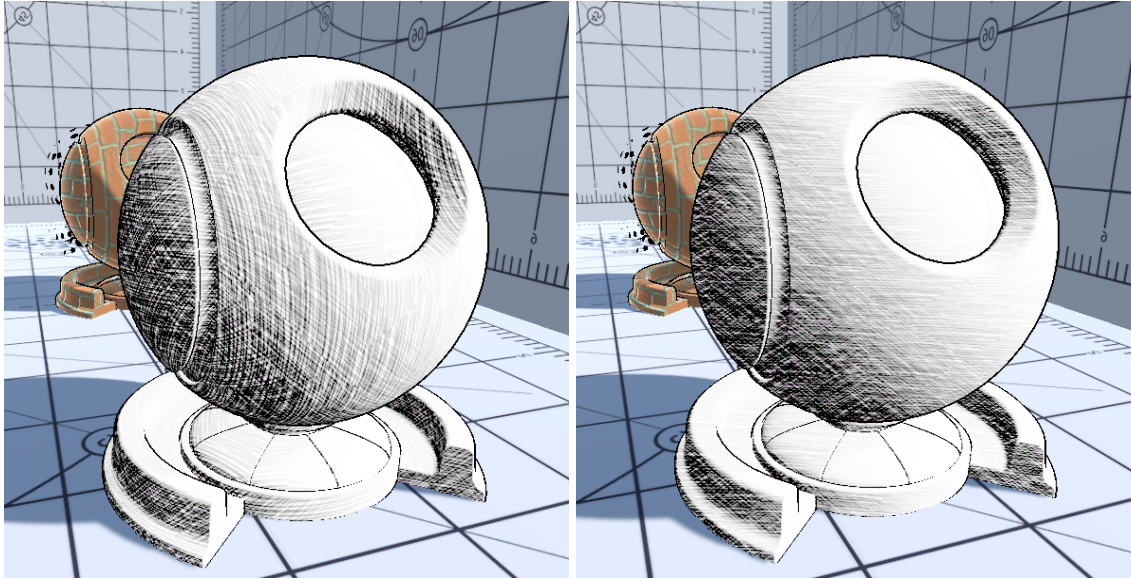


Level2



Level3

ShadowTextureViewProjection if enabled the texture projection swaps between object and view



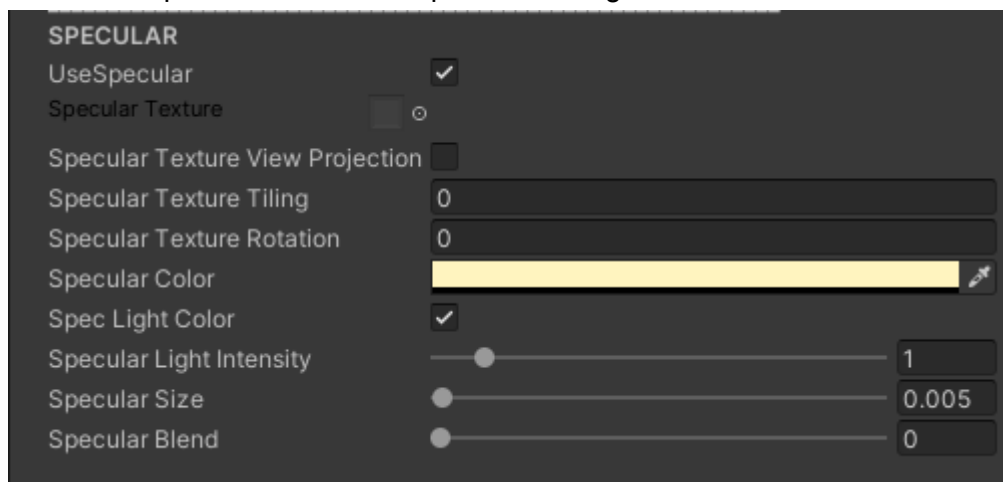
Object Projection

View Projection

Animate if enabled you can control the direction speed of the texture.

- Specular

This part is reserved for specular settings.



Specular Texture a slot to add a texture to the specular

SpecularTextureViewProjection if enabled the texture projection swaps between object and view.

SpecularTextureTiling control texture size

SpecularTextureRotation control texture rotation

SpecularColor control color of specular

SpecLightColor use light color for specular color

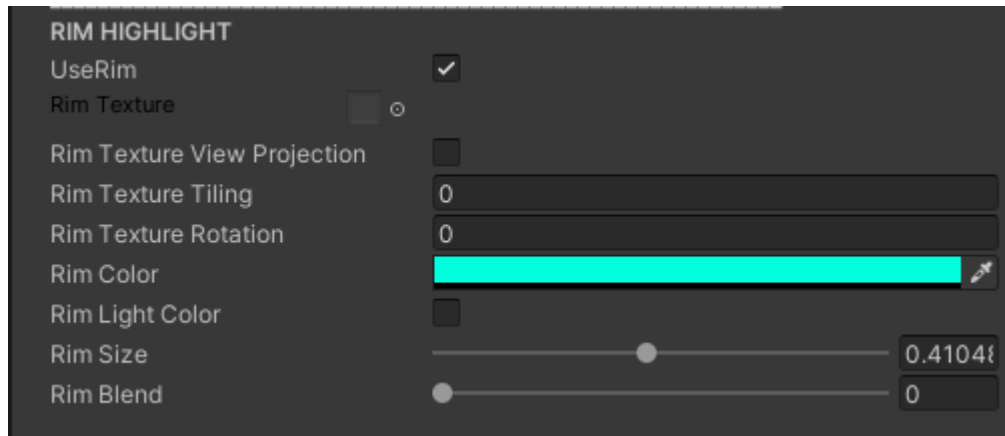
SpecularLightIntensity intensity of light color

SpecularSize control specular size

SpecularBlend control the specular attenuation

- Rim highlight

This part is reserved for rim settings.



Rim Texture a slot to add a texture to the rim

RimTextureViewProjection if enabled the texture projection swaps between object and view.

RimTextureTiling control texture size

RimTextureRotation control texture rotation

RimColor control color of rim

RimLightColor use light color for rim color

RimLightIntensity intensity of light color

RimSize control rim size

RimBlend control the rim attenuation

- Gradient

This part is reserved for gradient settings.

ColorA,ColorB main colors of the gradient

GradientSize control the gradient size.

GradientPosition control the gradient position

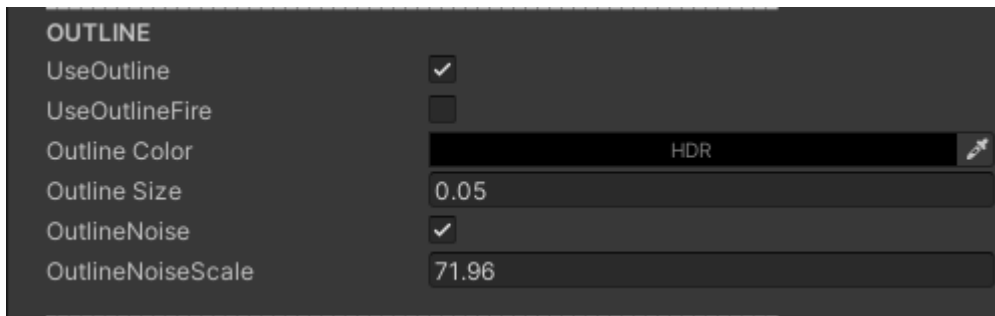
GradientRotation control the gradient rotation

ChangeAxis switch between XY axis and XZ axis



- Outline

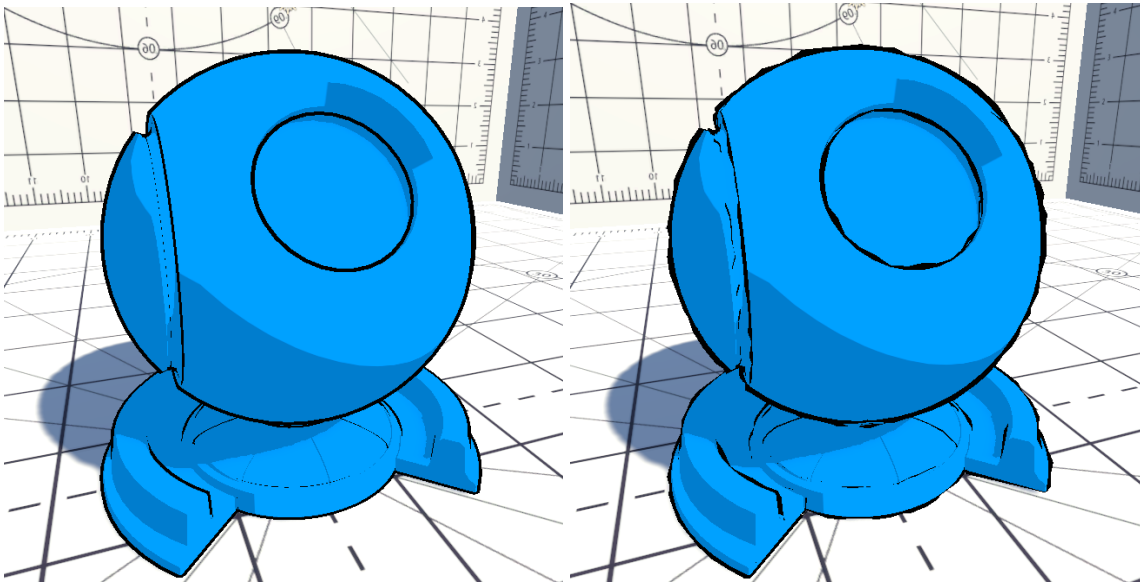
This part is reserved for Outline settings.



OutlineColor control the outline color, Color is HDR you can use it for glow effect with post processing

OutlineSize control outline size

OutlineNoise if enabled make your outline noisy



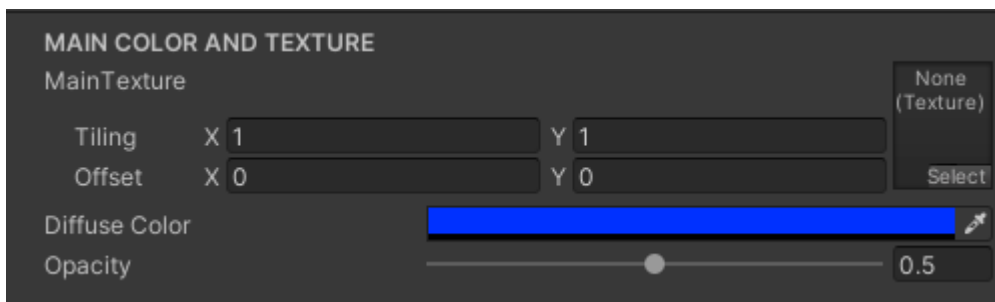
Without noise

With noise

OutlineNoiseScale control the noise amount

Tatoon2_Built-in_Transparent

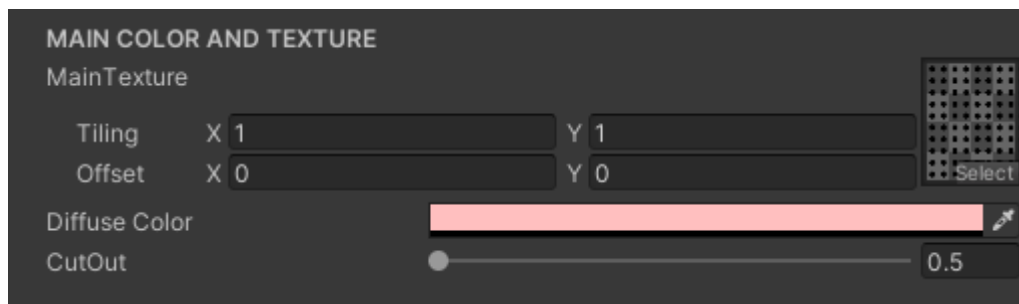
- Opacity



I simply added an Opacity parameter to the Tatoon2_Built-in_Transparent shader. It is located in the MainColor & Texture section. This Shader does not contain an Outline parameter

Tatoon2_Built-in_Cutout

- Cutout

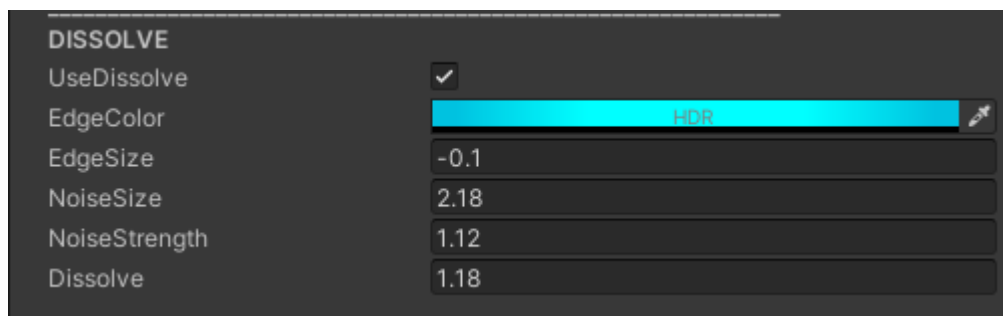


I simply added an Cutout parameter to the Tatoon2_Built-in_Cutout shader. It is located in the MainColor & Texture section. This Shader does not contain an Outline parameter

Tatoon2_Built-in_Dissolve

- Dissolve

This shader contains all the options of the Tatoon2_built-in_OutlineIncluded shader with an additional dissolve section. The DissolveScript is also available to control the dissolve effect at runtime.



UseDissolve Enable Dissolve section.

EdgeColor Control the color of the edge between color and transparent.

EdgeSize Control the size of the edge between color and transparent

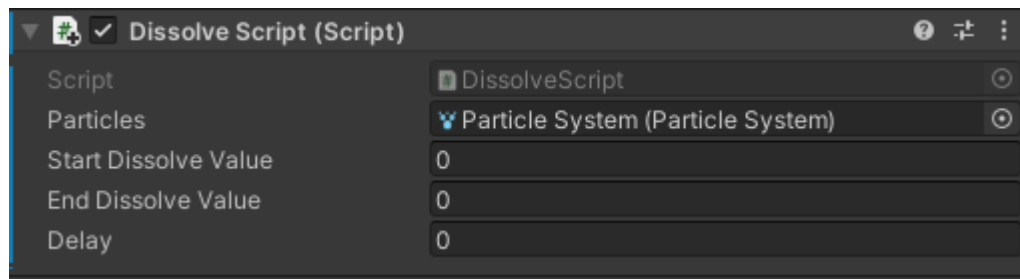
NoiseSize Control the size of the noise procedural of the effect

NoiseStrenght Control the amplitude of the noise procedural of the effect

Dissolve Control the movement of the effect on the Y axis of the object

- Dissolve Script

Dissolve script allows to control the dissolve action via the LaunchDissolve(); function (see demo scene) you can use it on MeshRenderer as well as on SkinnedMeshRenderer. You can also add a particle system to enhance the effect.



Particles for adding particule system to the effect (See demo Scene)

Start Dissolve Value Value of Dissolve setting at start

End Dissolve Value Value of Dissolve setting at end

Delay Time durartion

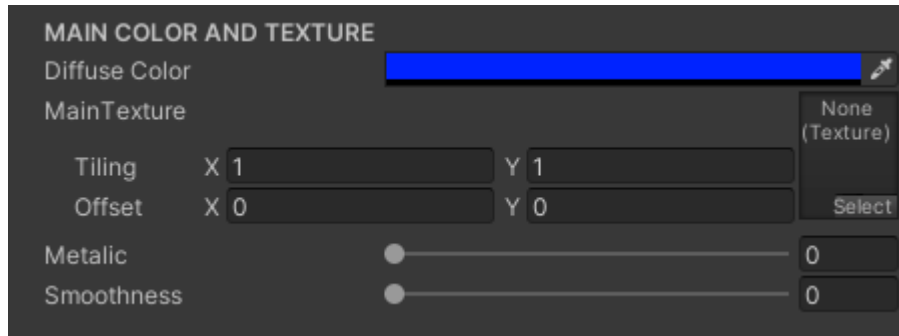
URP renderer

Tatoon2_URP

- Main Color and Texture

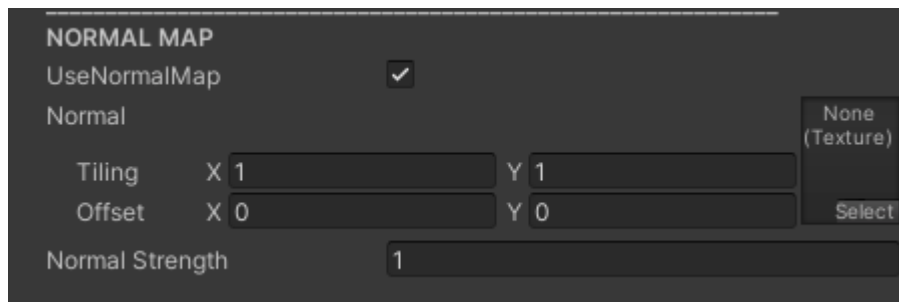
In this part we have a slot for the main texture of your model and a color setting. If you use a main texture it is recommended to set the color to white.

I also added two parameters to control the metallic and smoothness



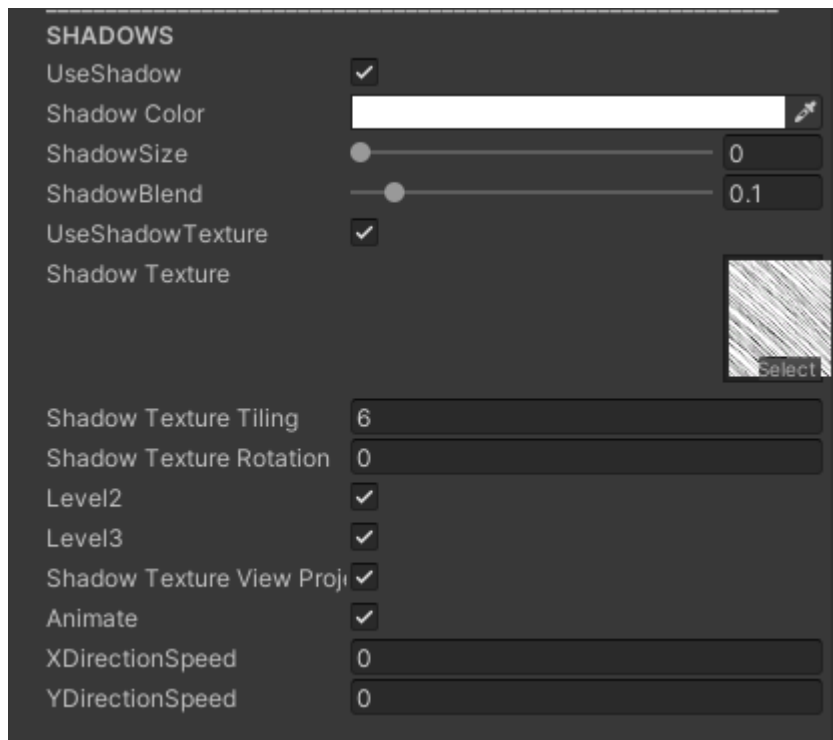
- Normal map

In this part we have a slot for the Normal map of your model and one parameter "**Normal strength**" for the strength of the normal map



- Shadows

This part is reserved for shadow settings.



Shadow Color for the color of the shadow(white = transparent) if you use shadow texture it's recommended to set this setting to white.

Shadow Size between 0 and 1, at 0 the shadow is reduced to the minimum and at 1 the shadow covers the whole object.

Shadow Blend controls the shadow attenuation. 0 = not attenuated, 1 = fully attenuated.

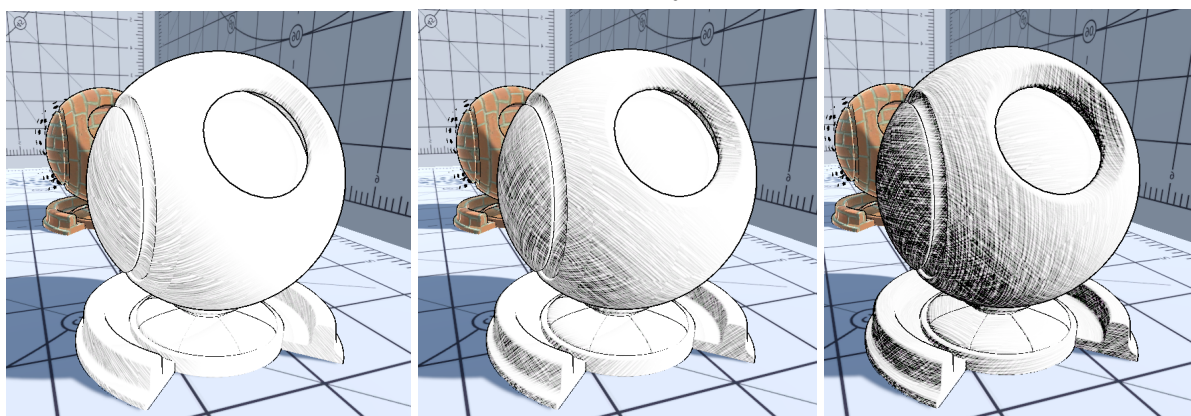
UseShadowTexture unlock shadow texture settings, Allows you to inject a texture into the shadow

ShadowTexture a slot to add a texture to the shadow

Shadow texture tiling control texture size

Shadow texture rotation control texture rotation

Level2, Level3 if "UseShadowTexture" is enabled , you can activate 3 levels of shadow

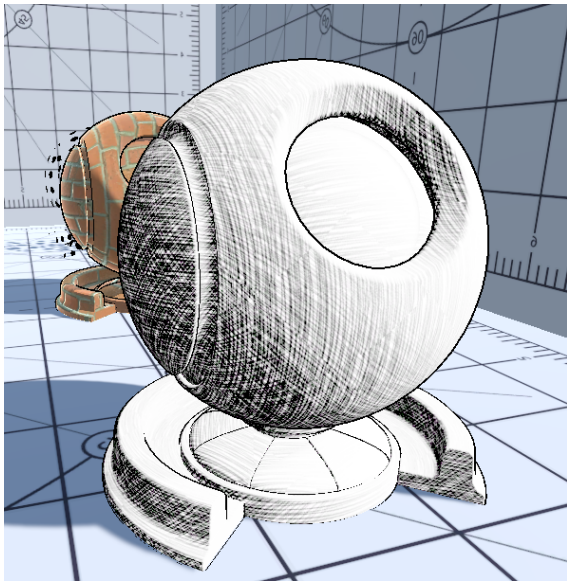


Level1

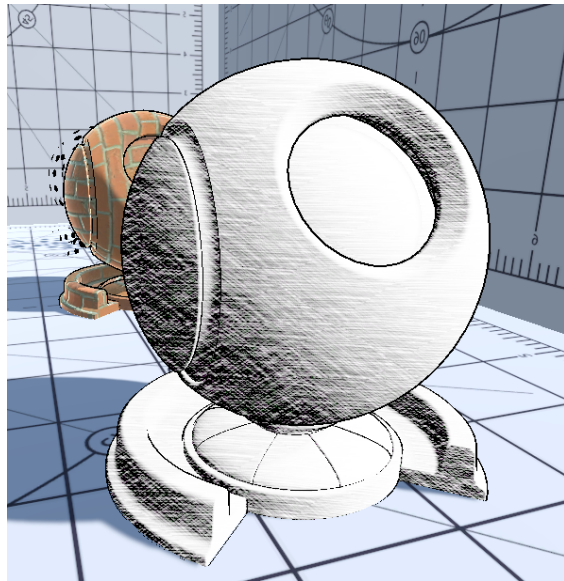
Level2

Level3

ShadowTextureViewProjection if enabled the texture projection swaps between object and view



Object Projection

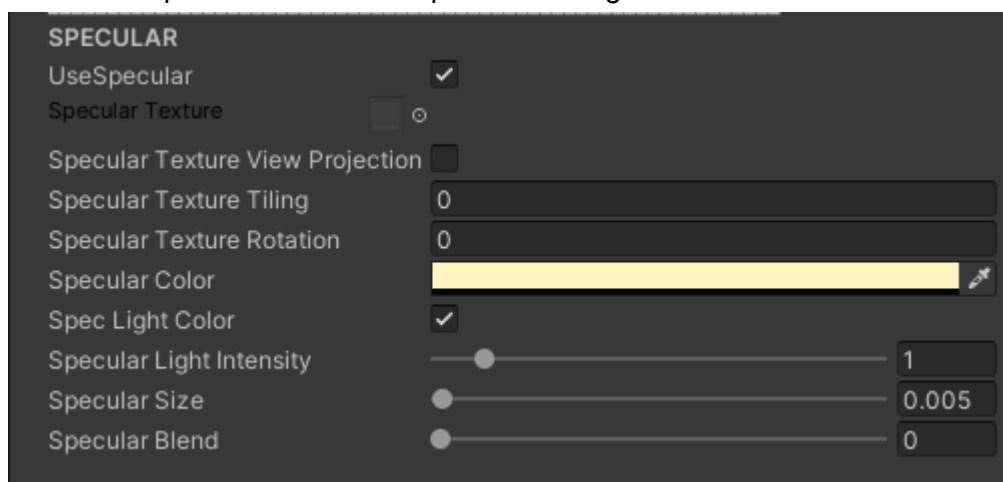


View Projection

Animate if enabled you can control the direction speed of the texture.

- Specular

This part is reserved for specular settings.



Specular Texture a slot to add a texture to the specular

SpecularTextureViewProjection if enabled the texture projection swaps between object and view.

SpecularTextureTiling control texture size

SpecularTextureRotation control texture rotation

SpecularColor control color of specular

SpecLightColor use light color for specular color

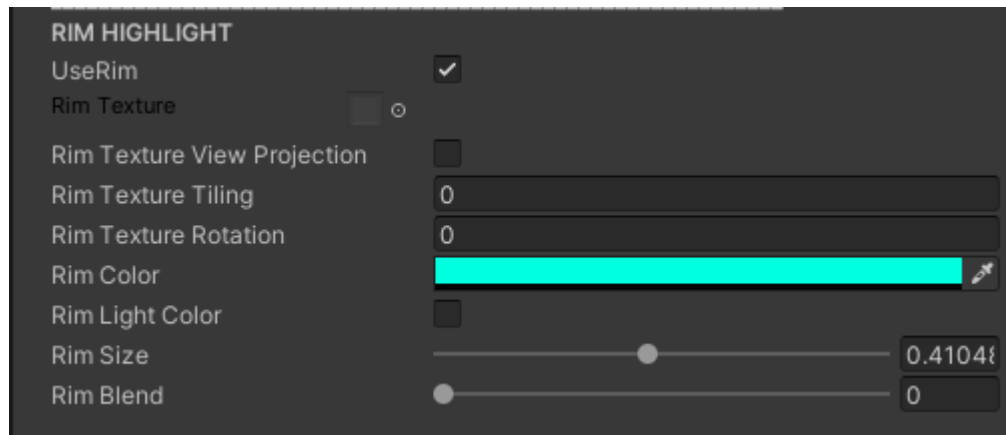
SpecularLightIntensity intensity of light color

SpecularSize control specular size

SpecularBlend control the specular attenuation

- Rim highlight

This part is reserved for rim settings.



Rim Texture a slot to add a texture to the rim

RimTextureViewProjection if enabled the texture projection swaps between object and view.

RimTextureTiling control texture size

RimTextureRotation control texture rotation

RimColor control color of rim

RimLightColor use light color for rim color

RimLightIntensity intensity of light color

RimSize control rim size

RimBlend control the rim attenuation

- Gradient

This part is reserved for gradient settings.

ColorA,ColorB main colors of the gradient

GradientSize control the gradient size.

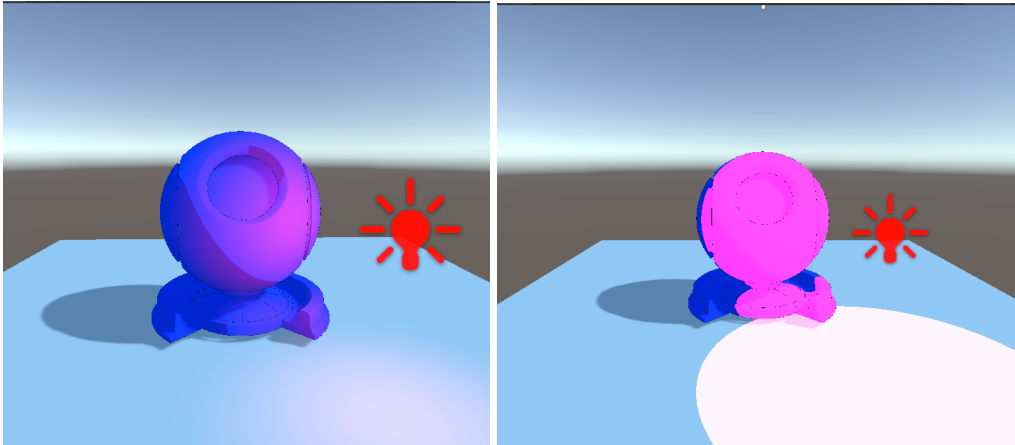
GradientPosition control the gradient position

GradientRotation control the gradient rotation

ChangeAxis switch between XY axis and XZ axis



- Additional lights



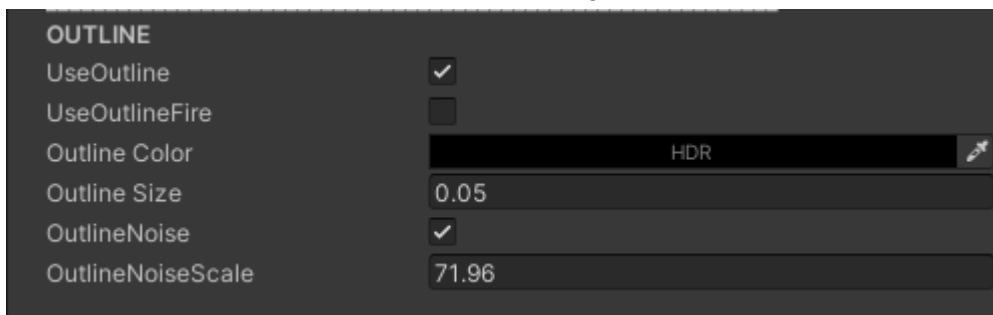
Normalize off

Normalize on

Here you can normalize your additional lights to give them a flatter effect on the shader

- Outline

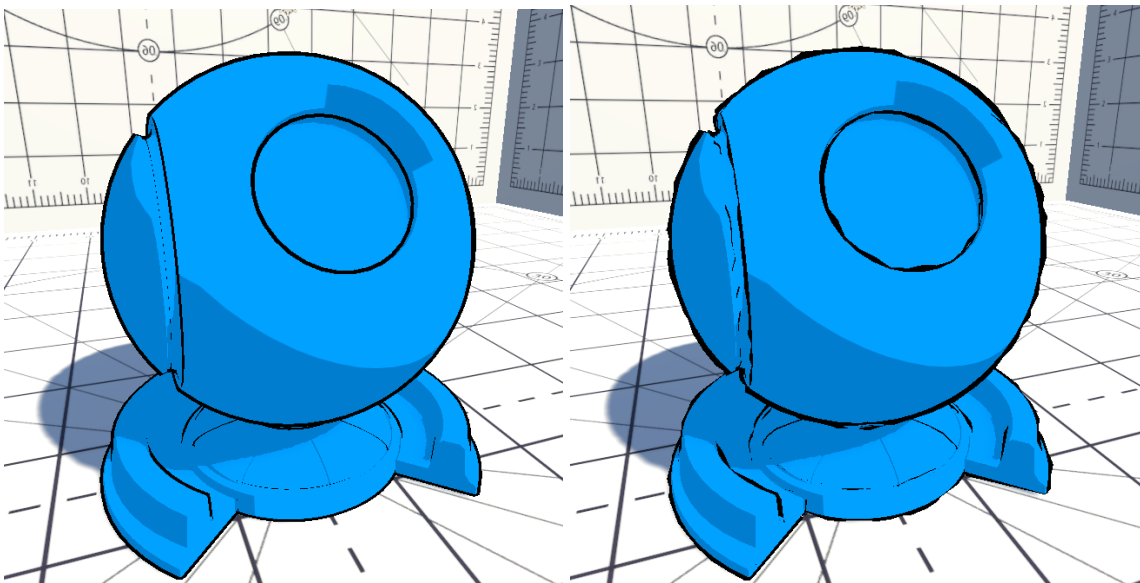
This part is reserved for Outline settings.



OutlineColor control the outline color, Color is HDR you can use it for glow effect with post processing

OutlineSize control outline size

OutlineNoise if enabled make your outline noisy



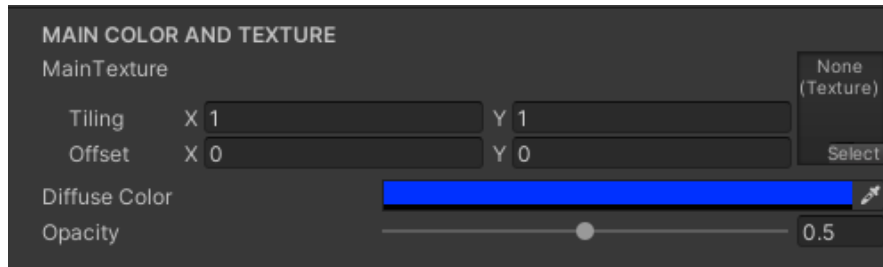
Without noise

With noise

OutlineNoiseScale control the noise amount

Tatoon2_URP_Transparent

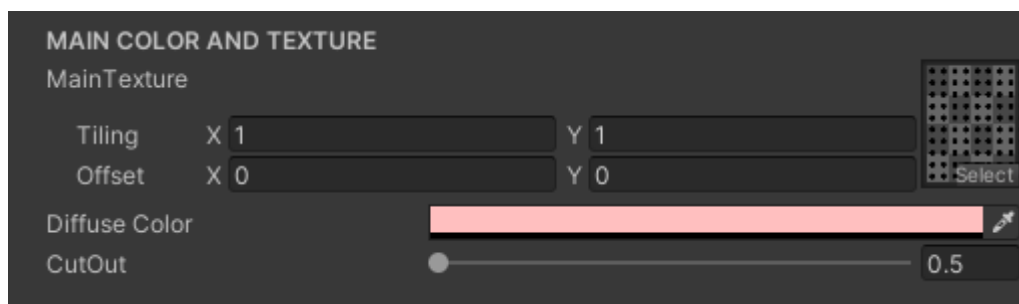
- Opacity



I simply added an Opacity parameter to the Tatoon2_URP_Transparent shader. It is located in the MainColor & Texture section. This Shader does not contain an Outline parameter

Tatoon2_URP_Cutout

- Cutout

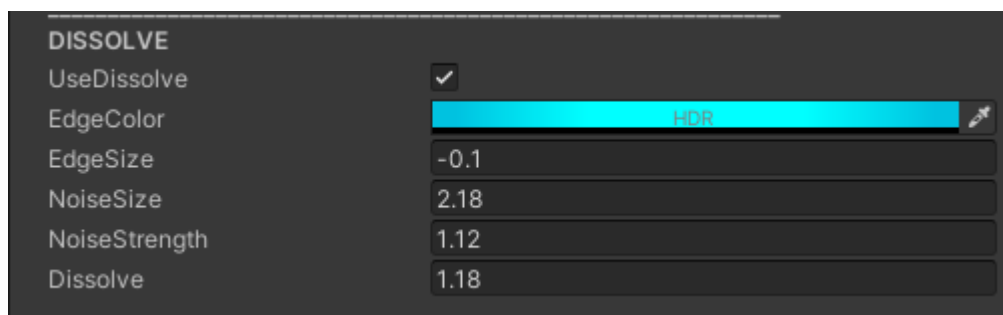


I simply added an Cutout parameter to the Tatoon2_URP_Cutout shader. It is located in the MainColor & Texture section. This Shader does not contain an Outline parameter

Tatoon2_URP_Dissolve

- Dissolve

This shader contains all the options of the Tatoon2_built-in_OutlineIncluded shader with an additional dissolve section. The DissolveScript is also available to control the dissolve effect at runtime.



UseDissolve Enable Dissolve section.

EdgeColor Control the color of the edge between color and transparent.

EdgeSize Control the size of the edge between color and transparent

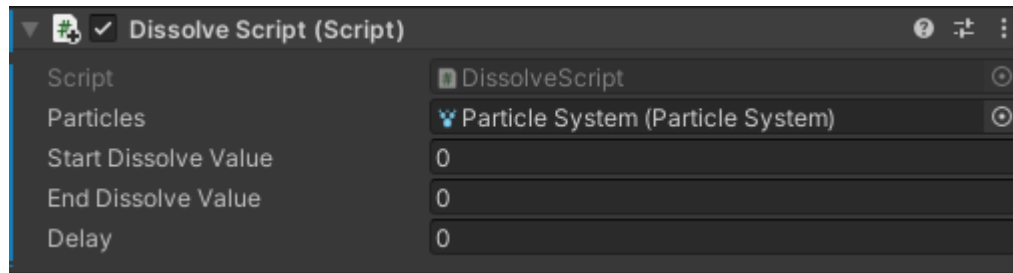
NoiseSize Control the size of the noise procedural of the effect

NoiseStrenght Control the amplitude of the noise procedural of the effect

Dissolve Control the movement of the effect on the Y axis of the object

- Dissolve Script

Dissolve script allows to control the dissolve action via the LaunchDissolve(); function (see demo scene) you can use it on MeshRenderer as well as on SkinedMeshRenderrer. You can also add a particle system to enhance the effect.



Patricules for adding particule system to the effect (See demo Scene)

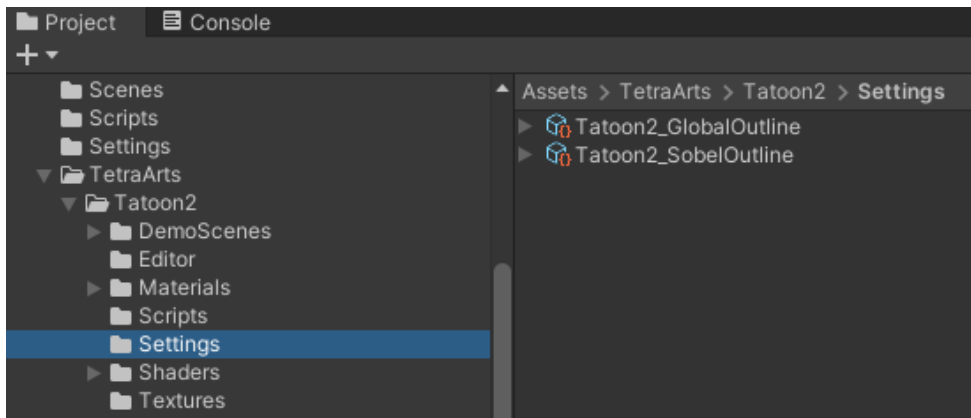
Start Dissolve Value Value of Dissolve setting at start

End Dissolve Value Value of Dissolve setting at end

Delay Time durartion

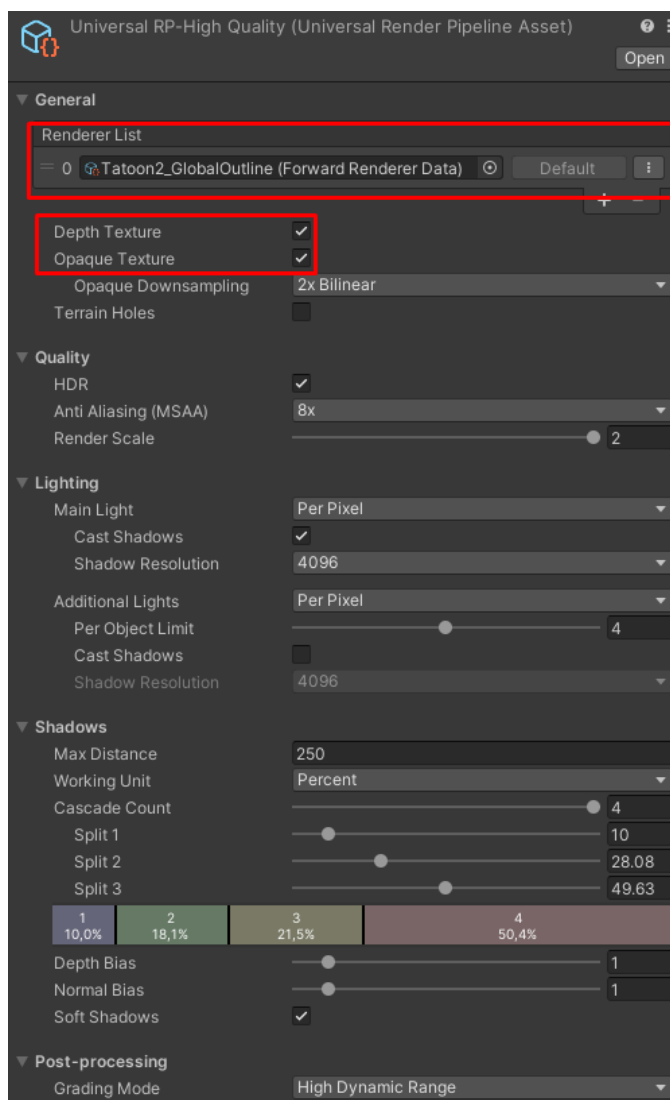
Outlines passes

The URP render mode allows us to add additional passes to the render. You can find the additional outlines passes in the Assets/TetraArts/Tatoon2/Settings path.



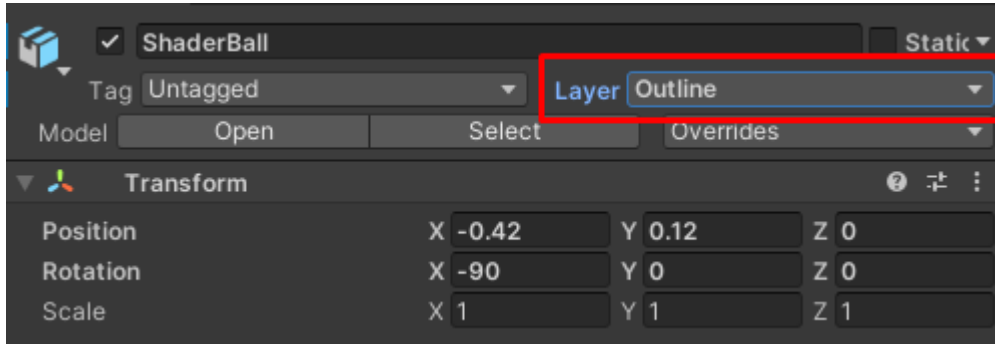
To use them, just drag and drop the forward renderer of your choice into your universal renderer asset.

ATTENTION don't forget to check the DepthTexture and OpaqueTexture parameters of your Universal Renderer Asset.

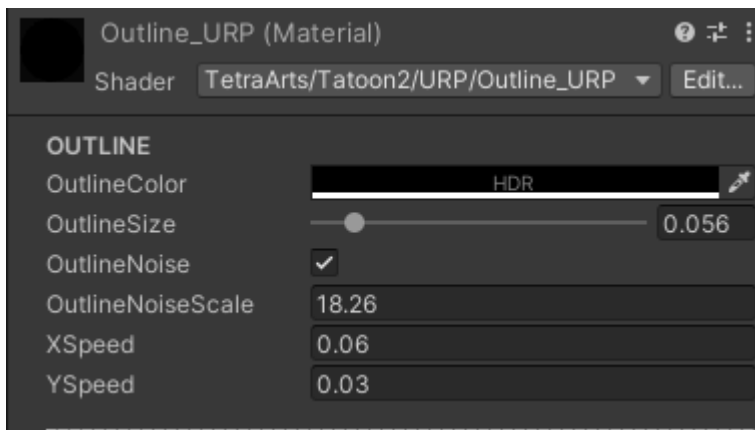
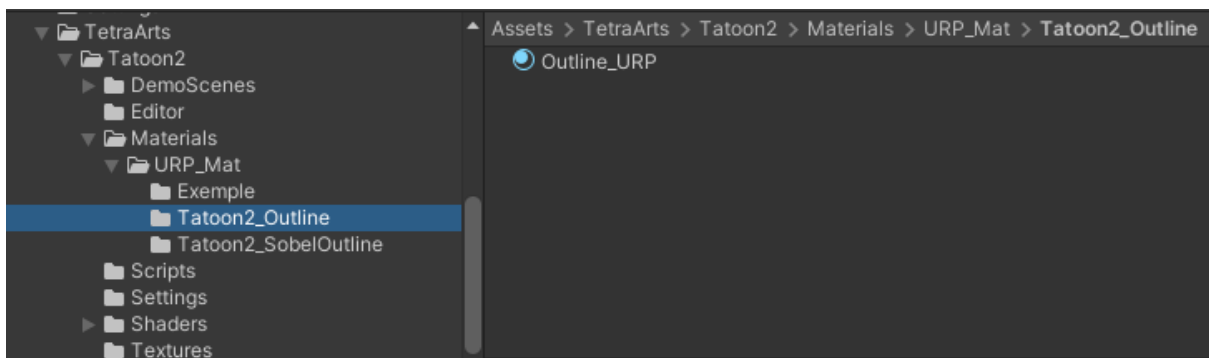


- Global Outline

After following the steps in the "OutlinePasses" chapter, we need to create a new Layer named Outline and assign it to the objects in your scene that you want to outline.



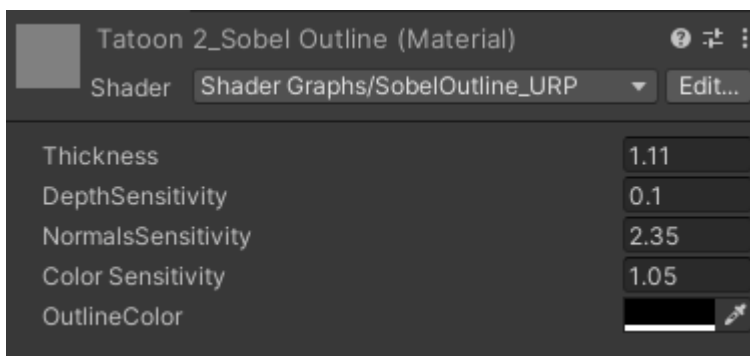
You can now play with GlobalOutline Material in [Assets/TetraArts/Tatoon2/Materials/URP_Mat/Tatoon2_Outline](#)



- **Sobel Outline**

After following the steps in the "OutlinePasses" chapter, we can play directly with a SobelOutline Material from,

[Assets/TetraArts/Tatoon2/Materials/URP_Mat/Tatoon2_SobelOutline](#)



Thickness Control the scale of the outline

DepthSensitivity Control the influence of the outline in the depth

NormalsSensitivity Control the influence of the outline in the edge of your objects

ColorSensitivity Control the influence of the outline by color changement

OutlineColor Control the outline color.

Contacts

If you encounter difficulties, bugs, if you have suggestions or if you simply want to be informed of the evolution of this pack, do not hesitate to contact me via any means at your disposal at the bottom of this paragraph. Wishing you the best for your projects.

Email : tetraarts66@gmail.com

Discord serveur : <https://discord.gg/K74aZe8Ypk>

Facebook : <https://www.facebook.com/Tetra-Arts-101632025535867>

Twitter : <https://twitter.com/MrDupat>

