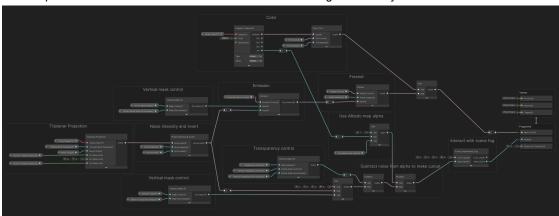
## **Ghost Shader for Unity URP Documentation**

First of all I would like to thank you for purchasing this shader and I hope you will love it as much as I do.

Main focus points of this shader:

- Be mobile friendly.
- Be as cheap as possible.
- Provide good looking results.
- Provide transparency, but avoid visibility of the interior of the mesh same as elements on the back (to prevent messy looking with all parts overlapping).
- Provide a decent amount of control (enough to be easy to use and to make different variations and at same time to be not overwhelmingly complex).

Sub-Graphs are used to make sure the shader is clean looking and is easy to work with.

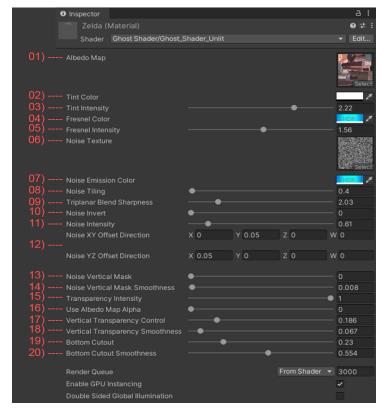


## Material

To switch existing material to ghost shader click on the drop down menu just below material name, next to the word "Shader". In the drop down menu choose "Ghost Shader > S Ghost Unlit".

## **Material Parameters**

- Albedo (Color Map) Input. It's the main texture of your character.
- Apply tint color to the whole character. If a character or object doesn't have an Albedo map then this would be the main color.
- 3) Tint color intensity.
- 4) Fresnel is an effect which highlights the difference between the shapes. It looks like a thick (adjustable) rim. This parameter allows you to change color and glow intensity.
- 5) Fresnel intensity allows you to control the spread of it.
- 6) Noise texture input (black & white map). It produces a different color or/and glow effect inside of the character/ghost and is used as well to cut out the bottom of the mesh.
- 7) Noise emission color and intensity.



- Noise tiling.
- 9) Noise projected from all 3 axis and this parameter helps to adjust sharpness of the edge between axis projection.
- 10) Because the noise texture is black & white this parameter allows to invert which parts of it are black & white.
- 11) Noise intensity allows to control sharpness (detailing) of the noise elements.
- 12) Noise can be animated and those two parameters help to set speed and direction (pay attention to names XY and YZ).
- 13) Controls how far up on the character noise texture is moved.
- 14) Controls noise texture edge smoothness. Without it the edge between noise texture and no texture will be very sharp.
- 15) Controls how visible a character or object will be, but will never make the object become opaque.
- 16) If you want to use the Alpha channel from the Albedo map then set this parameter to 1.
- 17) This parameter controls linear cut out which moves up and down vertically.
- 18) This parameter smoothies the cut out edge otherwise it will be very sharp.
- 19) Bottom cutout parameter cuts out the bottom of the mesh, and moves up and down vertically, based on the noise texture you inserted above. So it won't be a straight line as with parameter 17 and can be animated.
- 20) This parameter smoothies and spreads the cut out edge which is based on the noise texture.

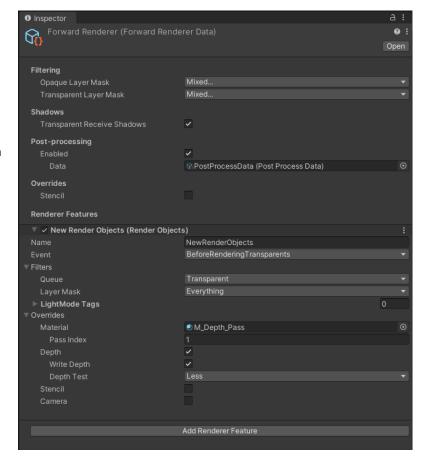
## **URP Forward Renderer Settings**

To make shader work as it is designed you will need to do a small change to the Forward Renderer.

You need to press "Add Renderer Feature" and then choose "Render Objects". This will add "New Render Object" (can be renamed) with some parameters, which we need to tweak to make our ghost shader work properly, otherwise we will see inside and back geometry of the mesh and will look very messy. So we need to see only what is in front, but at the same time it must be transparent (see through it).

Please follow these steps:

- Set "Event" to "BeforeRenderingTransparent".
- In the "Filters" drop down, set "Queue" to "Transparent" and "Layer Mask" to "Everything".
- In the "Overrides" drop down, insert
  "M\_Depth\_Pass" material into the "Material"
  input. You will find this material in the folder
  "Ghost Shader > Materials".
- Set "Pass Index" to 1.
- Enable "Depth" and "Write Depth" and set "Depth Test" to Less.



That is all. Your material should work properly.

If for some reason your material still doesn't work as it should please contact me by sending an email to <a href="mailto:contact@ceslavsukstul.com">contact@ceslavsukstul.com</a> or send me a message in LinkedIn <a href="mailto:https://www.linkedin.com/in/ceslav-sukstul/">https://www.linkedin.com/in/ceslav-sukstul/</a>.