

MANUAL

HEIGHT

FOG



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Hello!

Thank you for buying my asset, for me every buyer is important! In this manual, I will try to simply tell you about all the features of my asset, describe the operation of controllers, give examples of the implementation of some scenes. Well, we will not wait long and will begin!

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SHADER PROPERTIES



To create a fog material, add new material to the desired folder in the project and select the shader – SKGames -> Height Fog.

I tried to make the interface as simple as possible, not only with the help of controllers, but also when working with the material directly!

Primary properties. Most of the shader parameters you probably know, because they are used in most other shaders, including the standard PBR shader,

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at the top of the shader, slots under the basic textures, such as – **Albedo** (Main color texture, with additional color field, opposite to it, designed to give an additional shade to the entire material), **Normal Map** - texture for imitation of relief on material, **AO Map** – ambient occlusion, to give a more realistic shading to the object, **Specular and Metallic maps** - to impart reflective properties to the material, also have additional controllers, for manipulating the glare strength and source selection, these can be both the RGBA channels corresponding to the material of the textures, and the alpha channel of the Albedo texture. **Emission color** with intensity value field and **Bake emission** toggle – for enable\disable emission light baking on lightmap. All textures uses same Tiling and Offset properties.

Fog properties. This section lists the main properties for the fog effect settings on the object. **Fog space** - determines in which coordinate space the minimum and maximum fog heights are specified, in the world or in the model space. With Local property we will be simulate translucent materials. Fog color - determines the color of the fog. **Fog height (Min\Max)** – specifies the values of the minimum and maximum fog heights, all that is below the minimum border will have only the color of the fog, anything higher than the maximum border will have its usual color, everything that is between the minimum and maximum will be interpolated from the color of the fog to the color without fog. At Min values less than Max the direction of the fog will be from the bottom up, with Min greater than Max, the fog direction is inverted. To change the intensity of the interpolation, use the **Fog falloff** slider. **Fog emission color** allow you change fog emission color. **Fog emission power** allows you to adjust the strength of the glow of the fog, this property is perfect for creating an atmosphere of a glowing gorge or self-luminous materials, as well as for creating an effect of object overheating. **Fog**

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emission falloff, same as Fog falloff, provide us adjust illuminate interpolation intensity from Min to Max.

Fog animation properties. This section lists the properties for making the fog more alive, due to a simple sinusoidal motion. Use **fog animation toggle** – disable\enable fog animation. The section has only 3 properties, which will be clear to anyone. **Speed** - determines how fast the fog will move in its plane, **Amplitude** - how high will be its waves and **Frequency** - how much more waves there will be per unit.

Standard fog properties. **Combine with standard fog** toggle – enable\disable standard Unity fog (Lighting window in Unity) affecting on this object. **Override standard fog color** toggle – override fog color from Lighting window to color from Fog color property of this shader.

Advanced options. **Enable instancing** toggle – enable\disable Unity GPU instancing for this object.

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OBJECT FOG CONTROLLER



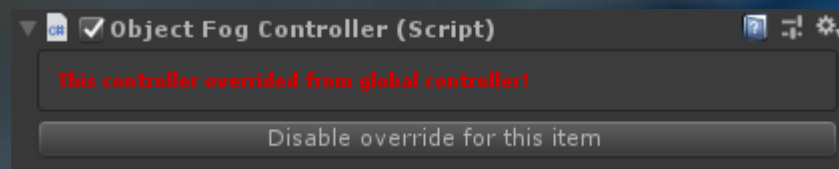
To add a controller, in the object inspector, click Add Component -> SKGames -> Object Fog controller.

To change the settings of the material directly is simple enough and quickly, but not always effective, because when you change the material parameters in runtime, for example, the speed of the fog animation or its color, entails creating

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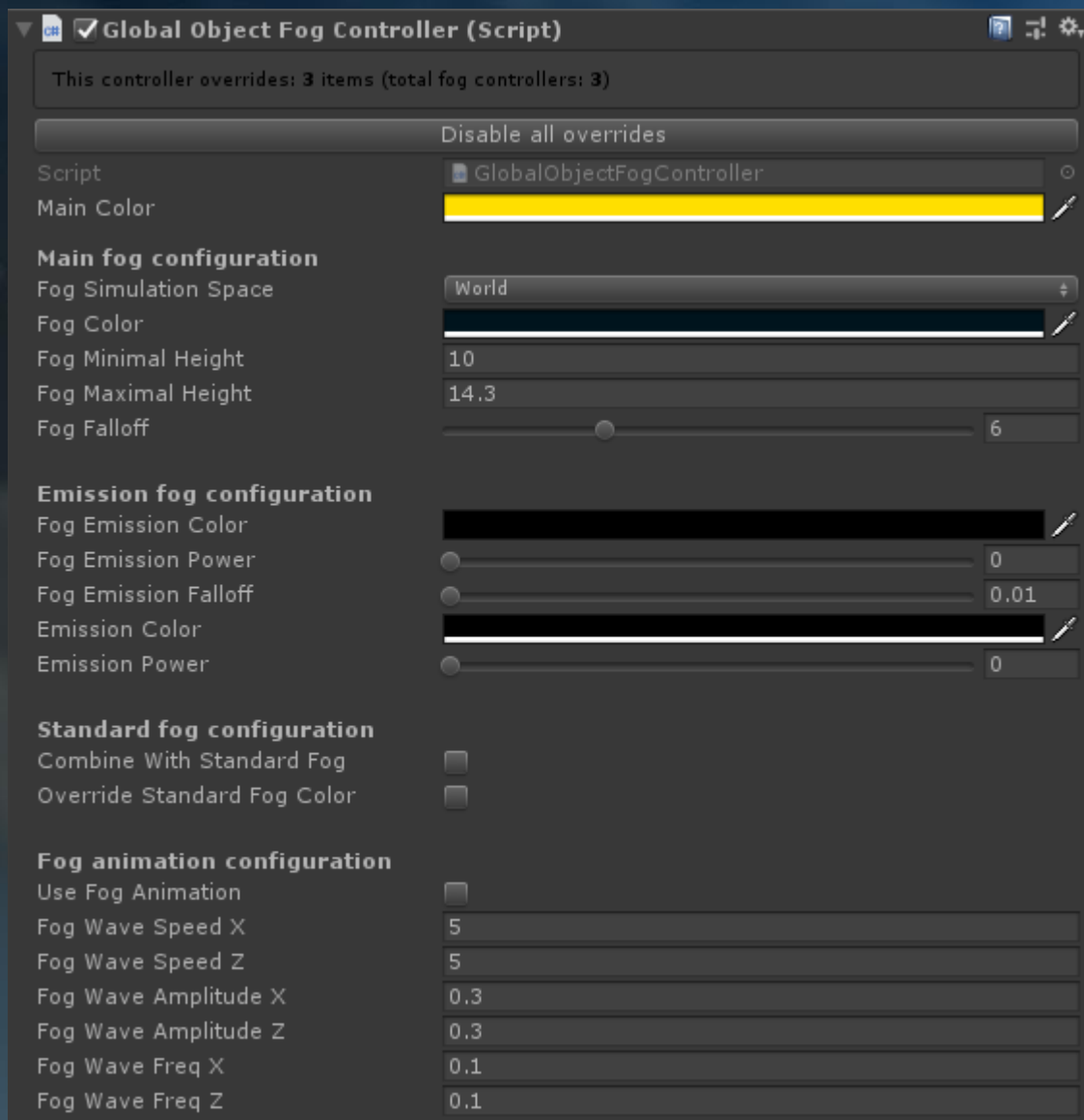
a new instance of this material, which does not have a good effect on performance. But not in our case! My shader, whose lucky owner you have become, is made in such a way as to give the maximum performance in your games, and therefore it is written with Material Property Blocks, thanks to which you can easily change most of the material properties in runtime, without fearing that a new instance will be created. To simplify your life, I wrote several controllers, with which you do not even have to write a line of code to change the material properties on your object, all the fields of this script are identical to the values in the shader, and all these properties work with the Material Property Blocks. **Object fog controller** - allows you to change the properties of the fog material on the object to which it is added (**Attention the object must have a MeshRenderer or a SkinnedMeshRenderer with the material assigned, in which the current Height Fog shader is specified**). Enable override for this item button (visible only if Global object fog controller exists on scene) allow you to enable overriding for this controller to properties from Global object fog controller. After clicking on this button, all material properties will be overridden by properties from the Global object fog controller, and the appearance of the controller will change:



After click on Disable button, properties will be taken from this controller again.

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GLOBAL OBJECT FOG CONTROLLER



To add a controller, in the object inspector, click Add Component -> SKGames -> Object Fog controller.

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All properties are identical to the properties of the material. This controller allows you to control the properties of all objects with Height fog material. In addition, the **Fog color** property of this controller overrides Clear Flags and Background of the active camera by the color indicated in this property. In addition to all this, this controller allows you to enable or disable in one click the override of all Object Fog Controllers on the scene. At the top you can always see the number of Object Fog Controllers on the scene and the number of those that are overridden.

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