MK Glow Free

Reference

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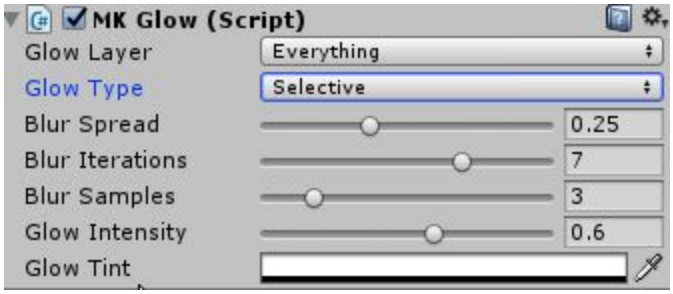
1.0 Setup

Before activating the MK Glow, a Camera Object has to be selected. Following this, the entry can be found here: *“Window/MKGlow/Add MK Glow To Selection”*. That’s simply it.

2.0 Global configuration



GlowType:

Adjustment	**Description**
Selective	to specifically bring objects to glow This mode gives you the most “correct” glow, but it uses unity´s RenderWithShader implementation (performance intensive)
Fullscreen	complete screen glows

Other Parameters:

Adjustment	Description
Blur Spread	Width of the glow effect
Blur Iterations	Number of used blurs
Samples	the downsampling factor of the blur
Glow Intensity	The global luminous intensity
Glow Tint	The glows coloration

3.0 Shader configuration (selective mode only)

The MK Glow already brings a multitude of standard shaders. These shaders can be found here: MK/Glow/Selective.

These shaders are only needed in Selective Mode! Simply assign the respective shader to the objects which shall receive the glow effect.

The shaders have some basic parameters:

Adjustment	Description
Glow Color	The color of the glow effect on the particular object
Glow Power	The object's luminous intensity
Glow Texture	The glow texture / the areas that should glow
Glow Texture Color	The color of the glow texture
Glow Texture Strength	The texture's luminous intensity

4.0 Make your own shaders glow (selective mode only)

As an example, we are going to fit a new created shader with a glow effect.

4.1 Expanding the properties box

```
Properties
{
   _MKGlowColor ("Glow Color", Color) = (1,1,1,1)
```

```
    _MKGlowPower ("Glow Power", Range(0.0,2.5)) = 1.0
    _MKGlowTex ("Glow Texture", 2D) = "black" {}
    _MKGlowTexColor ("Glow Texture Color", Color) = (1,1,1,1)
    _MKGlowTexStrength ("Glow Texture Strength ", Range(0.0,10.0)) = 1.0
}
```

The content of the properties box can simply be copy-pasted in your own shader.

4.2 Setting the RenderType

You also need to modify the RenderType like this:

```
SubShader
{
    Tags { "RenderType"="MKGlow"}
}
```

4.3 Expanding the uniform variables

Add these uniform variables to your shader

```
CGPROGRAM
    sampler2D _MKGlowTex;
    half _MKGlowTexStrength;
    fixed4 _MKGlowTexColor;
ENDCG
```

4.4 Expanding the Fragment function

1. Create the glow texture with the MainTexture's texture-coordinates.
2. Now multiply the glow texture with the glow texture color.
3. Combine the created glow texture with the MainTexture

```
void surf (Input IN, inout SurfaceOutput o)
{
    fixed4 c = tex2D(_MainTex, IN.uv_MainTex) * _Color;
    fixed4 d = tex2D(_MKGlowTex, IN.uv_MainTex) * _MKGlowTexColor;
    c += (d * _MKGlowTexStrength);
    o.Albedo = c.rgb;
    o.Alpha = c.a;
}
```

4.5 the complete shader

```
Properties
{
    _Color ("Main Color", Color) = (1,1,1,1)
    _MainTex ("Base (RGB)", 2D) = "white" {}
    _MKGlowColor ("Glow Color", Color) = (1,1,1,1)
    _MKGlowPower ("Glow Power", Range(0.0,2.5)) = 1.0
    _MKGlowTex ("Glow Texture", 2D) = "black" {}
    _MKGlowTexColor ("Glow Texture Color", Color) = (1,1,1,1)
    _MKGlowTexStrength ("Glow Texture Strength ", Range(0.0,10.0)) = 1.0
}
SubShader
{
    Tags { "RenderType"="MKGlow"}
    LOD 200
    CGPROGRAM
        #pragma surface surf Lambert
        sampler2D _MainTex;
        fixed4 _Color;

        sampler2D _MKGlowTex;
        half _MKGlowTexStrength;
        fixed4 _MKGlowTexColor;

        struct Input
        {
            float2 uv_MainTex;
        };

        void surf (Input IN, inout SurfaceOutput o)
        {
          fixed4 c = tex2D(_MainTex, IN.uv_MainTex) * _Color;
           fixed4 d = tex2D(_MKGlowTex, IN.uv_MainTex) * _MKGlowTexColor;
           c += (d * _MKGlowTexStrength);
          o.Albedo = c.rgb;
          o.Alpha = c.a;
        }
    ENDCG
}
Fallback "Diffuse"
```

5.0 Scripting

All settings can be changed and adjusted during the runtime. To do so, include the library *“using MK.Glow;”* and initialize it with the class MKGlow.

The following variables are available:
– BlurIterations
– BlurSpread
– GlowIntensity
– GlowType
– GlowTint

6.0 Bug reporting / questions

Should there be any questions regarding the MK Glow shader or you discovered a bug, you can contact me at any time. Just send me an E-Mail: support@michaelkremmel.de and I will reply as soon as possible.

Are you missing a feature or do you have great ideas to improve the shader? Feel free to contact me.