MK Glow Free

Reference

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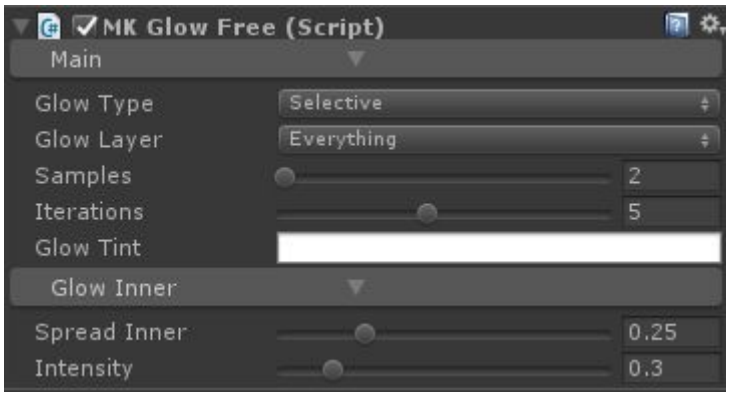
1.0 Setup

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

2.0 Global configuration



Adjustment	Description
Glow Type	Fullscreen: The whole screen glows. Selective: Only specific objects glow (needs to assign a MK/Glow/Selective shader).
Samples	This influences the downsampling for the blur. A higher sampling results in better performance, but also gains more flickering.
Iterations	Iterations for blur rendering. A Lower value results in better performance, but reduce the quality (5 should be fine in most cases).
Tint	Color tint for the glow
Spread Inner	Inner width of the glow effect
Inner Intensity	Intensity of the inner glow effect

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:

- GlowLayer (selective mode only)
- GlowType
- GlowTint
- Samples
- BlurIterations
- GlowIntensityInner
- BlurSpreadInner

6.0 Bug reporting / questions / feature requests

Should there be any questions regarding the MK Toon 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.