MK Glow

Reference

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Contents

1. Setup

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

2. Global configuration

Glow Type: Selective = to specifically bring objects to glow, Fullscreen = complete screen glows

Blur Spread: Width of the glow effect

Blur Iterations: Number of used blurs

Samples: Significantly influences the blurs quality

Glow Intensity: The global luminous intensity

Glow Tint : The glows coloration

Show Transparent Glow: Show glow through Transparent rendered objects

Show Cutout Glow: Show glow through Cutout rendered objects

3. Shader configuration

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

The MK Shader is only needed in Selective Mode! Simply assign the respective shader to the objects which shall receive the glow effect.

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 (Tip: To make the whole object glow simply use the MainTexture)

Glow Texture Color: The color of the glow texture

Glow Texture Strength: The texture's luminous intensity

4. Make your own shaders glow

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

4.1 *Expanding the p*roperties *b*ox

```
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

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

4.3 Expanding the CGPROGRAMM variables

```
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

```
Shader "MK/MKGlow/Normal/Diffuse"
{
	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. Scripting

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

The following commands are available:

- BlurIterations
- BlurSpread
- GlowIntensity
- GlowType
- ShowCutoutGlow
- ShowTransparentGlow
- ShowCutoutGlow
- GlowTint

6. Bug reporting / Questions

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