

# MK Toon

Reference



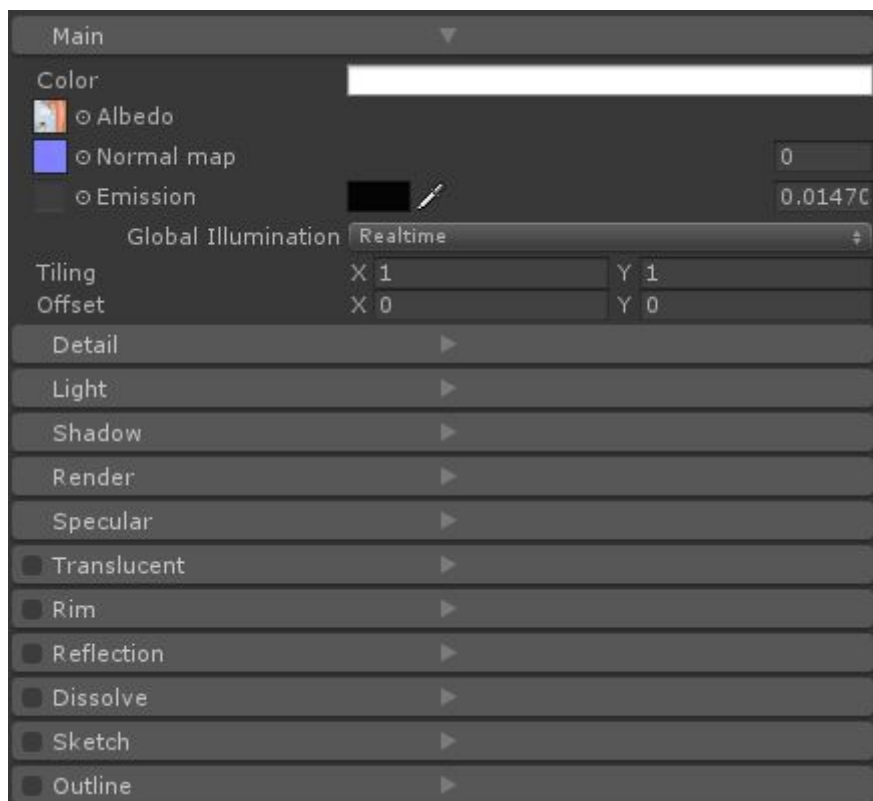
Created by Michael Kremmel  
[www.michaelkremmel.de](http://www.michaelkremmel.de)  
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# 1.0 Setup

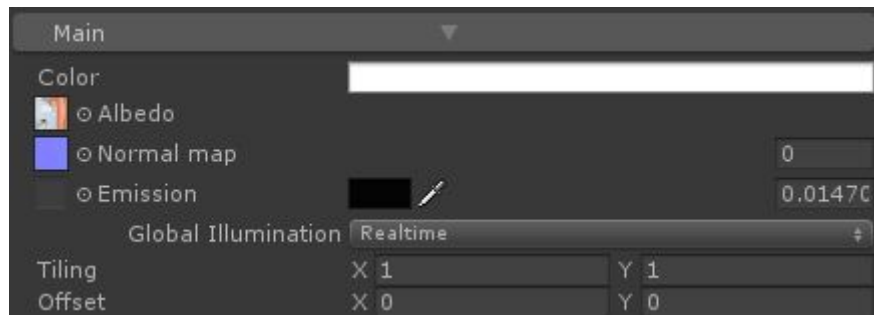
To set up MK Toon you just have to select a material and change the shader to “MK/Toon/Default”. That simply it is.

## 2.0 Configuration



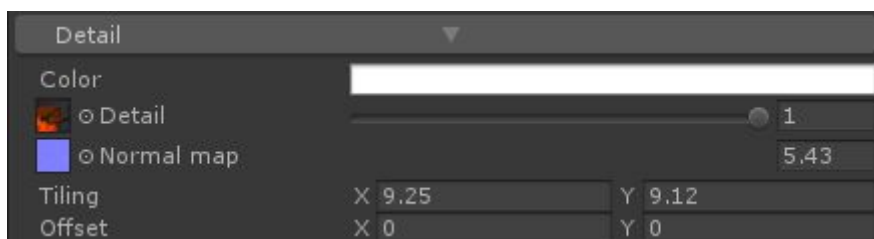
There are many parameters you can adjust to get the best out of your toon shading. To adjust the material click on one behavior to toggle the menu.

## 2.1 Main



Adjustment	Description
Color	The main tint of the albedo color.
Cutoff	Cutoff value for skipping fragments. (Cutout blending only)
Albedo (RGBA)	Main albedo texture. If no albedo texture is set the vertex colors will be used.
Normal map	Here you set up your normal map and the scale of it.
Emission	Simply set up your emission like in the unity standard shader. Optionally you set a mask texture.
Tiling & Offset	The tiling and offset will be used for the albedo, normal map and all other mask textures.

## 2.2 Detail



Adjustment	Description
Color	The tint of the detail albedo.
Detail	Detail albedo texture. The detail map will be multiplied on your albedo. You can also adjust the intensity of it.

Normal map	Here you can set up a detail normal map and the bumpscale of it.
tiling & offset	The tiling and offset influences only the detail maps

## 2.3 Light



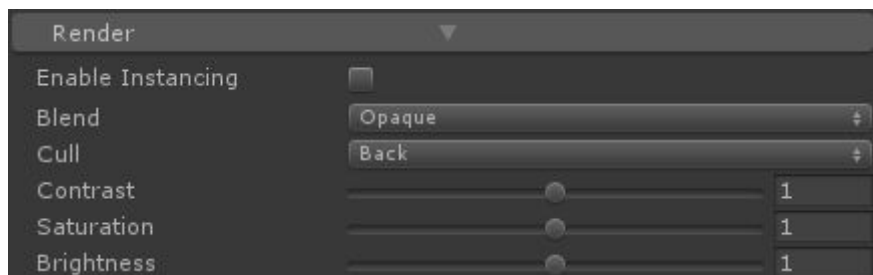
Adjustment	Description
Lightmodel	Set up your lighting model. You can choose between: <ul style="list-style-type: none"> <li>- Unlit</li> <li>- Lambert</li> <li>- Phong</li> <li>- Blinn Phong</li> <li>- Minneart</li> <li>- Oren Nayer</li> </ul>
Lighttype	Set up your lighttype. You can choose between: <ul style="list-style-type: none"> <li>- Default</li> <li>- Cel Shade Simple</li> <li>- Cel Shade Multi</li> <li>- Ramp</li> </ul>
Cuts	The amount of light cuts (Cel shade multi only).
Threshold	Influences the light attenuation. (Cel shaded only)
Roughness	Roughness value for the surface (Minneart and Oren Nayer only)
Light Smoothness	Influences the smoothness of the light calculation. (default and cel shaded only)
Occlusion	Apply an occlusion map to your material and the strength of it

## 2.4 Shadow



Adjustment	Description
Highlight Color	Color tint of lit areas
Shadow Color	Color tint of shadowed areas
Intensity	Intensity of the shadow.

## 2.5 Render



Adjustment	Description
Enable Instancing	Enabled and disable the instancing feature
Blend	You can choose between: <ul style="list-style-type: none"><li>- Opaque</li><li>- Transparent</li><li>- Cutout</li></ul>
Cull	This allows you the face culling. You can choose between: <ul style="list-style-type: none"><li>- Back</li><li>- Front</li><li>- Off</li></ul>
Contrast	Adjust the contrast of the output color
Saturation	Controls the saturation of the output color
Brightness	Controls the brightness of the output color

## 2.6 Specular

This option is only available with “Phong” or “Blinn Phong” light model.



Adjustment	Description
Color	The color tint of the specular.
Shininess	Influences the size of the specular
Intensity	Controls the intensity of the specular. Optionally you can set a mask texture. R is used for the specular intensity, G is used for the gloss.

## 2.7 Translucent

This option is only available with “Blinn Phong” light model.



Adjustment	Description
Color	The color tint of the translucent light.
Shininess	Influences the size of the translucent light
Intensity	Controls the intensity of the specular. Optionally you can set a mask texture. R is used for the translucent intensity, G is used for the gloss.

## 2.8 Rim

This option is usable for all lighting models except “Unlit”.



Adjustment	Description
Color	Color tint of the rim effect
Size	This increase or decrease the amount of rim on the surface
Intensity	This controls the intensity of the rim effect
Rim smoothness	Controls the smoothness of the rim effect.

## 2.9 Reflection

Reflection is usable for all lighting models except “Unlit”.

**Note:** For the basic setup to make the surface reflective is to add a Reflection probe component to your object. If no reflection probe is used the ambient source will be used for reflection. Don't forget to bake your lightmaps.



Adjustment	Description
Color	Color tint of the reflection
Intensity	Controls the intensity of the reflection. Optionally you can set a mask texture. R is used for the reflection intensity.
Reflect smoothness	Controls the smoothness of the reflection.

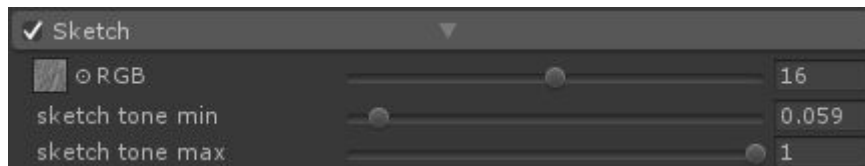


## 2.10 Dissolve



Adjustment	Description
Dissolve color	Color tint of the dissolve
Dissolve	Dissolve map.
Ramp	To stylize your dissolve you can set up a ramp map (Require a dissolve map).

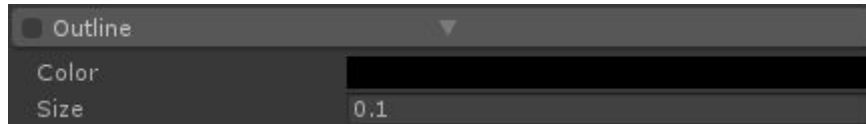
## 2.11 Sketch



Adjustment	Description
Sketch (RGB)	Sketch map that is required for that feature. Controls also the scaling of the sketch map.
Tone min	Influences the intensity of the sketch on dark areas
Tone max	Influences the intensity of the sketch on bright areas

## 2.12 Outline

To get a perfect looking outline (for example on a cube) it is recommend to use smoothed out normals on your 3D model.



Adjustment	Description
Color	Color of the outline
Size	Size of the outline.

## 3.0 Scripting

To make your variables change during runtime there are a few helper functions to make it easy to change them.

To use these function you need to include the helper class by *“using MK.Toon”*. All functions are stored in the *“MKToonMaterialHelper”* class.

## 4.0 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](mailto: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.