



# HONEY SHIBARI HSLIGHTCAP LITE

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# INTRODUCTION



HS Lightcap shader uses a custom approach to matcap, the result is a powerful and flexible camera dependent baked illumination. Lightcap is a term used to define matcaps applied to light, not whole material simulation. Lightcaps blend well with underlying texture.

There are cases where complex light effects are needed, 1:1 precision is not needed and performance is important. HSLightcap is designed with this in mind.

Camera dependence: the light will always follow the camera, this is perfect for cartoon style, cutscenes, 3d platformers, isometric games, mobile games.

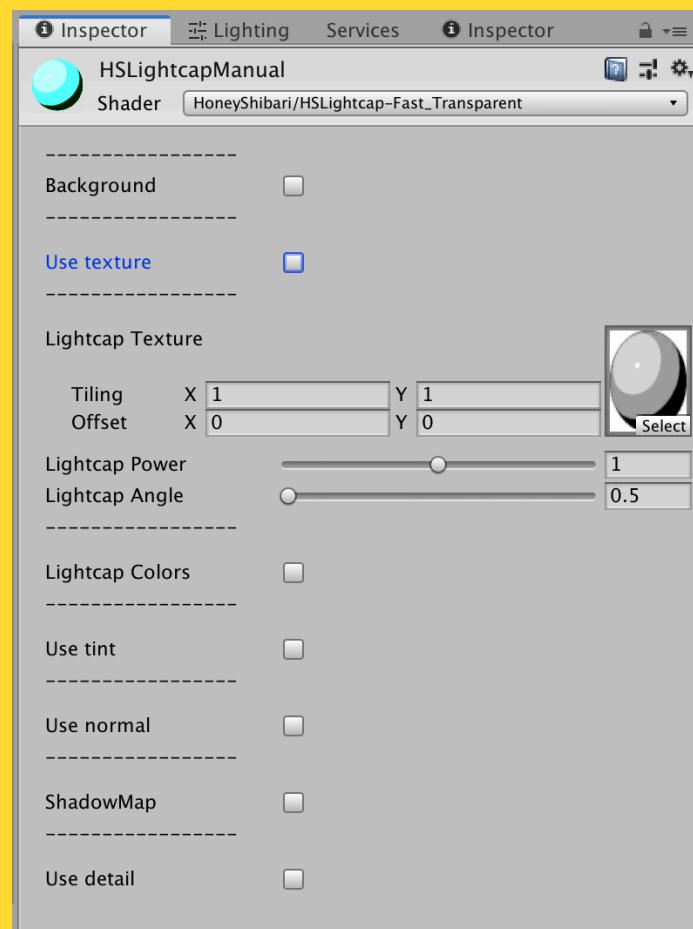
Background objects, 3d objects in point and click games, isometric games, 3d side scrolling games, puzzle games will all benefit from the low cost in cpu, low cost in gpu and the high quality look of this shader.

## THE INTERFACE

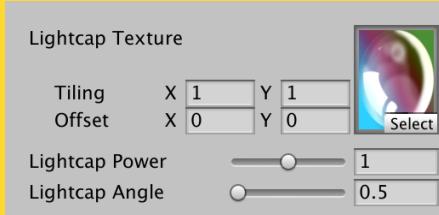
Each function of the shader can be enabled or disabled, enabling it will open the necessary sub menus.

**The highest performances are achieved if just lightcap, texture are used.**

- Background: for static mapping.
- Use texture: enables albedo.
- Lightcap textures: set the lightcap to use, the power and the rotation - tiling and offset are disabled.
- Lightcap Colors: replace nightcap colors according to brightness.
- Tint: add a tint to the albedo or set the base tint of the mesh if no texture is used.
- Use normal: enables normal maps.
- ShadowMap or Shadows: enables receiving shadow maps or real time shadows.
- Use detail: enables an extra tillable texture overlay for additional albedo details.



# LIGHTCAP



To enable the lightcap, select a **Lightcap texture** to use. Each lightcap can produce strikingly different effects: from realistic light to stylized.



**Angle** rotates the matcap to create the illusion of lights from different angles.

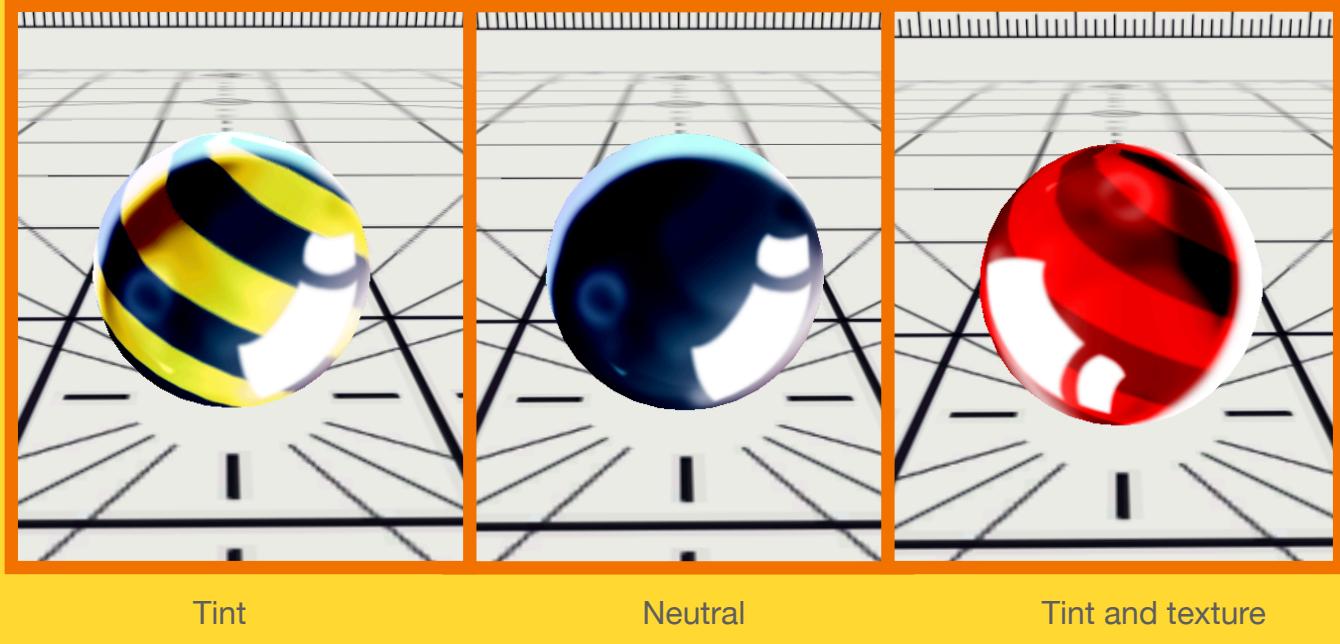
Angles are in degrees from 0 to 360.

Default is 0.

**Power** reduces or strengthen the lightcap effect. Default is 1.



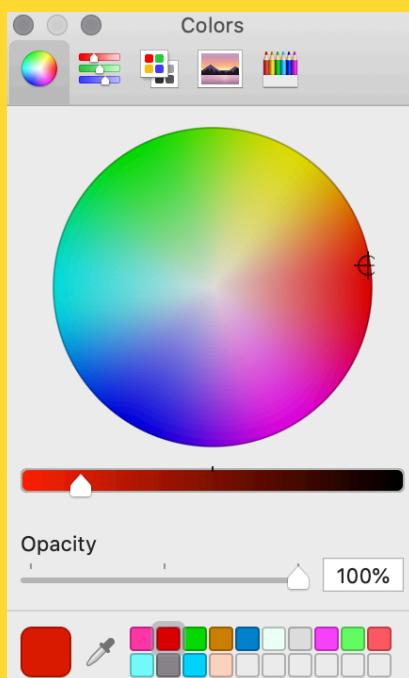
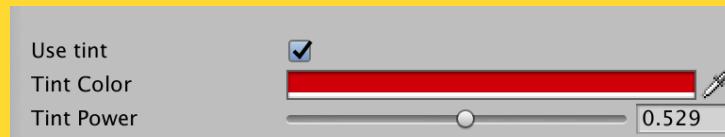
## TINT - TEXTURE - premium only



Tint

Neutral

Tint and texture



If texture is disabled, the object is colored according to the TINT box.

If texture is enabled and tint is disabled, the mesh uses a texture as a base.

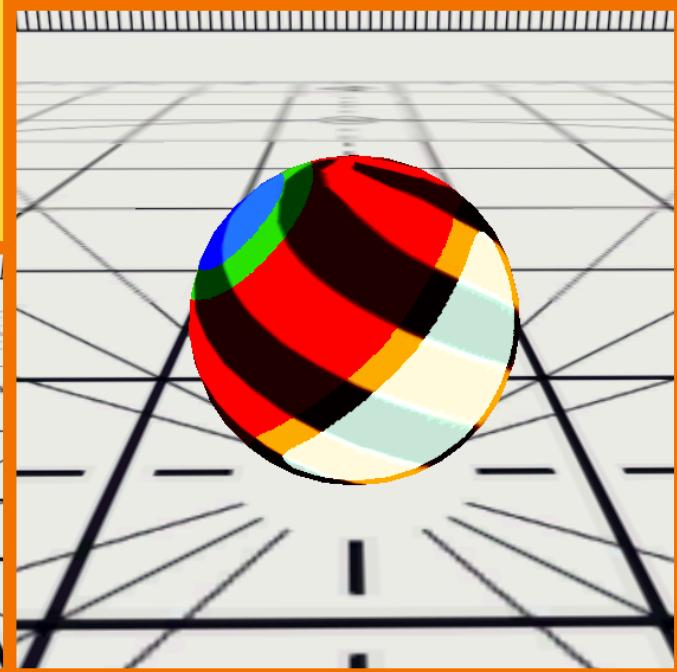
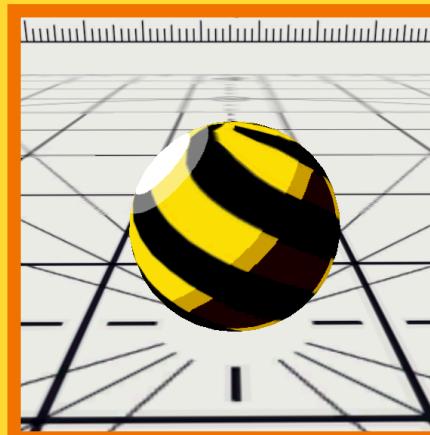
If texture is enabled and TINT is enabled, the texture and the tint color mix.

## COLORS AND DETAILS - premium only



### Lightcap Colors

Replaces various brightness values of the matcap with different colors.  
If a colored matcap is used, the shader ignores the saturation and uses only the brightness.



### Lightcap Colors

Black Tones

Dark Tones

Mid Tones

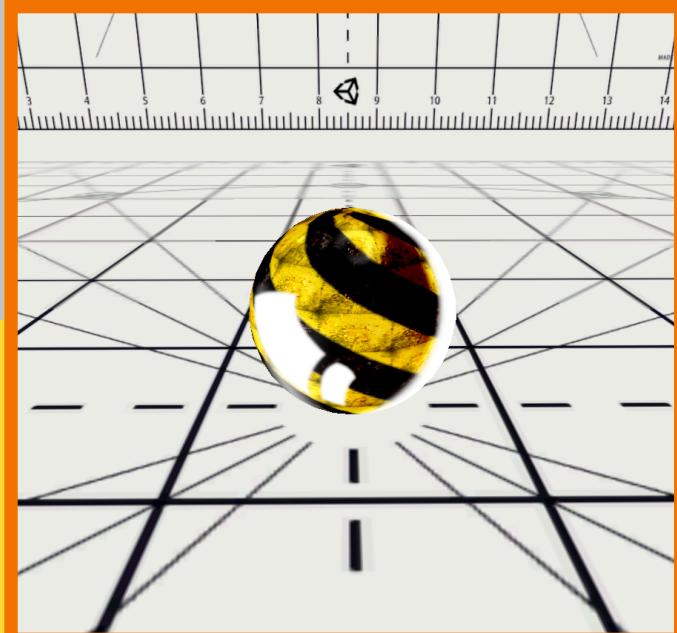
Bright Tones

White Tones

Tones Blend

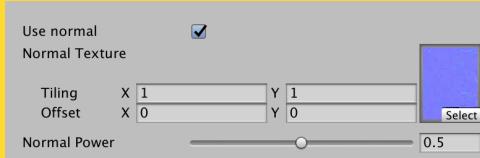


Use detail: enables an extra tillable texture overlay for additional albedo details.

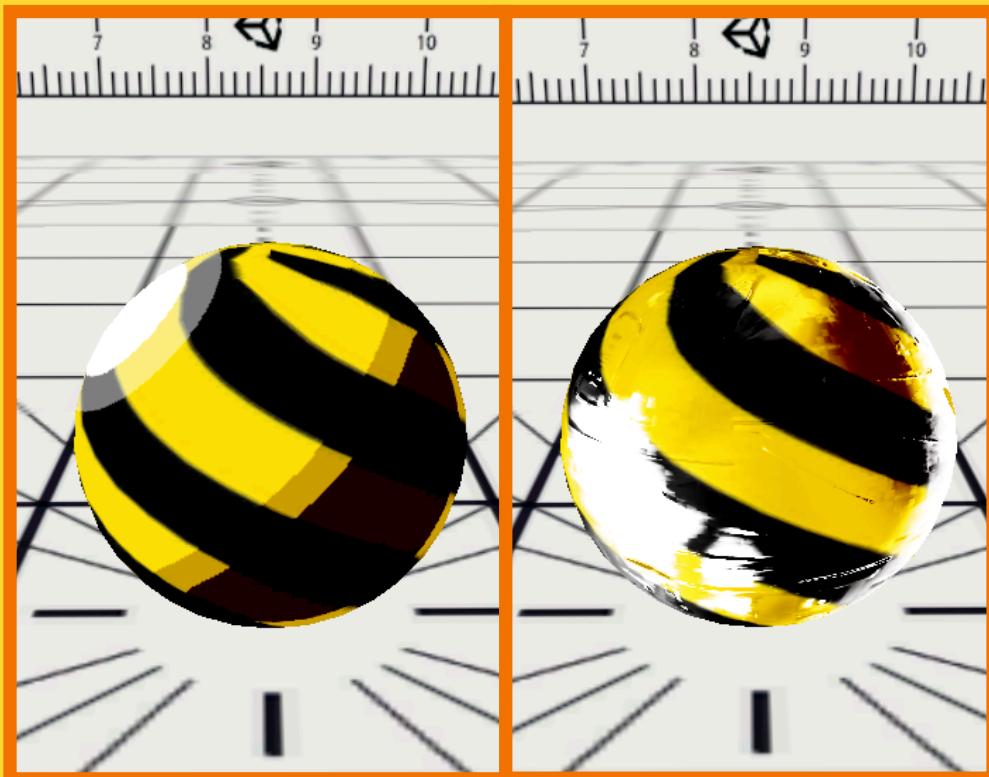




## NORMAL MAPS - premium only

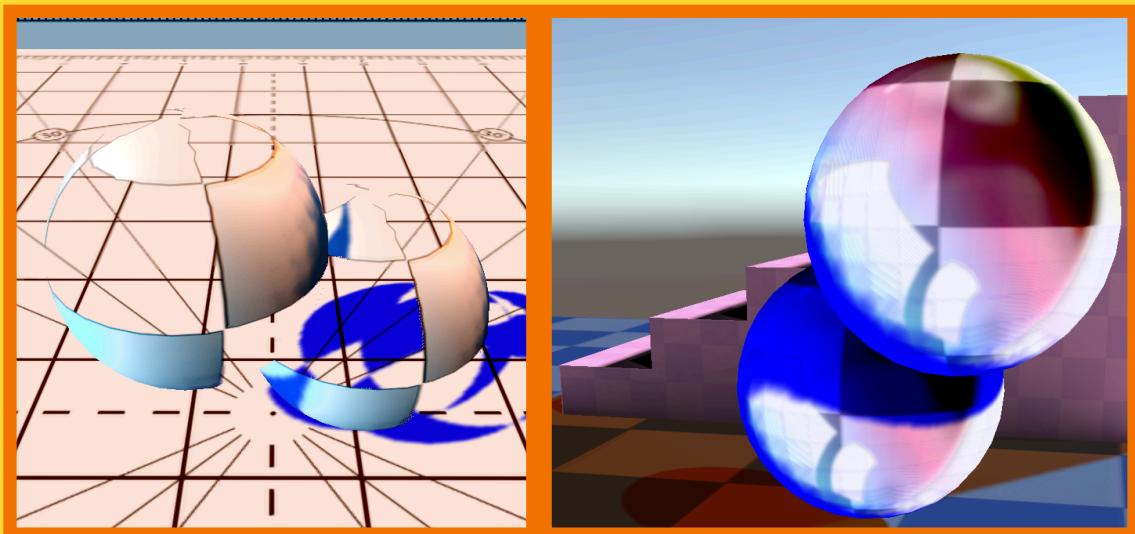
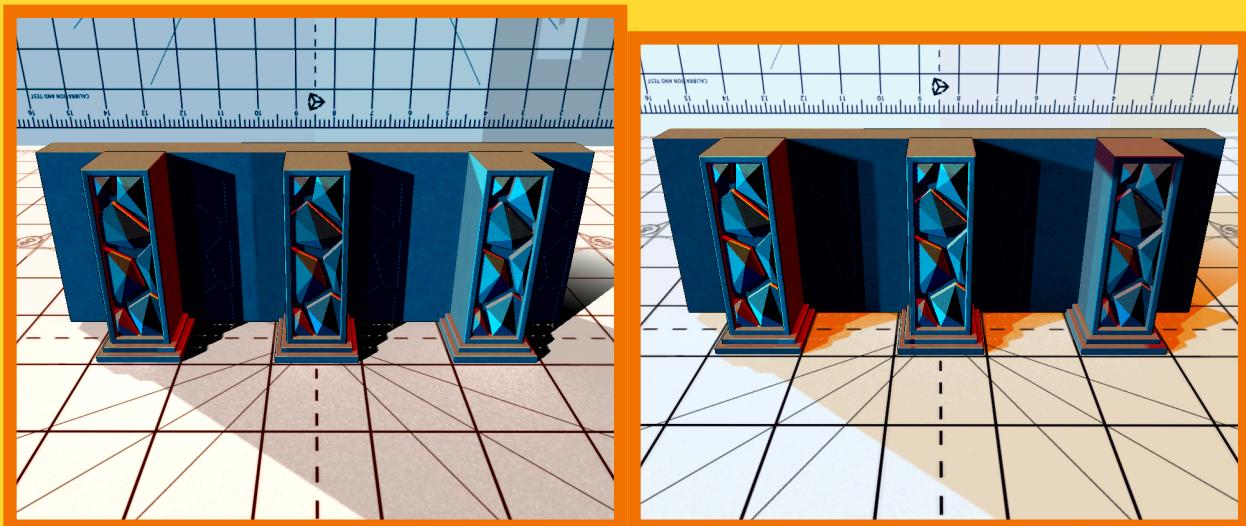


Enabling Use Normal will dynamically deform the lightcap texture to simulate the reaction of light to the normal map.  
The suggested power value is 0.5.



## SHADOWS - premium only

Shadows enable receiving shadow maps and receiving realtime shadows.  
Realtime shadows are available in the Lightcap Standard shaders.  
Lightmap are available in all Lightcap shaders.  
Realtime shadows are available to directional only.  
The shadow color is adjustable for both type of shadows.  
Shadow supports alpha and projects accordingly.



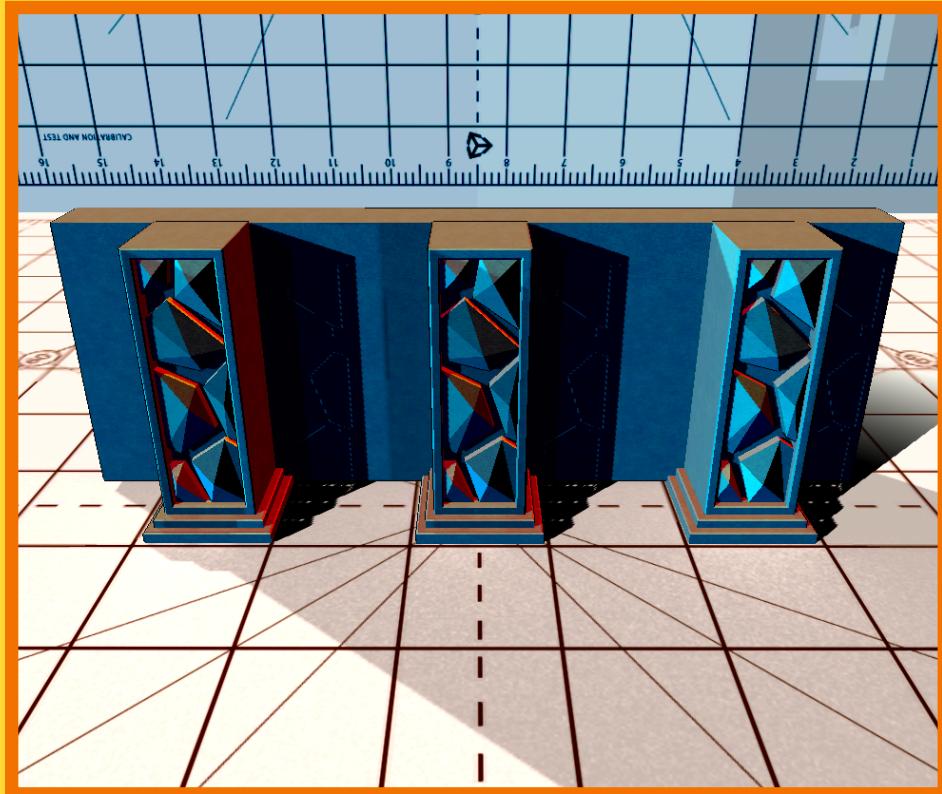
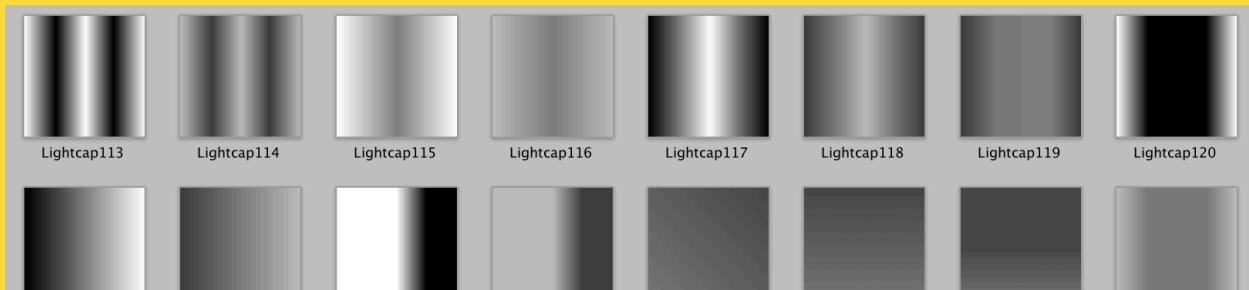
## BACKGROUND MODE - premium only



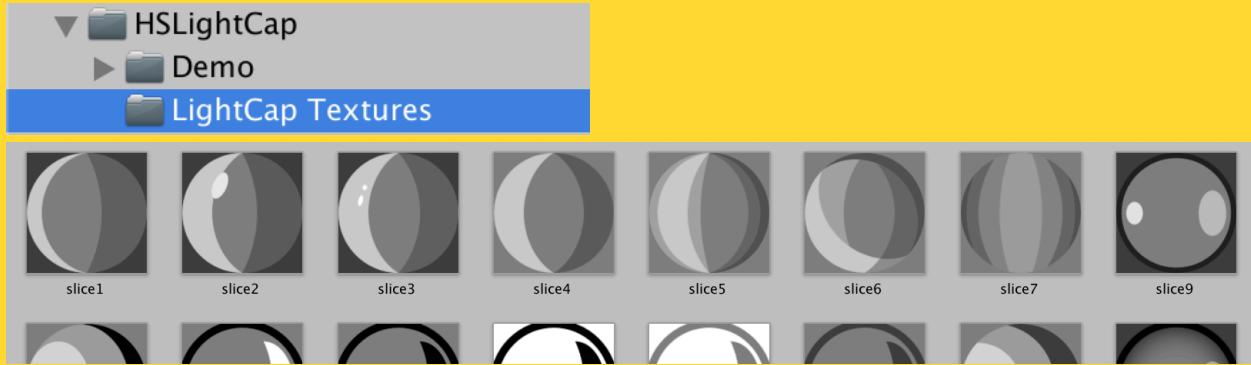
Background mode will stop the matcap from following the camera, this will enable a mirrored directional light like effect. It can be useful in some instances.

Backgrounds can be rendered also without the background mode, to maintain a reactive effect.

Square gradient lightcaps usually deliver the best results when using background mode.



# CUSTOM LIGHTCAPS

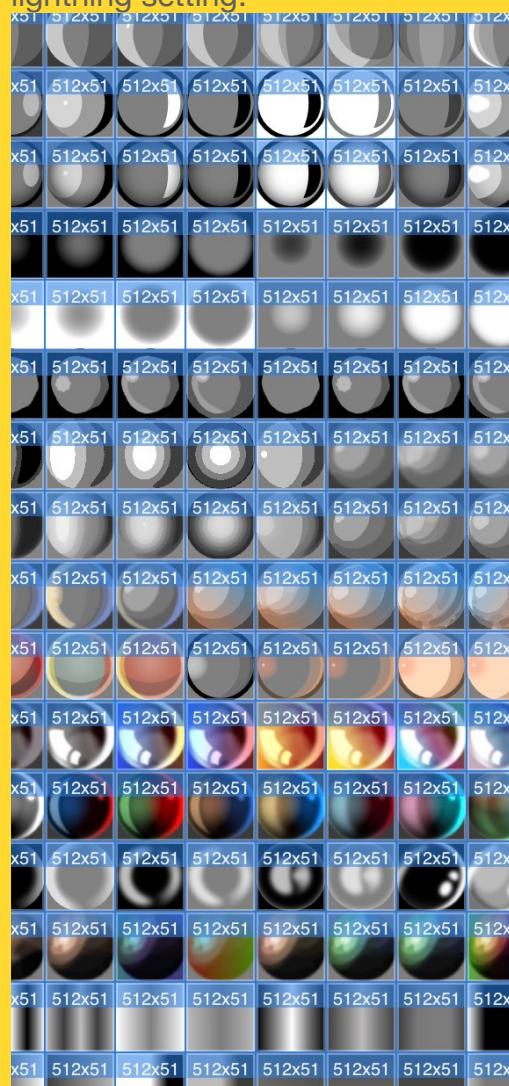


Creating custom matcaps is easy:

Create a square image file in your favorite software.

Draw a edge to edge circle.

Paint on the circle imagining it as a lit sphere of your material of choice, in the desired lightning setting.



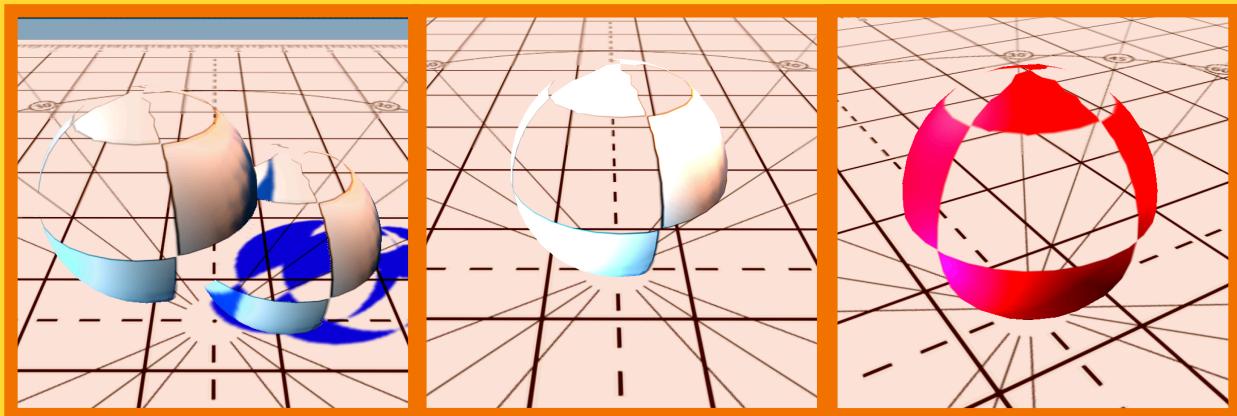
## TRANSPARENCY - fully featured premium only



HoneyShibari

- HSLightcap\_Standard
- HSLightcap\_Standard-Outline
- HSLightcap\_Transparent
- HSLightcap\_Fast
- HSLightcap\_Fast\_Outline
- HSLightcap\_Fast\_Transparent

To enable transparency use the proper Lightcap shader.  
Transparent textures project shadows accordingly to transparency.  
Tint affects the non transparent areas.



If texture is disabled, the opacity in the tint sets the overall opacity.

ALPHA TINT

Lightcap Colors

Use tint  Tint Color  Tint Power

Use normal

Shadows

Opacity  13%

Use detail

## OUTLINE - premium only



Lightcap offers a variety of different shaders according to your needs.

Fast shaders are the most performative, they support light map but do not receive real time shadow.

Standard and Transparent support receiving realtime shadow.  
Outline enables colored outline.

