

# LUXIUS

Manual

## LuxRender via Luxus

by Spheric Labs

for

**CARRARA**

8 and 8.5



In corporation with  
Spheric Labs

2016, April, 26

# - Table of Contents -

<b>Welcome</b> .....	<b>5</b>
<b>Download and Install</b> .....	<b>6</b>
Lexus for Carrara.....	6
Download.....	6
Installation.....	7
LuxRender.....	9
Download.....	9
Installation.....	9
<b>Lexus in Carrara</b> .....	<b>10</b>
Setting up Luxus.....	10
Carrara's Assemble Room.....	11
Lux Lights.....	12
Lux Infinite.....	12
Lux Projection.....	12
Lux Sky2.....	13
Lux Sun and Lux Sun Sky2.....	13
Carrara's Texture Room.....	14
Lux Surface.....	14
Lux Materials.....	16
Lux Area Light.....	17
Lux CarPaint.....	18
Lux Cloth.....	19
Lux Glass.....	20
Lux Glass2.....	21
Lux Glossy.....	22
Lux Glossy Coating.....	24
Lux Glossy Translucent.....	25
Lux Layered.....	26
Lux Matte.....	27
Lux Matte Translucent.....	28
Lux Metal2.....	29
Lux Mirror.....	30
Lux Mix.....	31

Lux Null.....	32
Lux Rough Glass.....	33
Lux Scatter.....	34
Lux Velvet.....	35
<b>Lux Volumes.....</b>	<b>36</b>
Lux Clear.....	37
Lux Homogenous.....	38
<b>Lux Textures.....</b>	<b>39</b>
Lux Add.....	40
Lux Bilerp.....	40
Lux Blackbody.....	41
Lux Brick.....	41
Lux Checkerboard.....	42
Lux Color Depth.....	42
Lux Constant Color.....	43
Lux Constant Float.....	43
Lux Dots.....	44
Lux Fbm.....	44
Lux FresnelColor.....	45
Lux FresnelName.....	45
Lux Gaussian.....	46
Lux Windy.....	46
Lux Mix.....	47
Lux Scale.....	47
Lux Substract.....	48
Lux Wrinkled.....	48
Lux Marble.....	49
<b>Carrara´s Render Room.....</b>	<b>50</b>
General Settings.....	51
Film Options.....	52
Depth of Field.....	52
Sampler Options.....	52
Surface Integrators Options.....	53
Filter Options.....	53
<b>LuxRender.....</b>	<b>54</b>
<b>LuxCore.....</b>	<b>55</b>

<b>Tips &amp; Tricks</b> .....	<b>56</b>
<b>Release Notes</b> .....	<b>58</b>
Official Releases.....	58
Beta Releases.....	59

# WELCOME

!!! THANKS TO SPHERIC LABS FOR HIS WORK !!!

>>> This manual based on the development / documentation blog, which you find here <<<

→ <http://carraracafe.com/luxus-the-luxrender-plugin-for-carrara-developmentdocumentation-blog/>

## Luxus the Luxrender plugin for Carrara - Development/documentation blog 20130601

Posted on April 19, 2013 in Articles, Plugins

The new Luxus the Luxrender plugin for Carrara is being developed by Spheric Labs at a very rapid rate. This blog is supposed to collect the most important information in one place.

The latest support additions are manual changes, free shaders and a FAQ, thanks to rk66, 3DAGE and Jay NOLA. Luxus has been released and can now be bought from DAZ3D.

### 1. Downloads:

- Official release of Luxus 1.0 for Win/Mac 32/64bit is now available at → <http://www.daz3d.com/luxus-for-carrara>
- Luxrender standalone → [http://www.luxrender.net/en\\_GB/standalone](http://www.luxrender.net/en_GB/standalone)

### 2. Release list/Changes:

- Log → <http://carraracafe.com/forum-3/?cid=1&show=59>

### 3. Documentations:

- Official Manual by Spheric Labs → [http://docs.daz3d.com/doku.php/public/read\\_me/index/16380/start](http://docs.daz3d.com/doku.php/public/read_me/index/16380/start)
- FAQ (scroll down to Spheric Labs) → <http://www.daz3d.com/forums/viewthread/15970/P105/#290982>
- Unofficial Manual by rk66 → <http://carraracafe.com/forum-3/?cid=1&show=59>
- Official Luxrender Manual → [http://www.luxrender.net/wiki/Main\\_Page](http://www.luxrender.net/wiki/Main_Page)

### 4. Other related downloads:

- Sample Shaders by Spheric Labs → <http://sphericlabs.com/carrara/LuxSampleShaders.zip>
- M4/V4 Lux Base Shaders by 3DAGE → <http://carraracafe.com/forum-3/?cid=25&show=217>
- Luxus for Carrara Resource Pack by PhilW → <http://www.daz3d.com/luxus-for-carrara-resource-pack>

### 5. Forum threads:

- CarraraCafe → <http://carraracafe.com/forum-3/#cid=1,tid=30>
- Daz3D → <http://www.daz3d.com/forums/viewthread/20383/>
- Daz3D → <http://www.daz3d.com/forums/viewthread/22779/>

# DOWNLOAD AND INSTALL

## Luxus for Carrara

### DOWNLOAD

Luxus for Carrara (8.1 and 8.5, Win and Mac, 32 and 64 bit) in the DAZ Store

→ <http://www.daz3d.com/luxus-for-carrara>



**Luxus for Carrara**  
Shop more by: [Spheric Labs](#)

SHARE ✉

WISHLIST

**\$29.98**

**Add to Cart** 🛒

**Description** sku: 16380

Luxus enables you to create photo realistic 3D rendering using LuxRender. Luxus tightly integrates LuxRender materials and textures as shaders in Carrara.

LuxRender is an unbiased rendering engine based on what 3D lighting does in real life. The images that are generated are defined by a simulation of the laws of physics.

LuxRender is available for free from [LuxRender.net](http://LuxRender.net)

### Official Manual

In the DAZ 3D Documentation Center you find the official manual by Spheric Labs

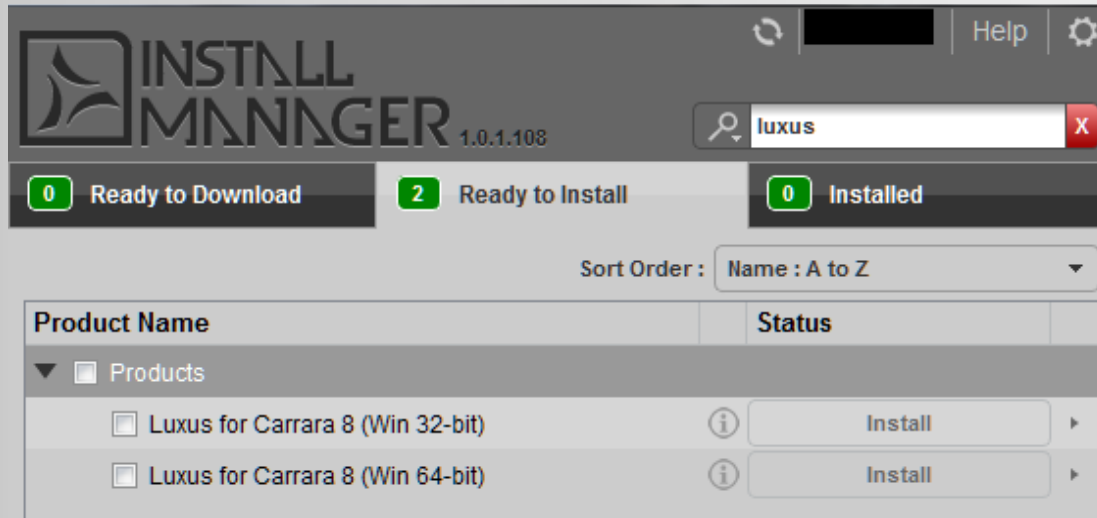
→ [http://docs.daz3d.com/doku.php/public/read\\_me/index/16380/start](http://docs.daz3d.com/doku.php/public/read_me/index/16380/start)



## INSTALLATION

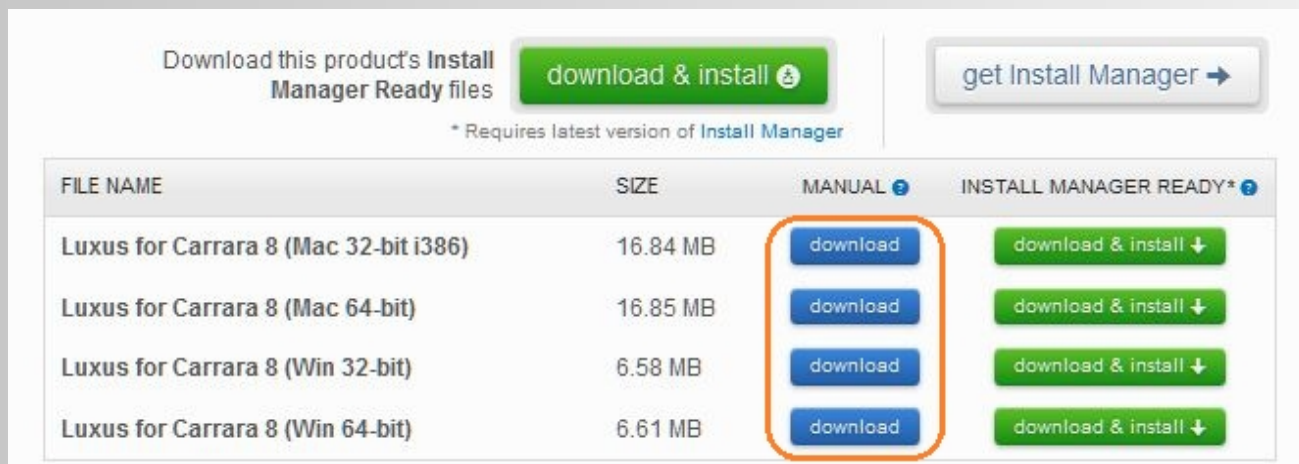
### Installation via DAZ Install Manager

- Go to the „Ready to Download“ tab, select Luxus (32 or 64 bit) and then go to the „Ready to Install“ tab. Click here „Install“.

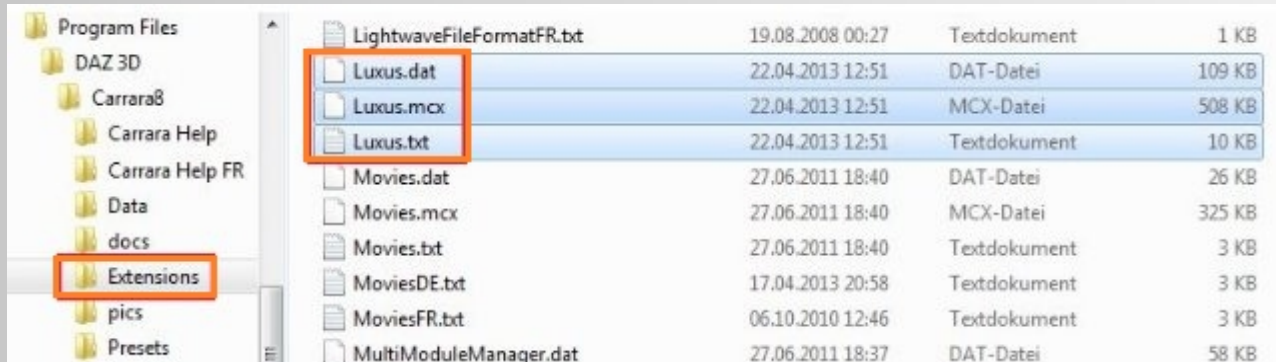


### Manual Installation

- Got to your Account > Product Library, select the corresponding Luxus version and then click „download“.
- After the download, install the file, follow the instructions.



- You find the three files in the "...DAZ 3D > Carrara 8 > Extension" folder, within your Carrara main folder, see picture please.



Free Sample Shaders by Spheric Labs for Carrara 8.1 and 8.5

- Download the free pack → <http://sphericlabs.com/carrara/LuxSampleShaders.zip>

- Unzip the files in the "...DAZ 3D > Carrara 8 > Presets > Shaders" folder. You find a new folder named Lux Sample Shaders.

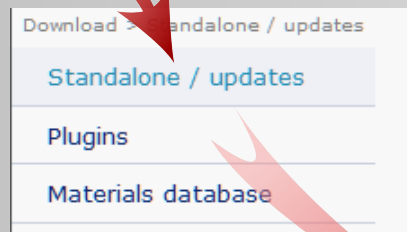











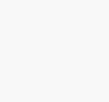






# LuxRender

## DOWNLOAD

LuxRender Standalone (Win and Mac, 32 and 64 bit)

→ [http://www.luxrender.net/en\\_GB/standalone](http://www.luxrender.net/en_GB/standalone)



Latest Stable Release (v1.3.1 04/11/2013)				
Version	 Windows		 Mac OSX	 Linux
	Archive	Installer		
OpenCL	 64	 64		 64
	 32	 32		 32
No OpenCL	 64	 64		 64
	 32	 32		 32

## INSTALLATION

- Install the LuxRender application in the directory your choice, not in the Carrara main folder.
- For instance in Windows, C:\Program Files\LuxRender.

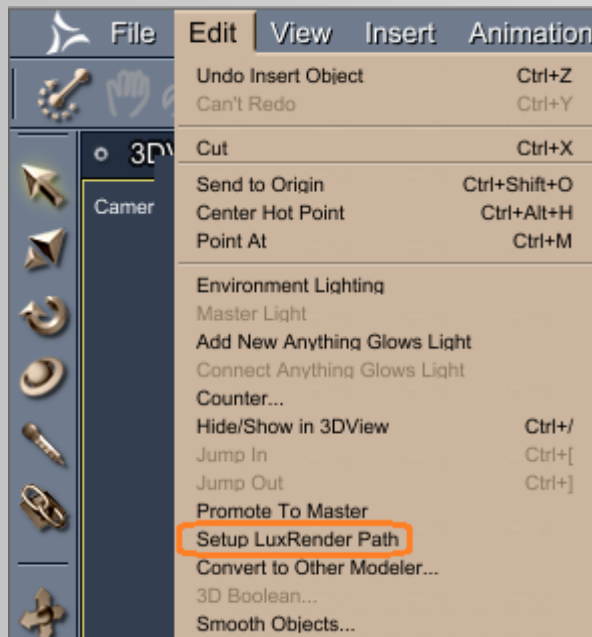
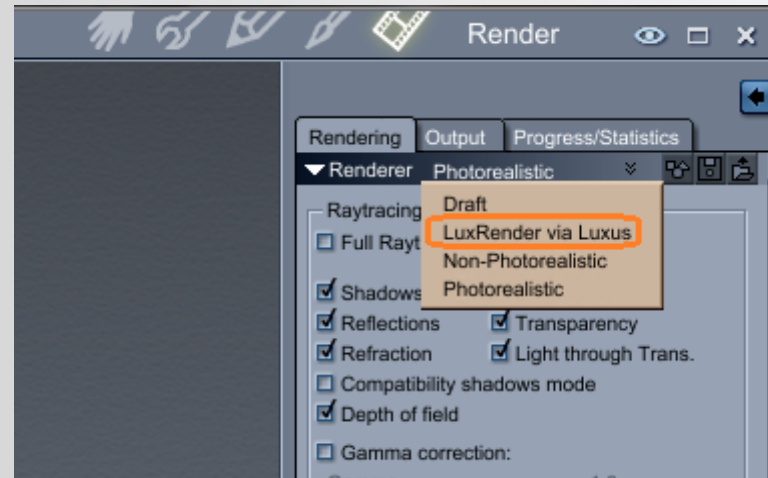
# LUXUS IN CARRARA

## Setting up Luxus

Set path to the LuxRender:

First, start Carrara.

Luxus must be the active renderer. Go to the Render Room and select „LuxRender via Luxus” from the pop-up menu.



Go back to the Assemble Room, then select „*Setup LuxRender Path*” from the edit menu.

A new windows appears. Now you specify the path to the LuxRender folder, not the executable file.

That´s all!. Now you can render with LuxRender.

# Carrara's Assemble Room

The Lux lights in the Assemble Room.



## INPUTS:

- Lux Infinite
- Lux Projection
- Lux Sky2
- Lux Sun
- Lux SunSky2

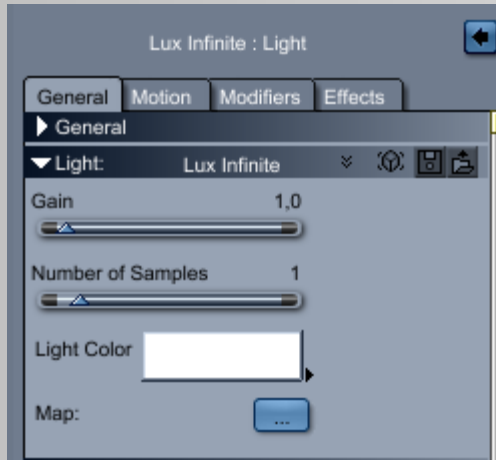
You can find this lights in the Insert menu.



## LUX LIGHTS

There is in Carrara five Lux lights for LuxRender.

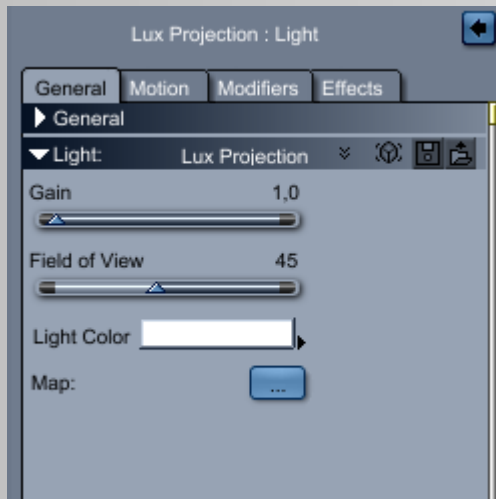
### LUX INFINITE



#### INPUTS:

- Gain
- Number of Samples
- Light Color
- Map: Specify the path to the \*.hdr or \*.exr file.

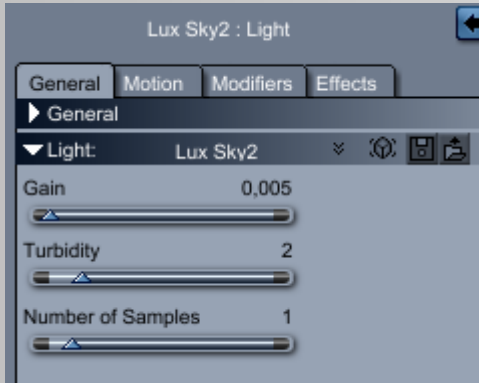
### LUX PROJECTION



#### INPUTS:

- Gain
- Field of View
- Light Color
- Map: Specify the path to the \*.hdr or \*.exr file.

## Lux Sky2

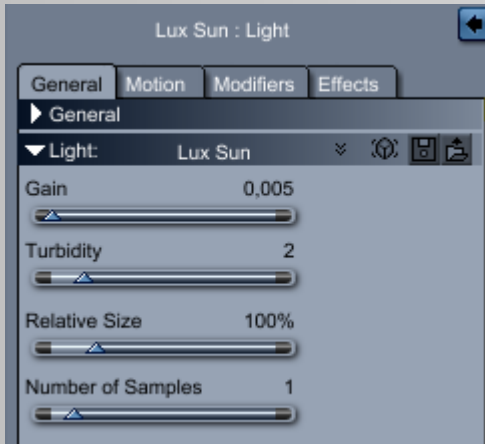


### INPUTS:

- Gain
- Turbidity
- Number of Samples

## LUX SUN AND LUX SUN SKY2

Lux Sun and Lux Sun Sky2 have the same settings.



### INPUTS:

- Gain
- Turbidity
- Relative Size
- Number of Samples

Informations about the lighting, see also Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Lighting](http://www.luxrender.net/wiki/LuxRender_Lighting)

And here the LuxRender filespec, it has some text descriptions of the parameters

→ [http://www.luxrender.net/wiki/Scene\\_file\\_format\\_1.0#Specific\\_Light\\_Parameters](http://www.luxrender.net/wiki/Scene_file_format_1.0#Specific_Light_Parameters)

# Carrara's Texture Room

See also DAZ3D 3D

→ <http://www.daz3d.com/forums/viewthread/20383/P75/#306480>

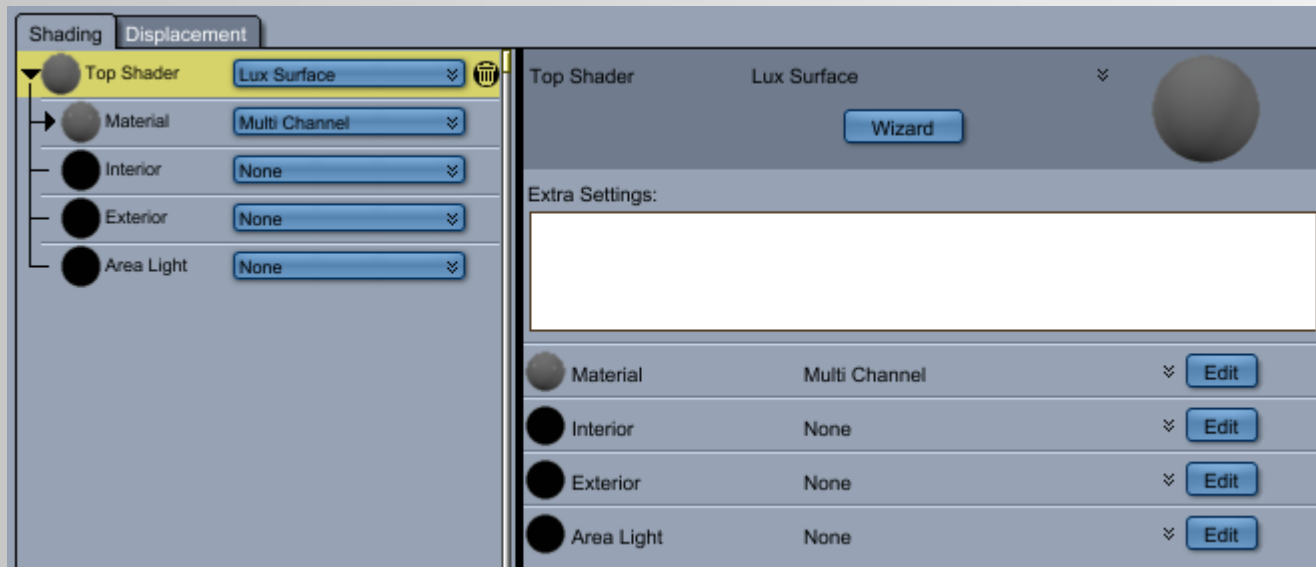
→ <http://www.daz3d.com/forums/viewthread/20383/P75/#306830>

## LUX SURFACE

**Spheric Labs:** This is the top most surface. Its purpose is to provide a place for the various inputs that can affect a LuxRender mesh.

### INPUTS:

- Material
- Interior
- Exterior
- Area Light
- Extra Settings





## Material

**Spheric Labs:** Is by far the most commonly used input. Stick a Lux Material into this input. If the material is entirely opaque, then Interior and Exterior wont really matter.

For an idea of what each of the different type of materials are capable of see

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials](http://www.luxrender.net/wiki/LuxRender_Materials)

## Interior

**Spheric Labs:** Defines what happens to the light as it travels inside the mesh. This can happen if the material is something that is transparent or translucent to some degree. The most common use here is glass. Although you can specify glass in the material, the better approach is to use glass2 (newer) and then specify the volume on the interior.

At this time there are only two recommend types for volumes

→ [http://www.luxrender.net/wiki/LuxRender\\_Volumes](http://www.luxrender.net/wiki/LuxRender_Volumes)

For clear glass, set your Material above to Lux Glass2, and set your Interior to Lux Clear, and then set your index of refraction of your Interior to common glass. Luxus supports Carrara's way of settings index of refraction, so this should help. This will cause the light as it passes through the glass to be affected as real glass would.

## Exterior

**Spheric Labs:** Is used when you have a "volume inside a volume" or a "volume partially inside a volume". I have yet to use it, but its there.

## Area Light

**Spheric Labs:** Is a slot for the Lux AreaLight material. It causes your surface to emit light. Any mesh is capable of become a light. Power is in watts, but the gain of the light can be adjusted during render in LuxRender GUI.

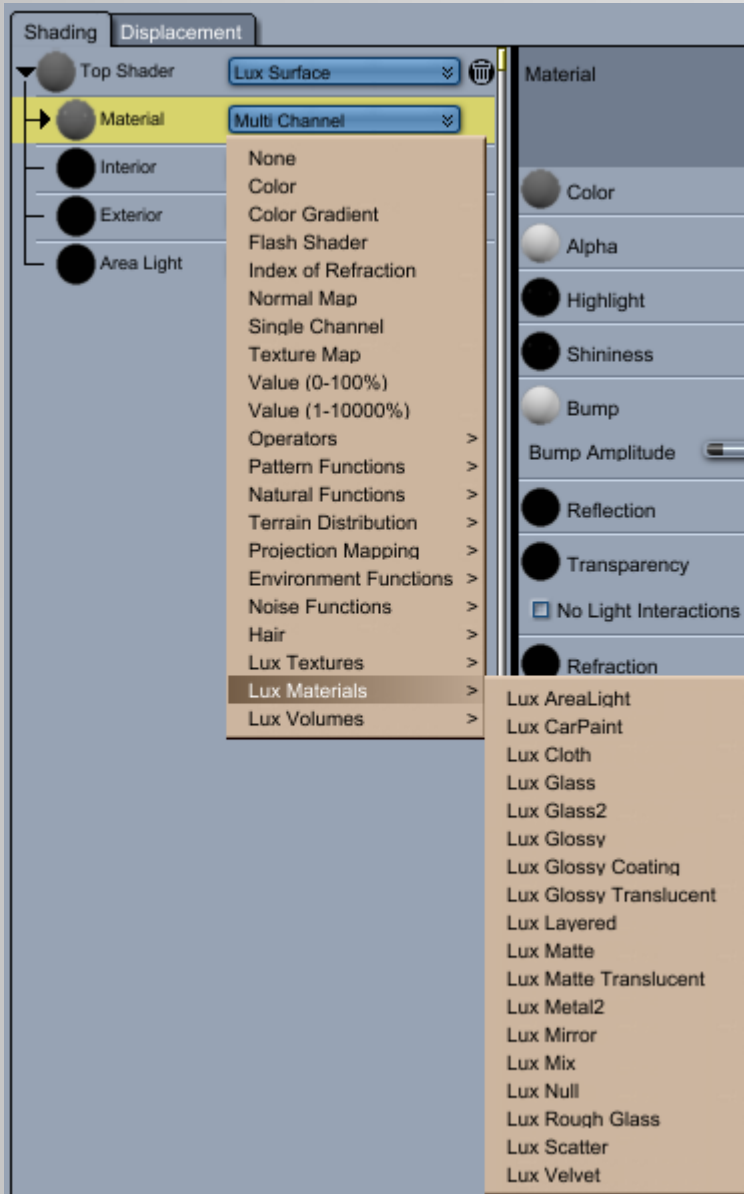
## Extra Settings

Here you can...

# LUX MATERIALS

See also Lux Wiki

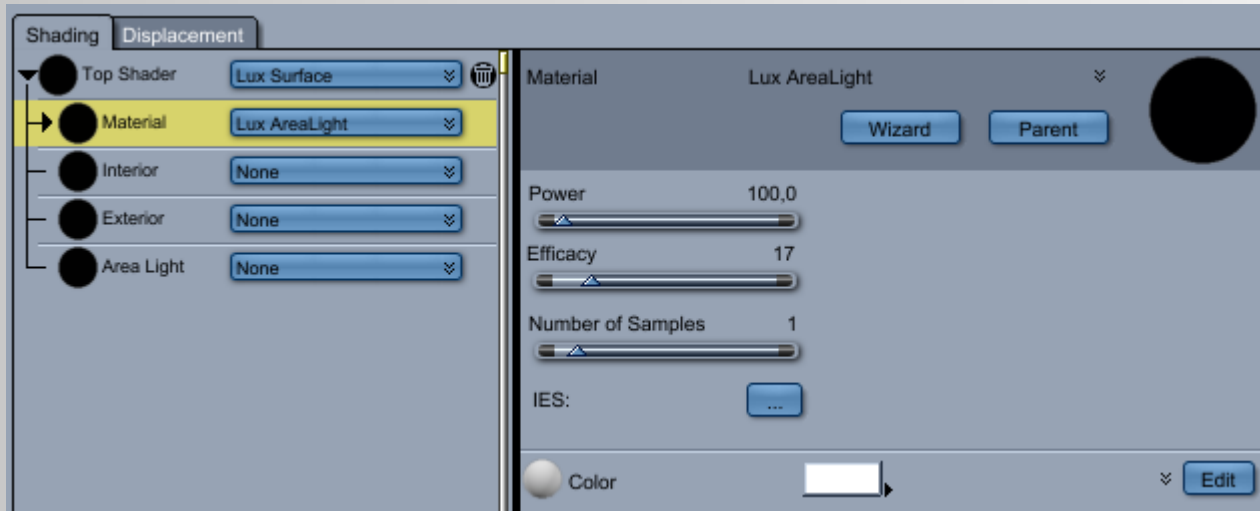
→ [http://www.luxrender.net/wiki/LuxRender\\_Materials](http://www.luxrender.net/wiki/LuxRender_Materials)



## INPUTS:

- Lux Area Light
- Lux Carpaint
- Lux Cloth
- Lux Glass
- Lux Glass2
- Lux Glossy
- Lux Glossy Coating
- Lux Glossy Translucent
- Lux Layered
- Lux Matte
- Lux Matte Translucent
- Lux Metal2
- Lux Mirror
- Lux Mix
- Lux Null
- Lux Rough Glass
- Lux Scatter
- Lux Velvet

## LUX AREA LIGHT



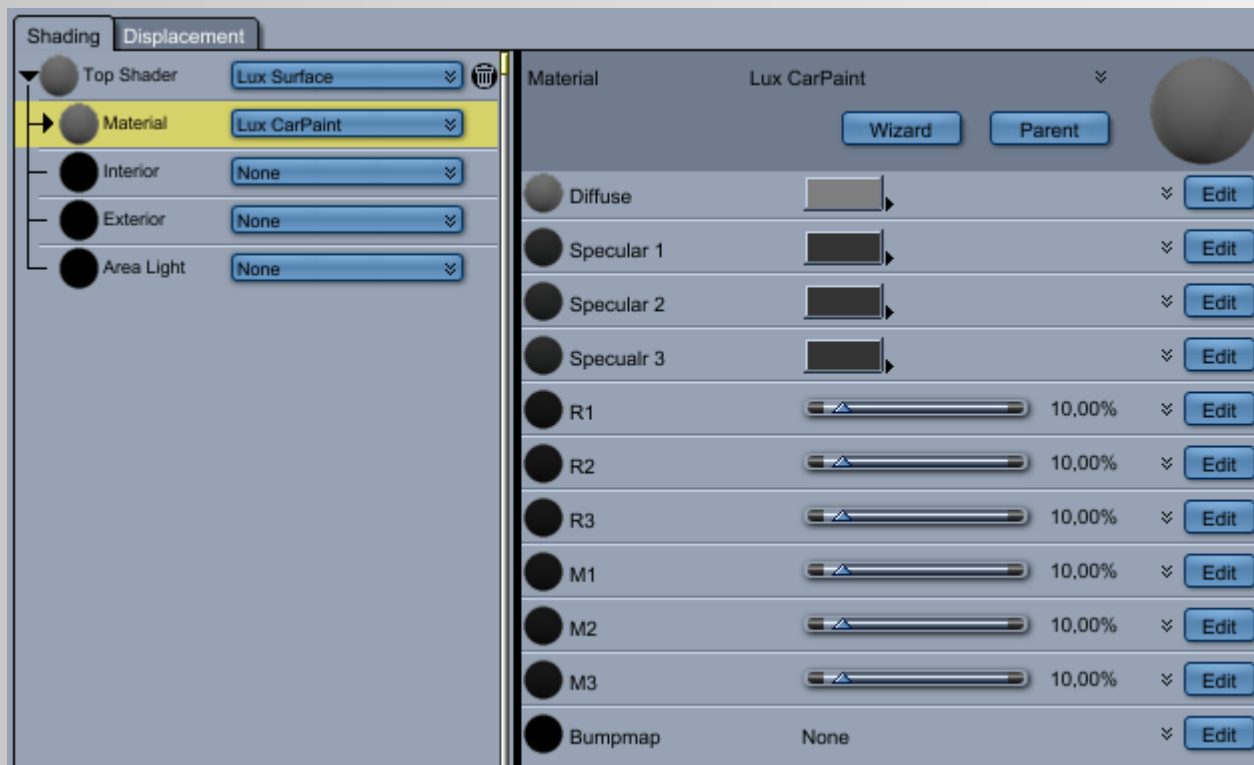
### INPUTS:

- Power
- Efficacy
- Number of Samples
- IES: Specify the path to the \*.ies file.
- Color

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Lighting](http://www.luxrender.net/wiki/LuxRender_Lighting)

## LUX CARPAINT



### INPUTS:

- Diffuse
- Specular 1, 2 and 3
- R1, R2 and R3
- M1, M2 and M3
- Bump Map

Read more Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_CarPaint](http://www.luxrender.net/wiki/LuxRender_Materials_CarPaint)

## LUX CLOTH



### INPUTS:

- Fabric: denim, silk chameuse, cotton twill, wool garbadine, polyester lining cloth, silk shantung
- Thread Count U
- Thread Count V
- Warp Diffuse
- Warp Specular
- Weft Diffuse
- Weft Specular
- Bump Map

**Spheric Labs:** Cloth simulates threads woven according to the pattern (not visible in the UI. so you are stuck with denim). Warp threads go one way, Weft go the other. Normally you only need to set colors on the Diffuse Channels and a little specular on the others.

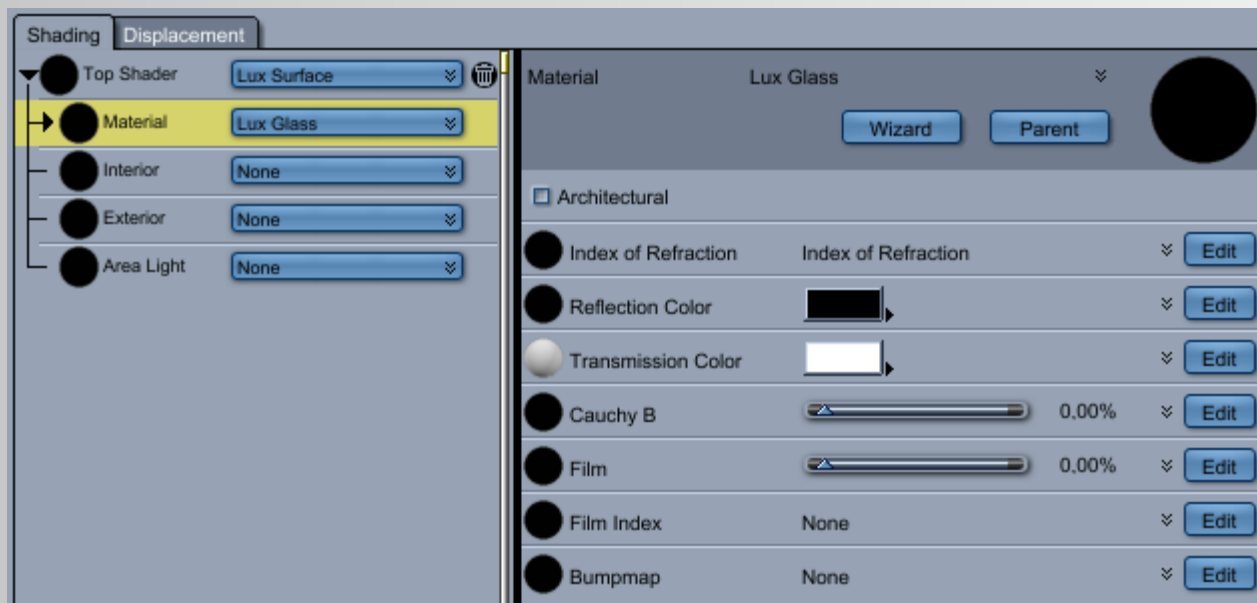
The best explanation is here

→ <http://www.luxrender.net/forum/viewtopic.php?f=10&t=9149>

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_Cloth](http://www.luxrender.net/wiki/LuxRender_Materials_Cloth)

## LUX GLASS

**Spheric Labs:** We are skipping this one. It actually works great, but Glass2 is better.



### INPUTS:

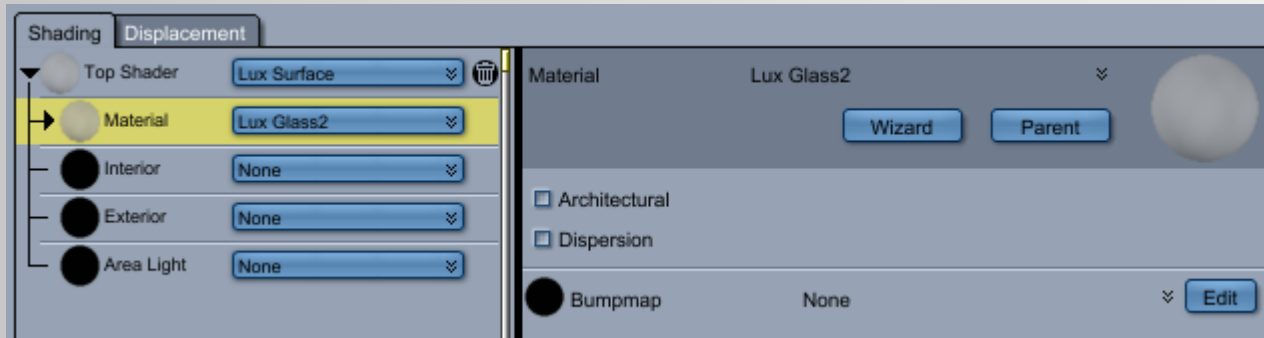
- Architectural
- Index of Refraction (IOR)
- Reflection Color
- Transmission Color
- Cauchy B
- Film
- Film Index
- Bump Map

Read more about glass here

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_Glass](http://www.luxrender.net/wiki/LuxRender_Materials_Glass)



## LUX GLASS2



### INPUTS:

- Architectural
- Dispersion
- Bump Map

**Spheric Labs:** BUT, this is just a wrapper to the volumes. Or in other words, all light hits the surface, some reflect and some refract. The look of the glass is largely determined by the Interior volume set on the Lux Surface.

Enable Architectural if you want the light that goes through the glass2 to act as if you have an „Index of Refraction“ (IOR) of 1.0. The reflection stuff will be as normal and will reflect according to the volume „Index of Refraction“.

Dispersion is chromatic dispersion? Something about how a prism makes rainbow colors. Normally his is off.

Always setup an Interior Volume when using glass2. Those volumes probably need alot of explanation, but start by use the Lux Clear and set your Fresnel „Index of Refraction“. If you want it colored, try a Lux ColorDepth texture plugged in the Absorption Color. The idea here is that light will be that color by that depth of penetration into the volume. To my technical mind this seems weird to me.

Or setup a carrara multiply in the Absorption slot of your Lux Clear that has a Color (not texture) as Source 1 and a 10000% value as Source 2. This represents a density of particles that absorb light. Set your color to pure green and amp up the your source 2 and your volume will take out green light. The idea being the denser the particles, the more that light (in this case green) is removed. You will be left with purple light eventually.

Read more here

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_Glass2](http://www.luxrender.net/wiki/LuxRender_Materials_Glass2)

## LUX GLOSSY



### INPUTS:

- **MultiBounce:** (supposedly for a velvet effect)
- **Separable:** (never used it)
- **Diffuse**
- **Specular**
- **Index of Refraction (IOR):** (this overrides Specular if not 0)
- **Roughness U**
- **Roughness V**
- **Absorption**
- **Depth**
- **Sigma**
- **Bump Map**

**Spheric Labs:** I short novel could be written about this material.

As a way to get going:

- 1) Set the diffuse as you normally would.
- 2) Specular, you probably just want dark gray. Like 32, 32, 32.
- 3) Roughness U and Roughness V is how rough the surface is and affects glossiness and reflection. Luxus will pay attention to a texture map that has inverted color checked. So you could use a a shininess map and invert it on this one.
- 4) Absorption and depth? I've Never used it on Glossy.
- 5) Sigma, never used this either.

Best information is here

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_Glossy](http://www.luxrender.net/wiki/LuxRender_Materials_Glossy)

## LUX GLOSSY COATING



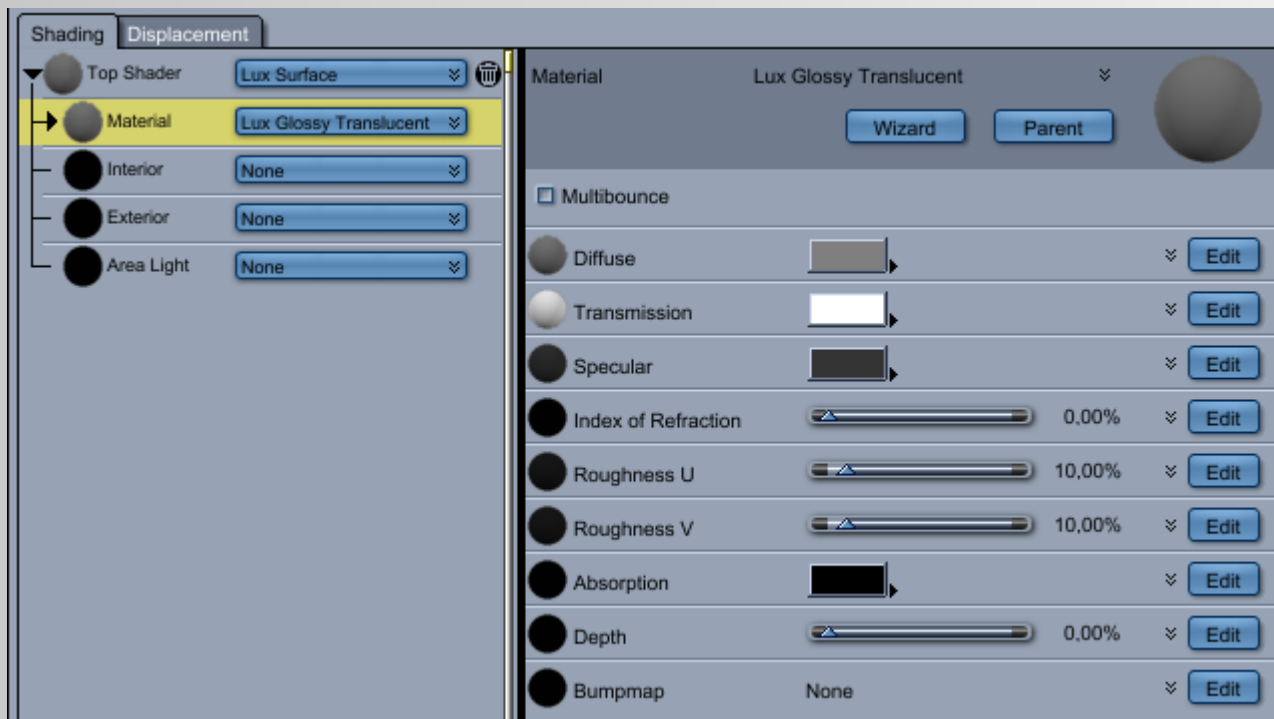
### INPUTS:

- Multibounce
- Base Material
- Specular
- Index of Refraction (IOR)
- Roughness U
- Roughness V
- Absorption
- Depth
- Bump Map

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_Glossycoating](http://www.luxrender.net/wiki/LuxRender_Materials_Glossycoating)

## LUX GLOSSY TRANSLUCENT



### INPUTS:

- Multibounce
- Diffuse
- Transmission
- Specular
- Index of Refraction (IOR)
- Roughness U
- Roughness V
- Absorption
- Depth
- Bump Map

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_GlossyTranslucent](http://www.luxrender.net/wiki/LuxRender_Materials_GlossyTranslucent)

## LUX LAYERED



### INPUTS:

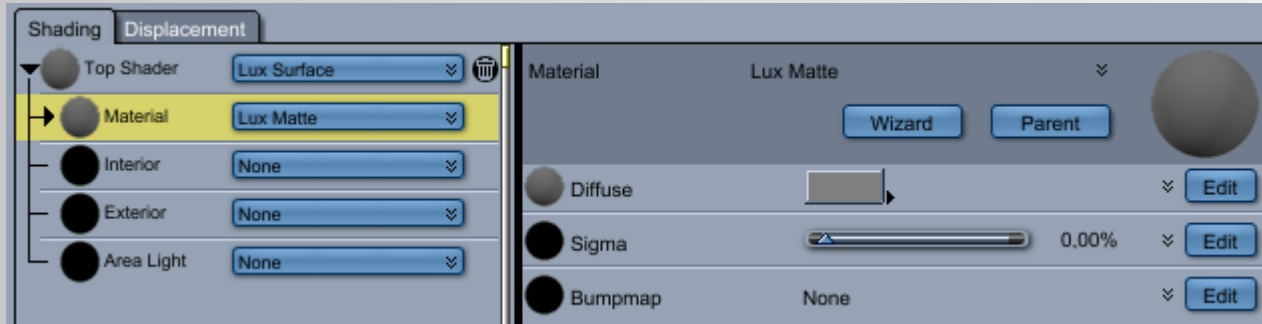
- Material 1
- Opacity 1
- Material 2
- Opacity 2
- Material 3
- Opacity 3
- Material 4
- Opacity 4
- Bump Map

Read more

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_Layered](http://www.luxrender.net/wiki/LuxRender_Materials_Layered)



## LUX MATTE



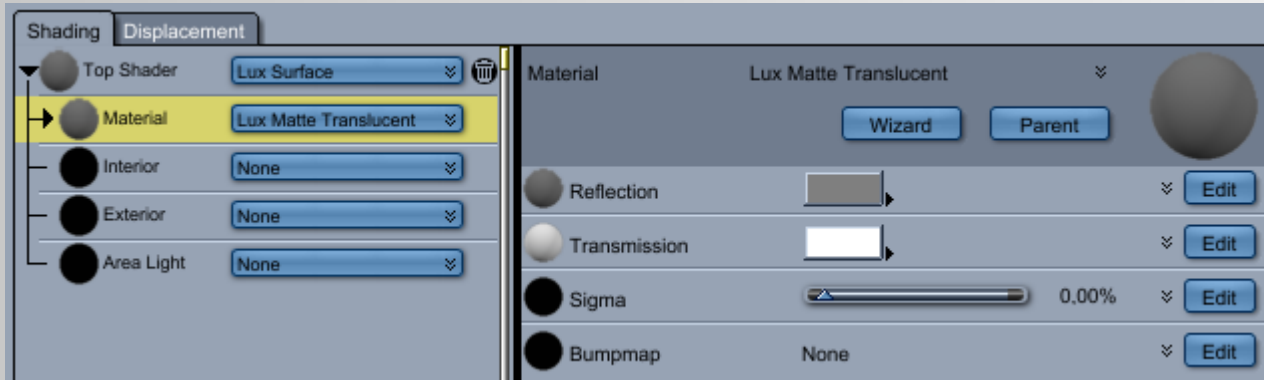
### INPUTS:

- Diffuse
- Sigma
- Bump Map

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_Matte](http://www.luxrender.net/wiki/LuxRender_Materials_Matte)

## LUX MATTE TRANSLUCENT



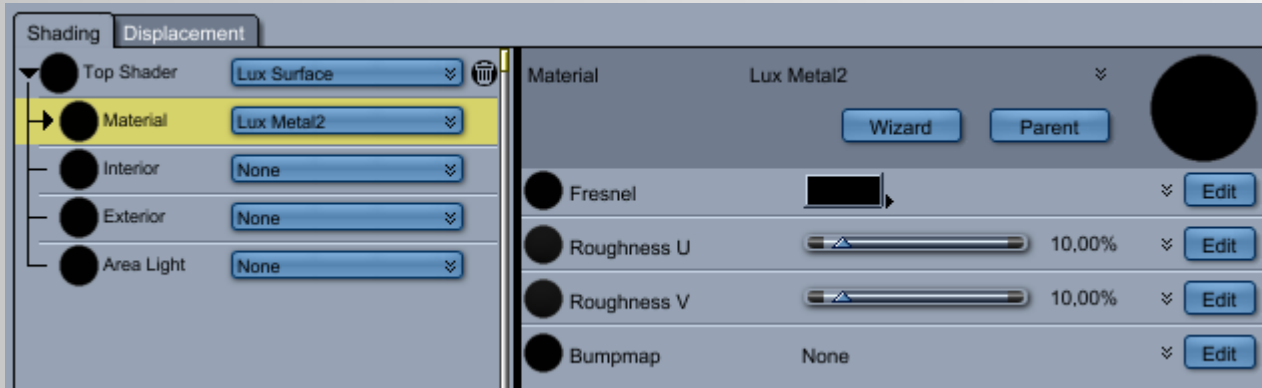
### INPUTS:

- Reflection
- Transmission
- Sigma
- Bump Map

See also Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_MatteTranslucent](http://www.luxrender.net/wiki/LuxRender_Materials_MatteTranslucent)

## LUX METAL2



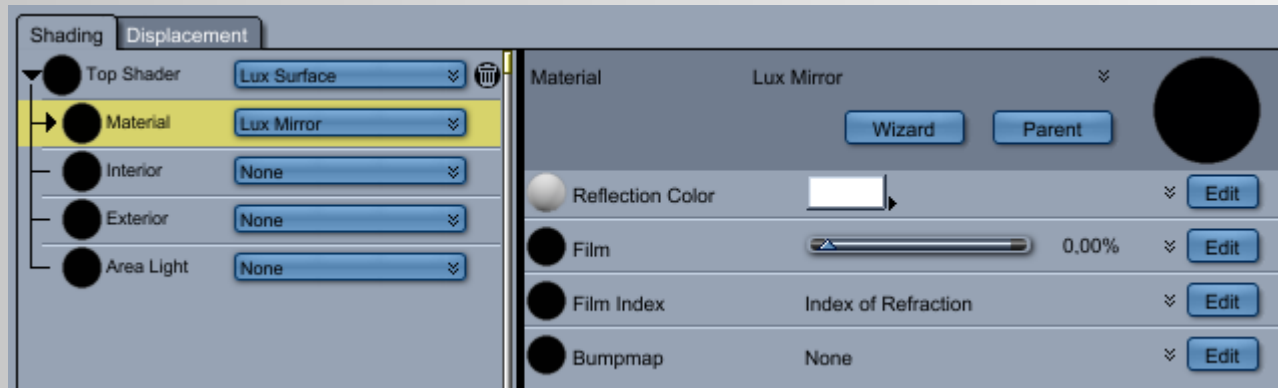
### INPUTS:

- Fresnel
- Roughness U
- Roughness V
- Bump Map

Read more

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_Metal2](http://www.luxrender.net/wiki/LuxRender_Materials_Metal2)

## LUX MIRROR



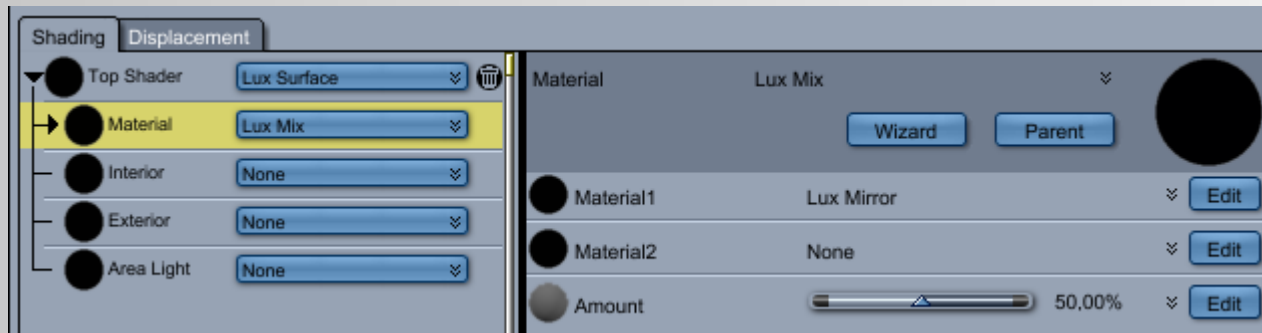
### INPUTS:

- Reflection Color
- Film
- Film Index
- Bump Map

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_Mirror](http://www.luxrender.net/wiki/LuxRender_Materials_Mirror)

## LUX MIX



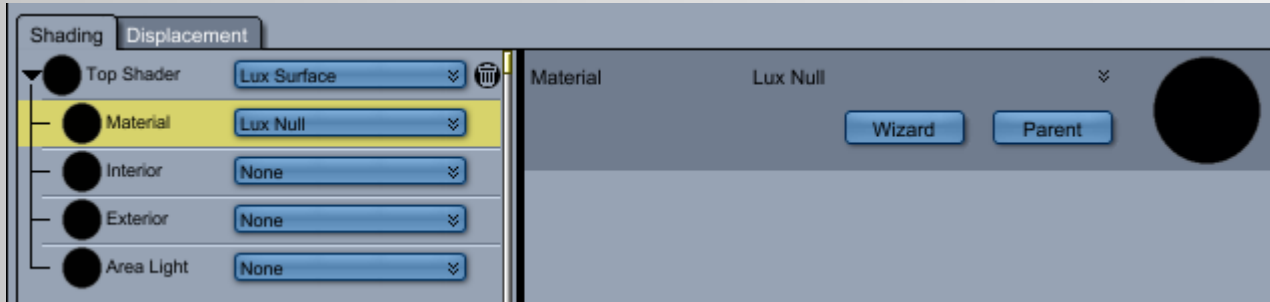
### INPUTS:

- Material 1
- Material 2
- Amount

See Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_Mix](http://www.luxrender.net/wiki/LuxRender_Materials_Mix)

## Lux NULL



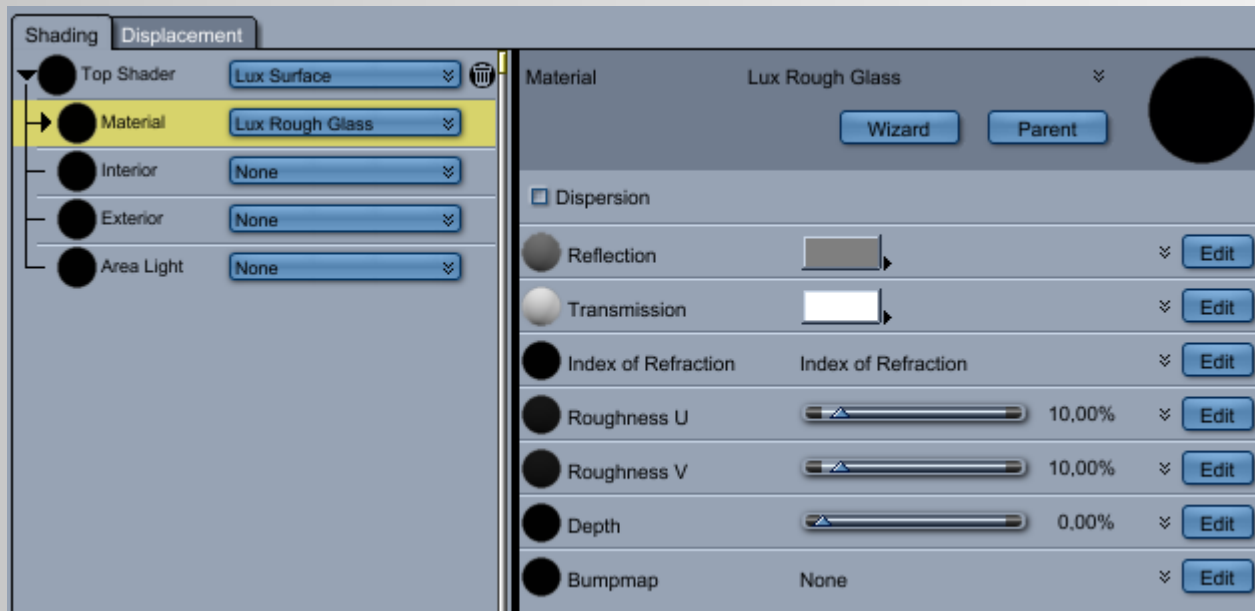
### **INPUTS:**

No Parameter.

See Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_Null](http://www.luxrender.net/wiki/LuxRender_Materials_Null)

## LUX ROUGH GLASS



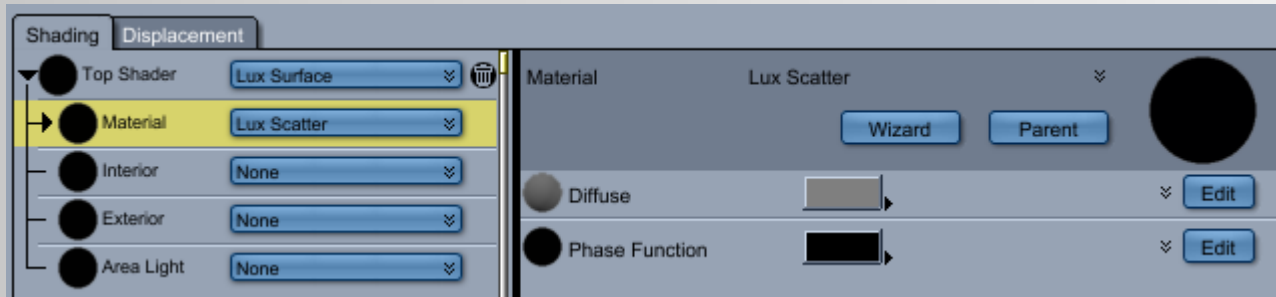
### INPUTS:

- Dispersion
- Reflection
- Transmission
- Index of Refraction (IOR)
- Roughness U
- Roughness V
- Depth
- Bump Map

Read more

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_RoughGlass](http://www.luxrender.net/wiki/LuxRender_Materials_RoughGlass)

## LUX SCATTER



### INPUTS:

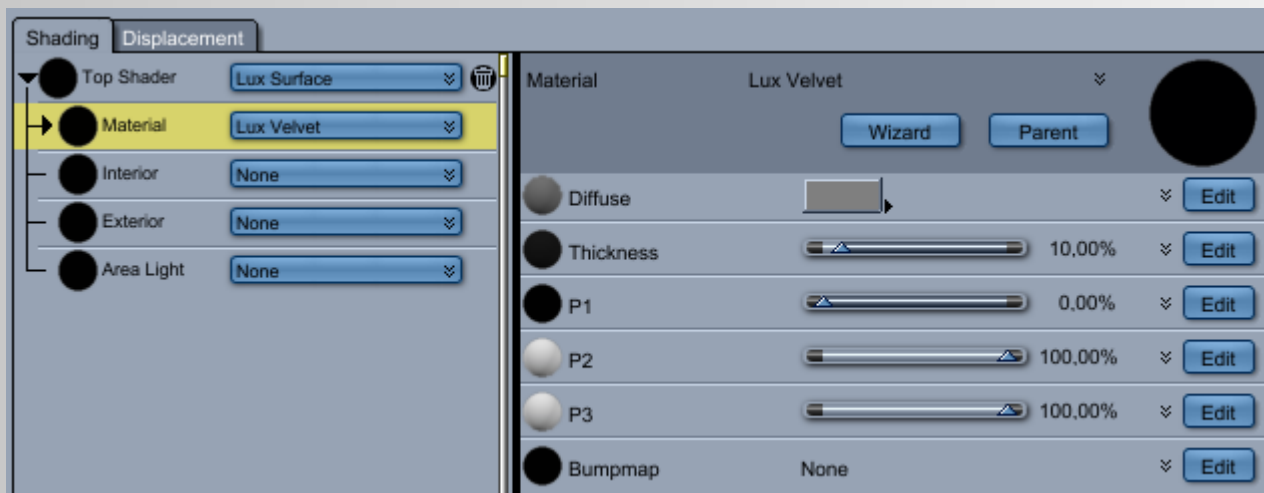
- Diffuse
- Phase Function

See also Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_Scatter](http://www.luxrender.net/wiki/LuxRender_Materials_Scatter)



## LUX VELVET



### INPUTS:

- Diffuse
- Thickness
- P1
- P2
- P3
- Bump Map

Read more

→ [http://www.luxrender.net/wiki/LuxRender\\_Materials\\_Velvet](http://www.luxrender.net/wiki/LuxRender_Materials_Velvet)

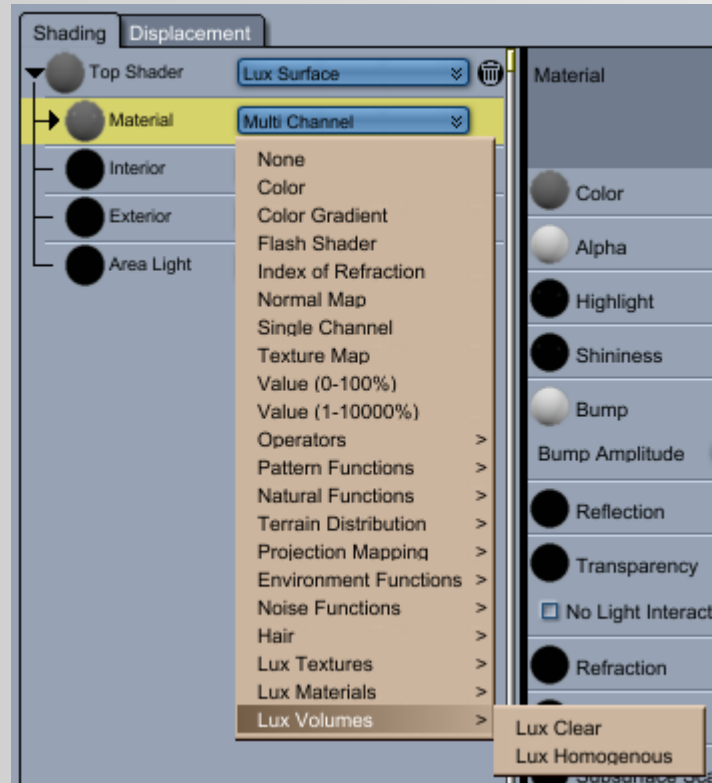
## LUX VOLUMES

See also Lux Wiki

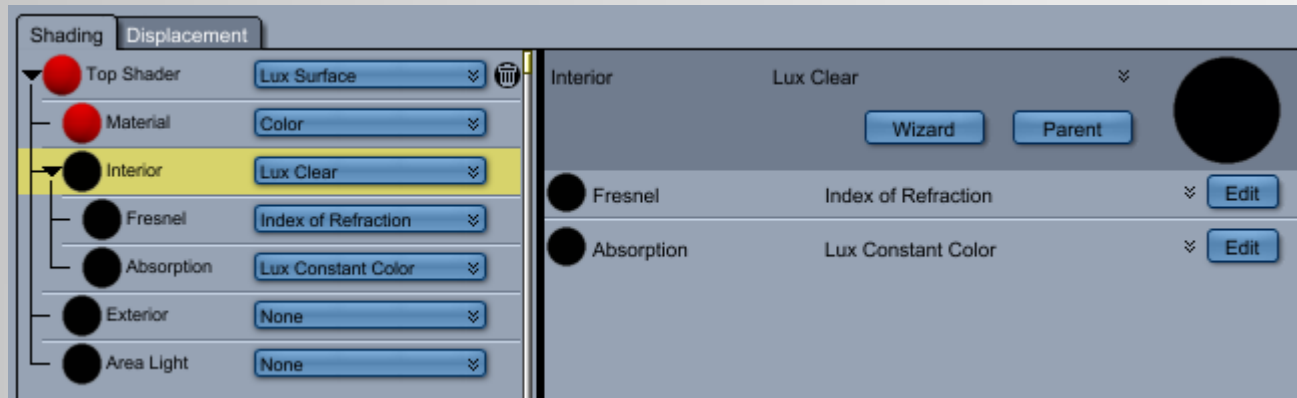
→ [http://www.luxrender.net/wiki/LuxRender\\_Volumes](http://www.luxrender.net/wiki/LuxRender_Volumes)

### INPUTS:

- Lux Clear
- Lux Homogenous



## LUX CLEAR



### INPUTS:

- Fresnel
- Absorption

See Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Volumes#Clear](http://www.luxrender.net/wiki/LuxRender_Volumes#Clear)

## LUX HOMOGENOUS



### INPUTS:

- Fresnel
- Absorption
- Scatter Coefficient
- Scatter Asymmetry

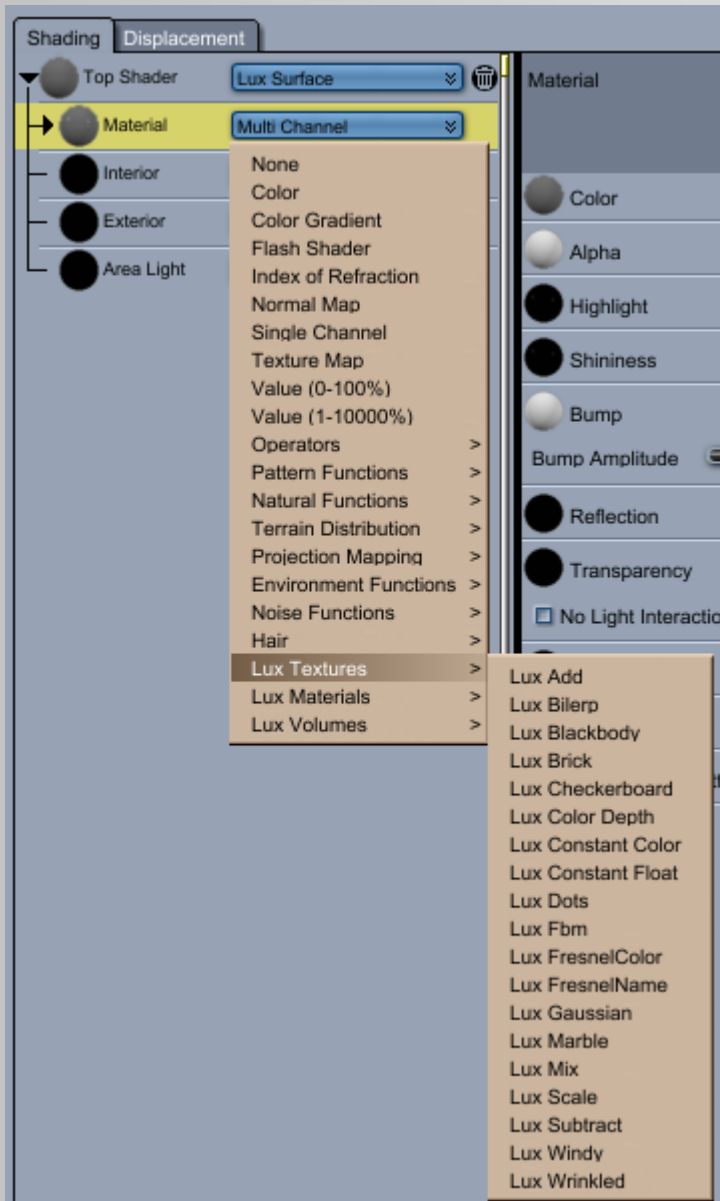
See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Volumes#Homogeneous](http://www.luxrender.net/wiki/LuxRender_Volumes#Homogeneous)

# LUX TEXTURES

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures](http://www.luxrender.net/wiki/LuxRender_Textures)



## INPUTS:

- Lux Add
- Lux Bilerp
- Lux Blackbody
- Lux Brick
- Lux Checkerboard
- Lux Color Depth
- Lux Constant Color
- Lux Constant Float
- Lux Dots
- Lux Fbm
- Lux FresnelColor
- Lux FresnelName
- Lux Gaussian
- Lux Marble
- Lux Mix
- Lux Scale
- Lux Subtract
- Lux Windy
- Lux Wrinkled

For further informations see please:

Procedural Textures

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Lux](http://www.luxrender.net/wiki/LuxRender_Textures_Lux)

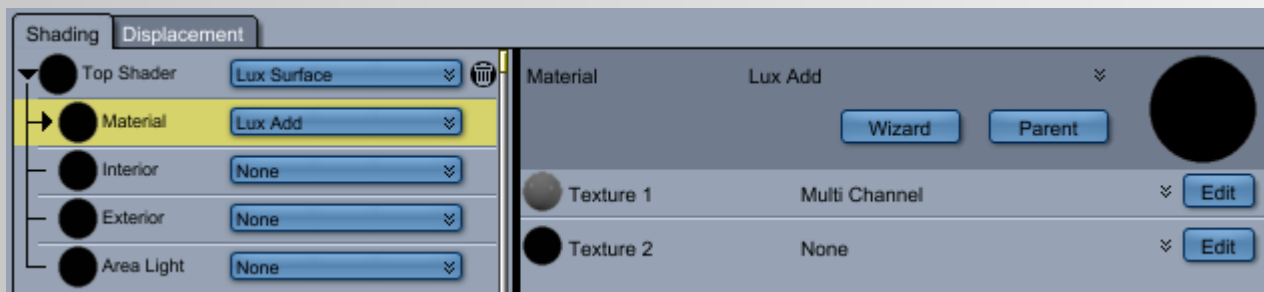
Spectrum Textures

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Spectrum](http://www.luxrender.net/wiki/LuxRender_Textures_Spectrum)

Fresnel Textures

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Fresnel](http://www.luxrender.net/wiki/LuxRender_Textures_Fresnel)

## LUX ADD



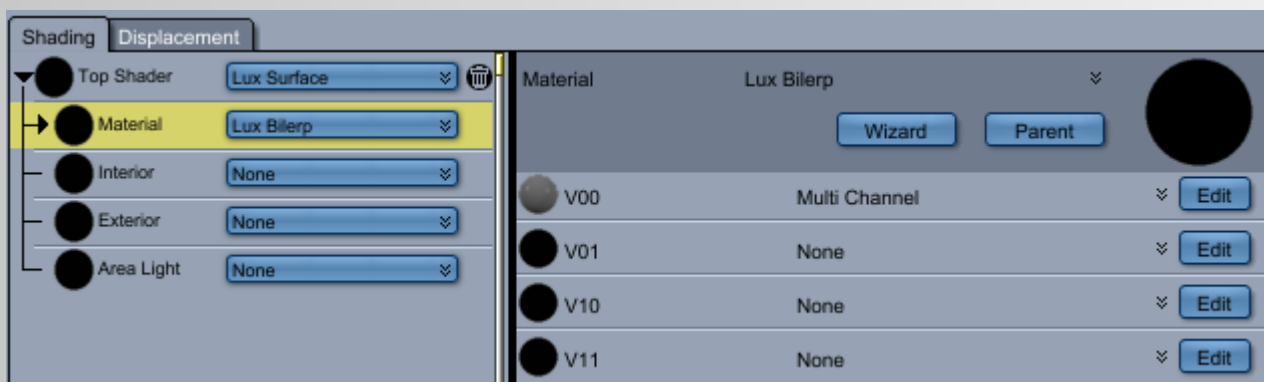
### INPUTS:

- Texture 1
- Texture 2

See Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Lux#Add](http://www.luxrender.net/wiki/LuxRender_Textures_Lux#Add)

## LUX BILERP



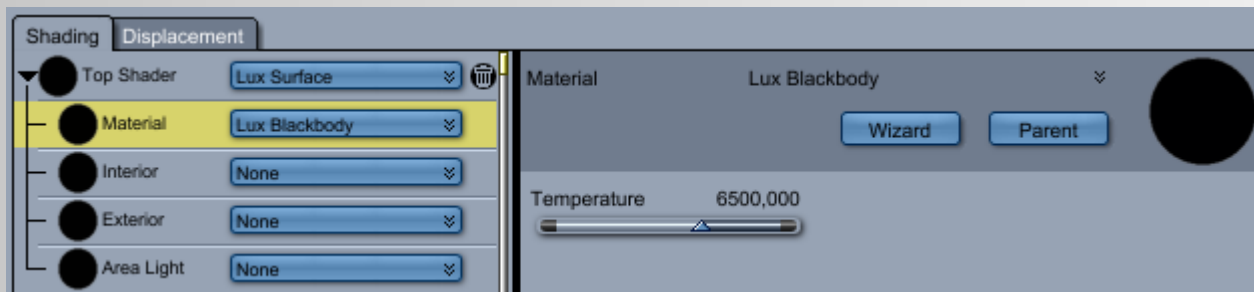
### INPUTS:

- V00 and V01
- V10 and V11

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Lux#Bilerp](http://www.luxrender.net/wiki/LuxRender_Textures_Lux#Bilerp)

## LUX BLACKBODY



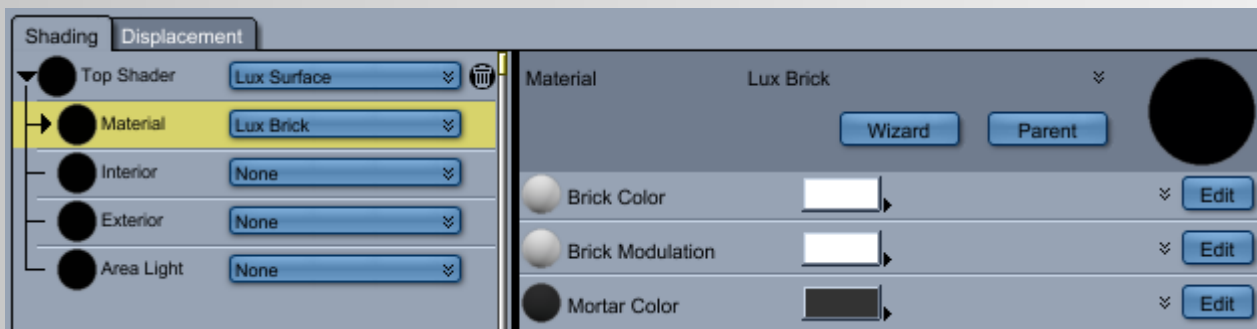
### INPUTS:

- Temperature

See Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Spectrum#Blackbody](http://www.luxrender.net/wiki/LuxRender_Textures_Spectrum#Blackbody)

## LUX BRICK



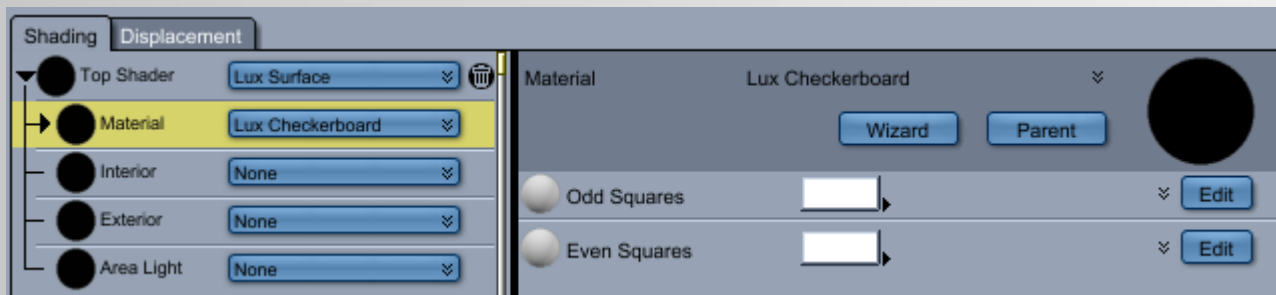
### INPUTS:

- Brick Color
- Brick Modulation
- Mortar Color

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Lux#Brick](http://www.luxrender.net/wiki/LuxRender_Textures_Lux#Brick)

## LUX CHECKERBOARD



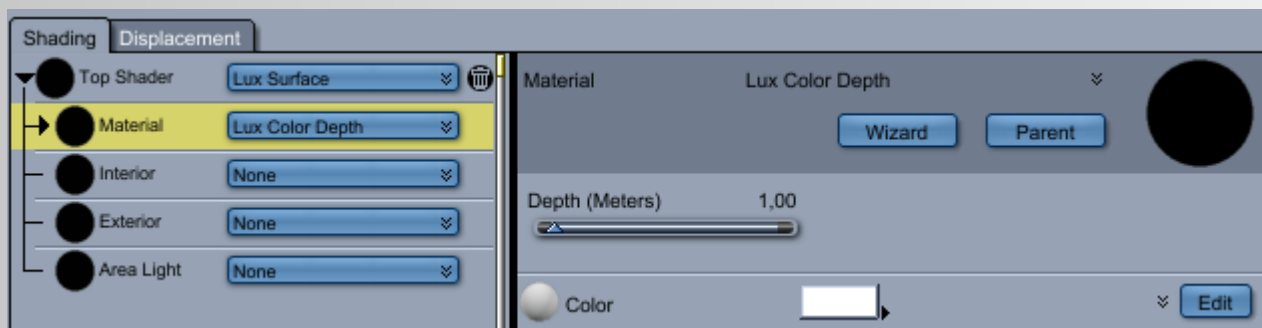
### INPUTS:

- Odd Squares
- Even Squares

See Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Lux#Checkerboard](http://www.luxrender.net/wiki/LuxRender_Textures_Lux#Checkerboard)

## LUX COLOR DEPTH



### INPUTS:

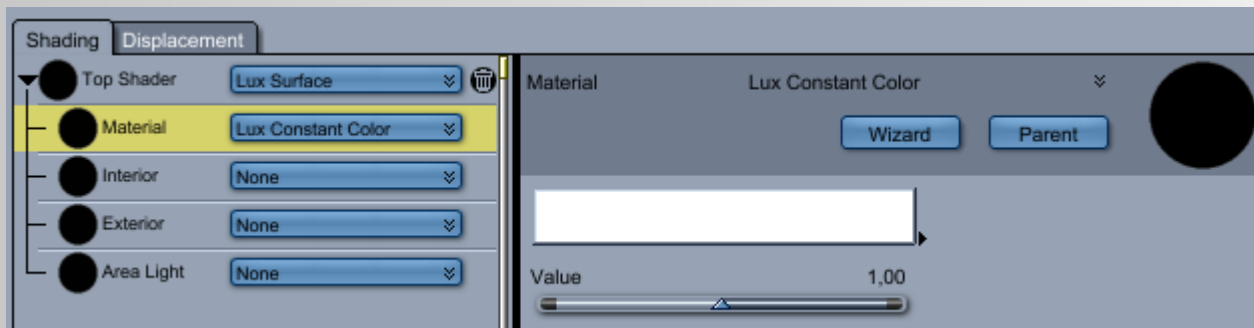
- Depth (Meters)
- Color

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Spectrum#Color\\_Depth](http://www.luxrender.net/wiki/LuxRender_Textures_Spectrum#Color_Depth)



## LUX CONSTANT COLOR



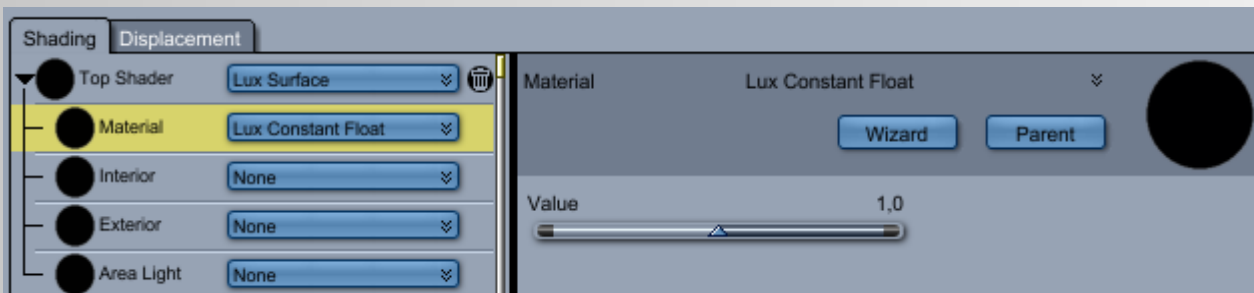
### INPUTS:

- Color Picker
- Value

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Fresnel#Constant](http://www.luxrender.net/wiki/LuxRender_Textures_Fresnel#Constant)

## LUX CONSTANT FLOAT



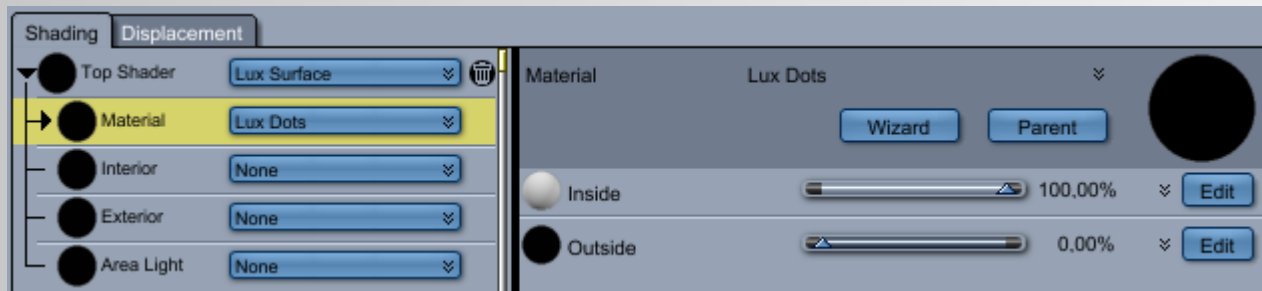
### INPUTS:

- Value

See Lux Wiki

→

## LUX DOTS



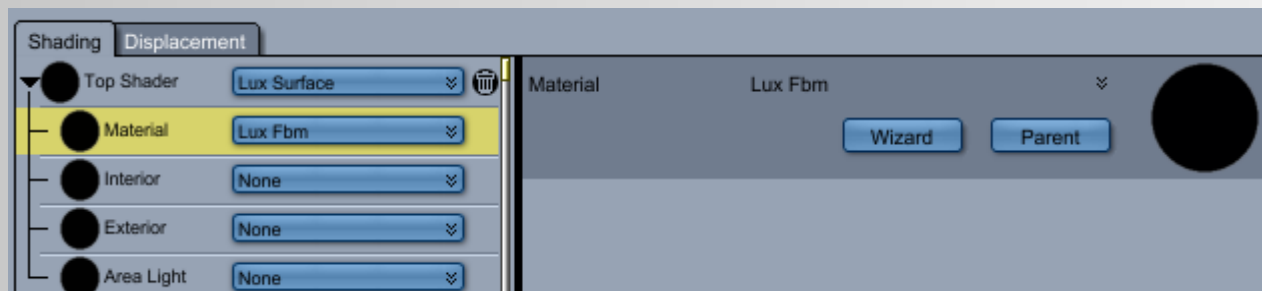
### INPUTS:

- Inside
- Outside

See Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Lux#Dots](http://www.luxrender.net/wiki/LuxRender_Textures_Lux#Dots)

## LUX FBM



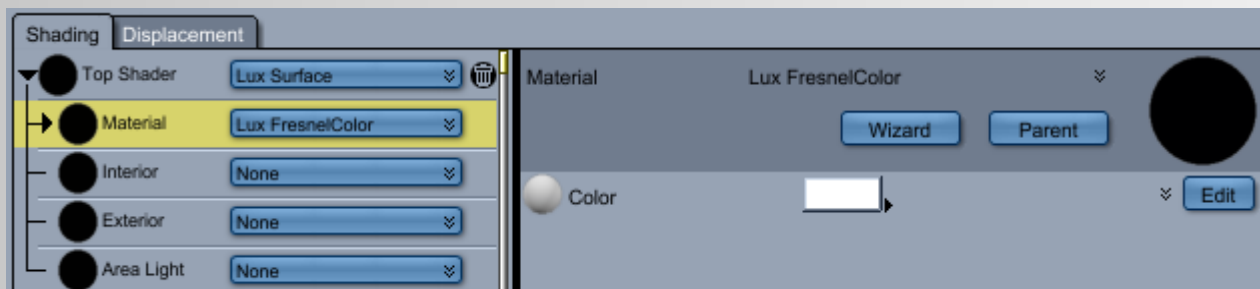
### INPUTS:

No Parameter.

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Lux#FBm](http://www.luxrender.net/wiki/LuxRender_Textures_Lux#FBm)

## LUX FRESNELCOLOR



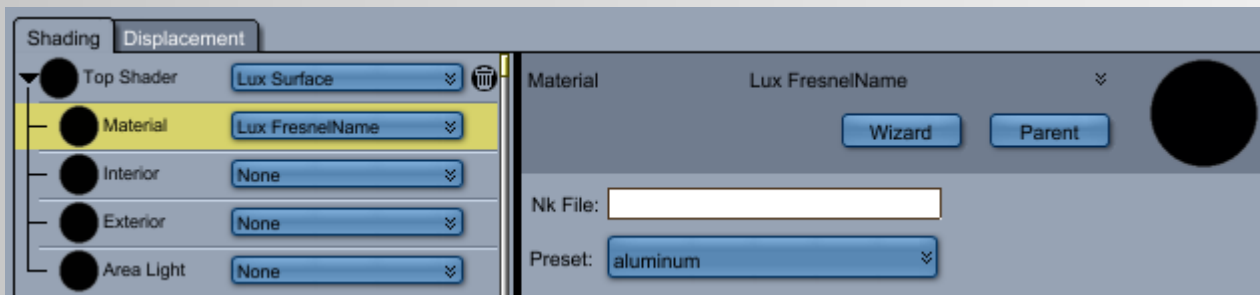
### INPUTS:

- Color

See Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Fresnel#Fresnel\\_Color](http://www.luxrender.net/wiki/LuxRender_Textures_Fresnel#Fresnel_Color)

## LUX FRESNELNAME



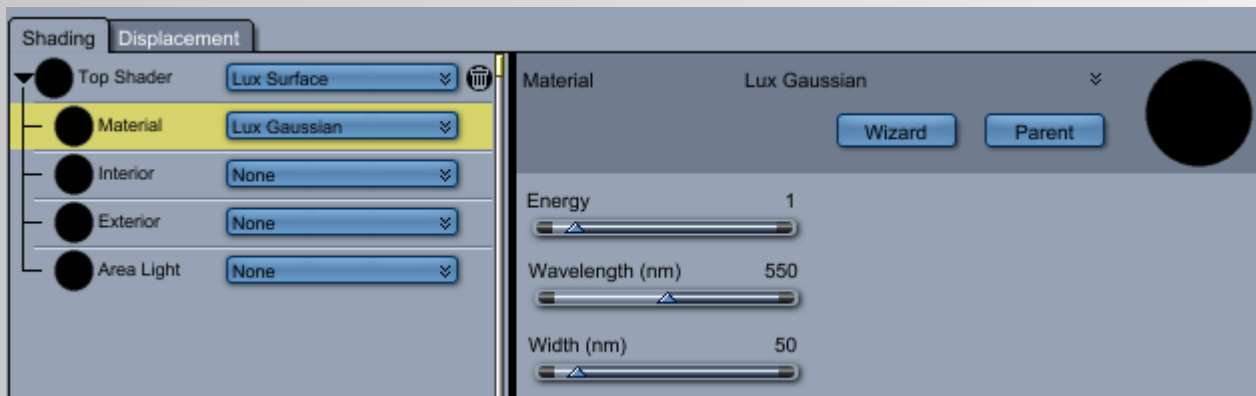
### INPUTS:

- Nk file
- Preset: aluminium (default), amorphous carbon, copper, gold, silver

See

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Fresnel#Fresnel\\_Name](http://www.luxrender.net/wiki/LuxRender_Textures_Fresnel#Fresnel_Name)

## LUX GAUSSIAN



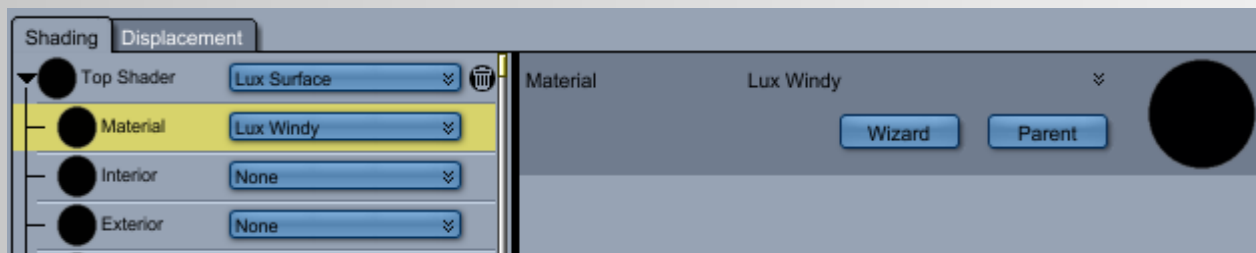
### INPUTS:

- Energy
- Wavelength (mm)
- Width (mm)

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Spectrum#Gaussian\\_spectrum](http://www.luxrender.net/wiki/LuxRender_Textures_Spectrum#Gaussian_spectrum)

## LUX WINDY



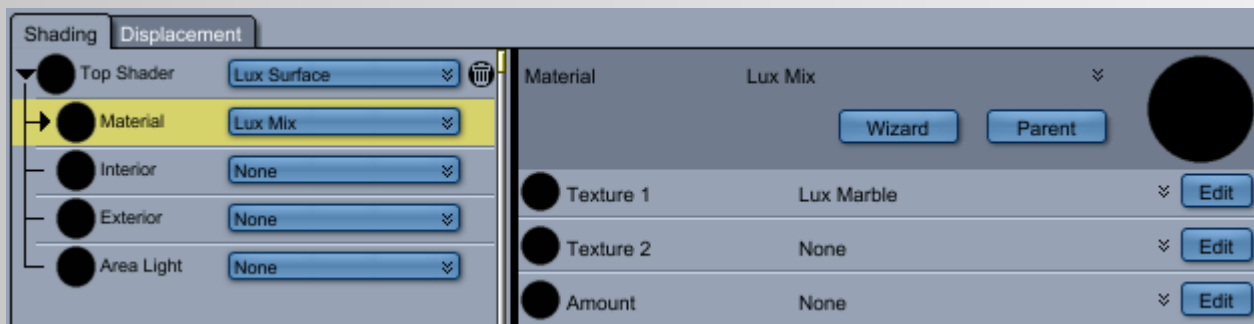
### INPUTS:

No Parameter.

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Lux#Windy](http://www.luxrender.net/wiki/LuxRender_Textures_Lux#Windy)

## LUX MIX



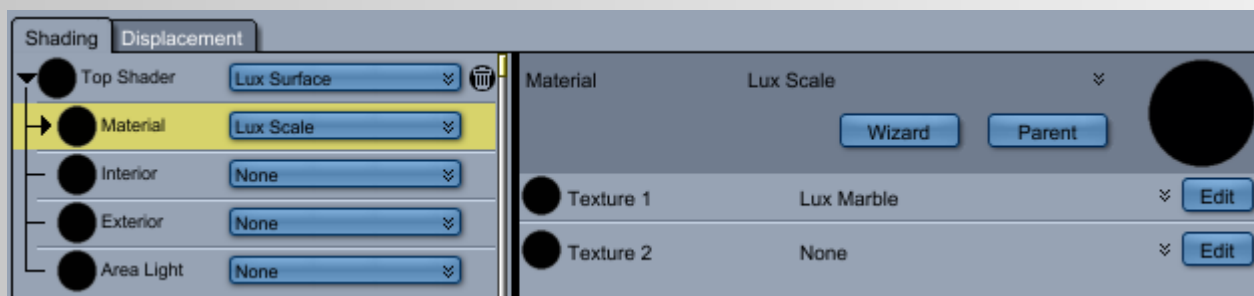
### INPUTS:

- Texture 1
- Texture 2
- Amount

See Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Lux#Mix](http://www.luxrender.net/wiki/LuxRender_Textures_Lux#Mix)

## LUX SCALE



### INPUTS:

- Texture 1
- Texture 2

See also

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Lux#Scale](http://www.luxrender.net/wiki/LuxRender_Textures_Lux#Scale)

## LUX SUBTRACT



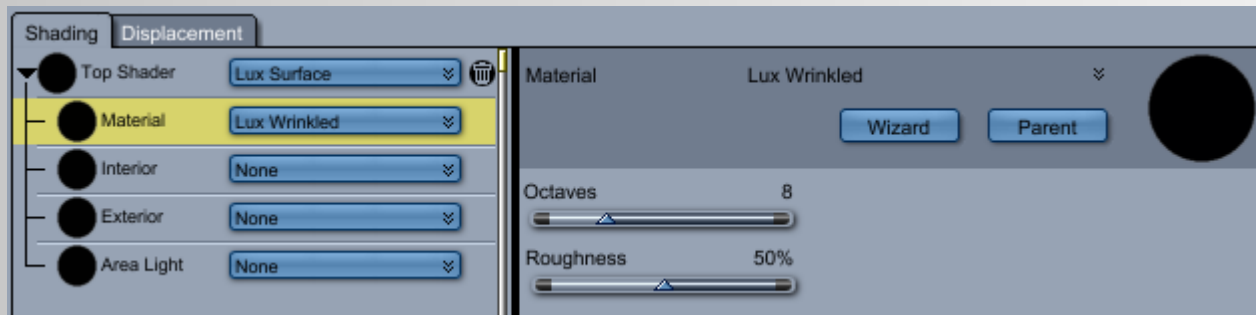
### INPUTS:

- Texture 1
- Texture 2

See Lux Wiki

→

## LUX WRINKLED



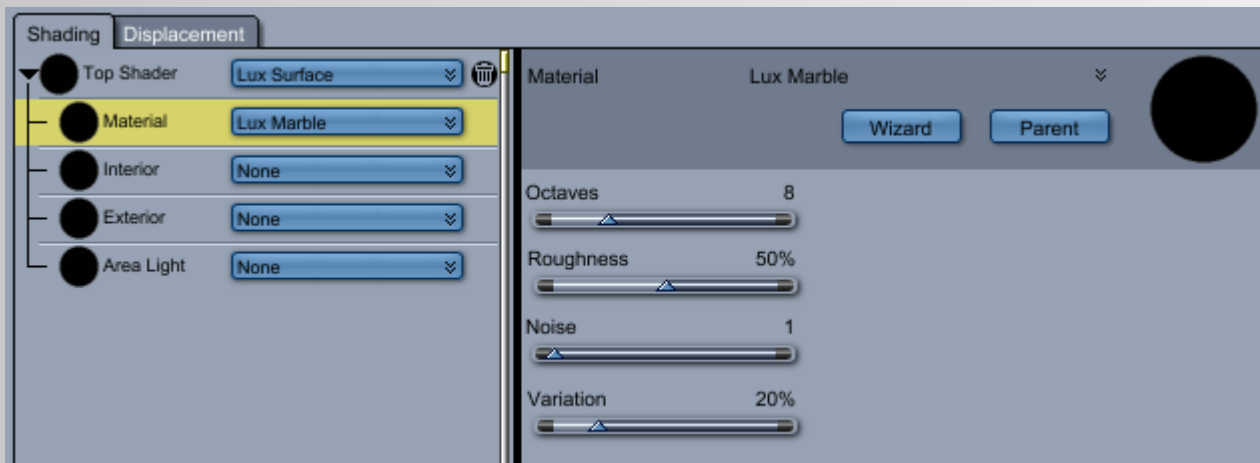
### INPUTS:

- Octaves
- Roughness

See Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Lux#Wrinkled](http://www.luxrender.net/wiki/LuxRender_Textures_Lux#Wrinkled)

## LUX MARBLE



### INPUTS:

- Octaves
- Roughness
- Noise
- Variation

See Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_Textures\\_Lux#Marble](http://www.luxrender.net/wiki/LuxRender_Textures_Lux#Marble)

# Carrara's Render Room

For informations see Lux Wiki please

Render Settings

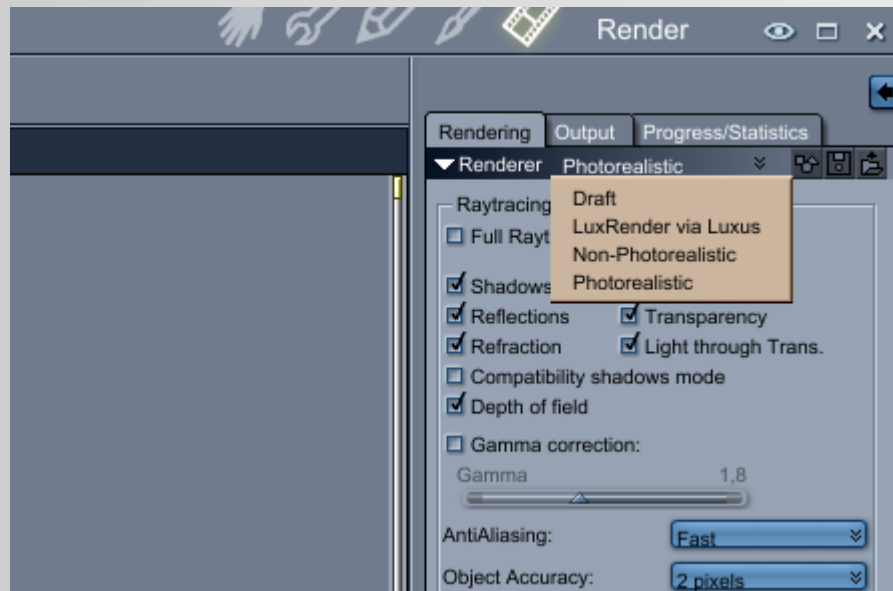
→ [http://www.luxrender.net/wiki/LuxRender\\_Render\\_settings](http://www.luxrender.net/wiki/LuxRender_Render_settings)

Animation Rendering

→ [http://www.luxrender.net/wiki/Animation\\_Rendering](http://www.luxrender.net/wiki/Animation_Rendering)

Network rendering

→ [http://www.luxrender.net/wiki/Network\\_rendering](http://www.luxrender.net/wiki/Network_rendering)

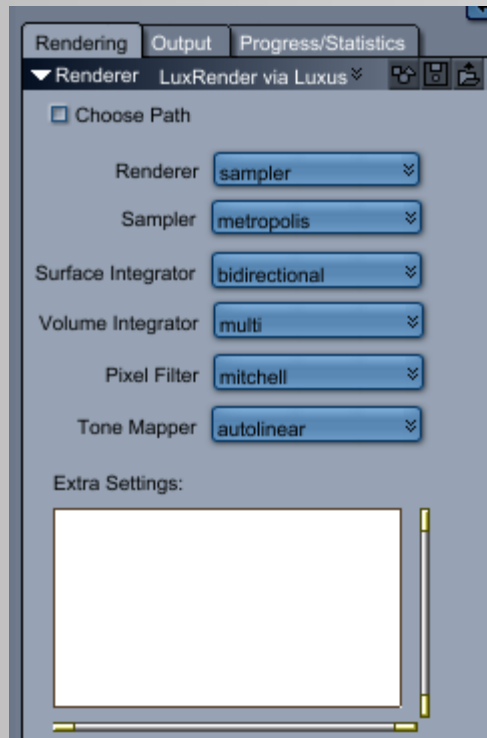


Select from the Renderer pop-up menu „*LuxRender via Luxus*“:

And now the single options.



## GENERAL SETTINGS



### Choose Path:

- **Disabled (default):** Lux generates automatically the output lxs file in the ...User > Documents > Luxus folder.
- **Enabled:** Lux generates the lxs file on the location your choice only and you can change the name of the file.

### INPUTS:

- **Renderer:** sampler, hybrid sampler, sppm, SLG renderer  
See also Lux Wiki → [http://www.luxrender.net/wiki/LuxRender\\_Render\\_settings#Renderer](http://www.luxrender.net/wiki/LuxRender_Render_settings#Renderer)
- **Sampler:** random, lowdiscrepancy, metropolis, erpt  
See Lux Wiki → [http://www.luxrender.net/wiki/LuxRender\\_Render\\_settings#Sampler\\_2](http://www.luxrender.net/wiki/LuxRender_Render_settings#Sampler_2)
- **Surface Integrator:** bidirectional, path, exphtonmap, directlighting, igi, distributedpath, sppm  
See also → [http://www.luxrender.net/wiki/LuxRender\\_Render\\_settings#Surface\\_Integrator](http://www.luxrender.net/wiki/LuxRender_Render_settings#Surface_Integrator)

- **Volume Integrator:** none, emission, single, multi

See Lux Wiki → [http://www.luxrender.net/wiki/LuxRender\\_Render\\_settings#Volume\\_Integrator](http://www.luxrender.net/wiki/LuxRender_Render_settings#Volume_Integrator)

- **Pixel Filter:** box, triangle, Gaussian, Mitchell, sinc

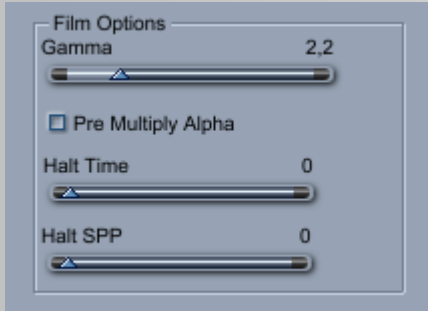
See Lux Wiki → [http://www.luxrender.net/wiki/LuxRender\\_Render\\_settings#Filter](http://www.luxrender.net/wiki/LuxRender_Render_settings#Filter)

- **Tone Mapper:** Reinhard, Linear, Auto-Linear, Contrast, Maximum to White (max white)

See also Lux Wiki → [http://www.luxrender.net/wiki/LuxRender\\_Tone\\_mapping#Tone\\_Mapping\\_Kernels](http://www.luxrender.net/wiki/LuxRender_Tone_mapping#Tone_Mapping_Kernels)

- **Extra Settings:** Here you can...

## FILM OPTIONS



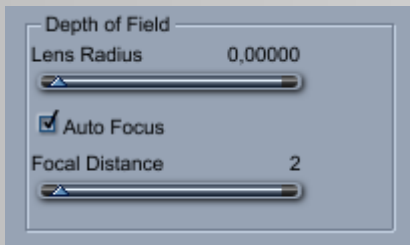
### INPUTS:

- Gamma
- Pre Multiply Alpha
- Halt Time
- Halt SPP

For informations about Halt Time and Halt SPP see

→ [http://www.luxrender.net/wiki/Animation\\_Rendering#HaltSPP\\_and\\_HaltTime](http://www.luxrender.net/wiki/Animation_Rendering#HaltSPP_and_HaltTime)

## DEPTH OF FIELD

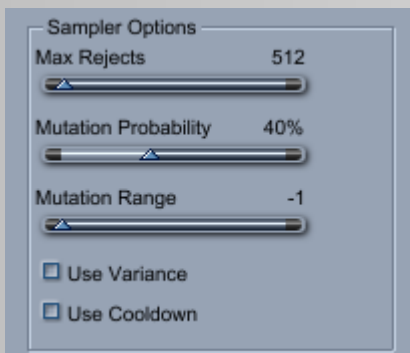


### INPUTS:

- Lens Radius
- Auto Focus
- Focal Distance

See Lux Wiki → [http://www.luxrender.net/wiki/LuxRender\\_Cameras](http://www.luxrender.net/wiki/LuxRender_Cameras)

## SAMPLER OPTIONS

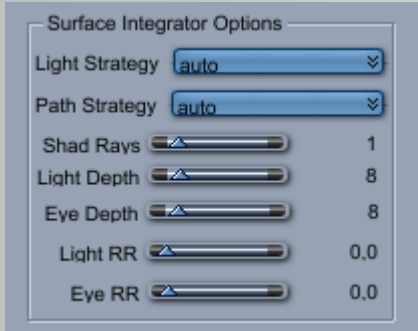


### INPUTS:

- Max Rejects
- Mutation Probability
- Mutation Range
- Use Variance
- Use Cooldown

See also Lux Wiki →

## SURFACE INTEGRATORS OPTIONS



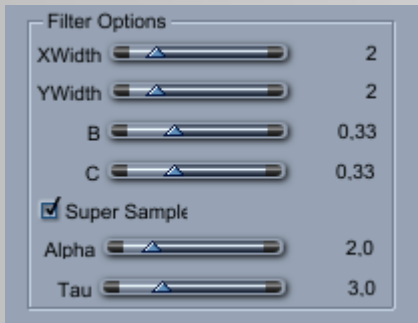
### INPUTS:

- **Light Strategy:** auto, one, all, importance, powerimp, allpowerimp, logpowerimp
- **Path Strategy:** auto, one, all, importance, powerimp, allpowerimp, logpowerimp
- **Shad Rays**
- **Light Depth**
- **Eye Depth**
- **Light RR**
- **Eye RR**

See Lux Wiki

→

## FILTER OPTIONS



### INPUTS:

- **Xwidth**
- **Ywidth**
- **B**
- **C**
- **Super Sample**
- **Alpha**
- **Tau**

See also Lux Wiki

→

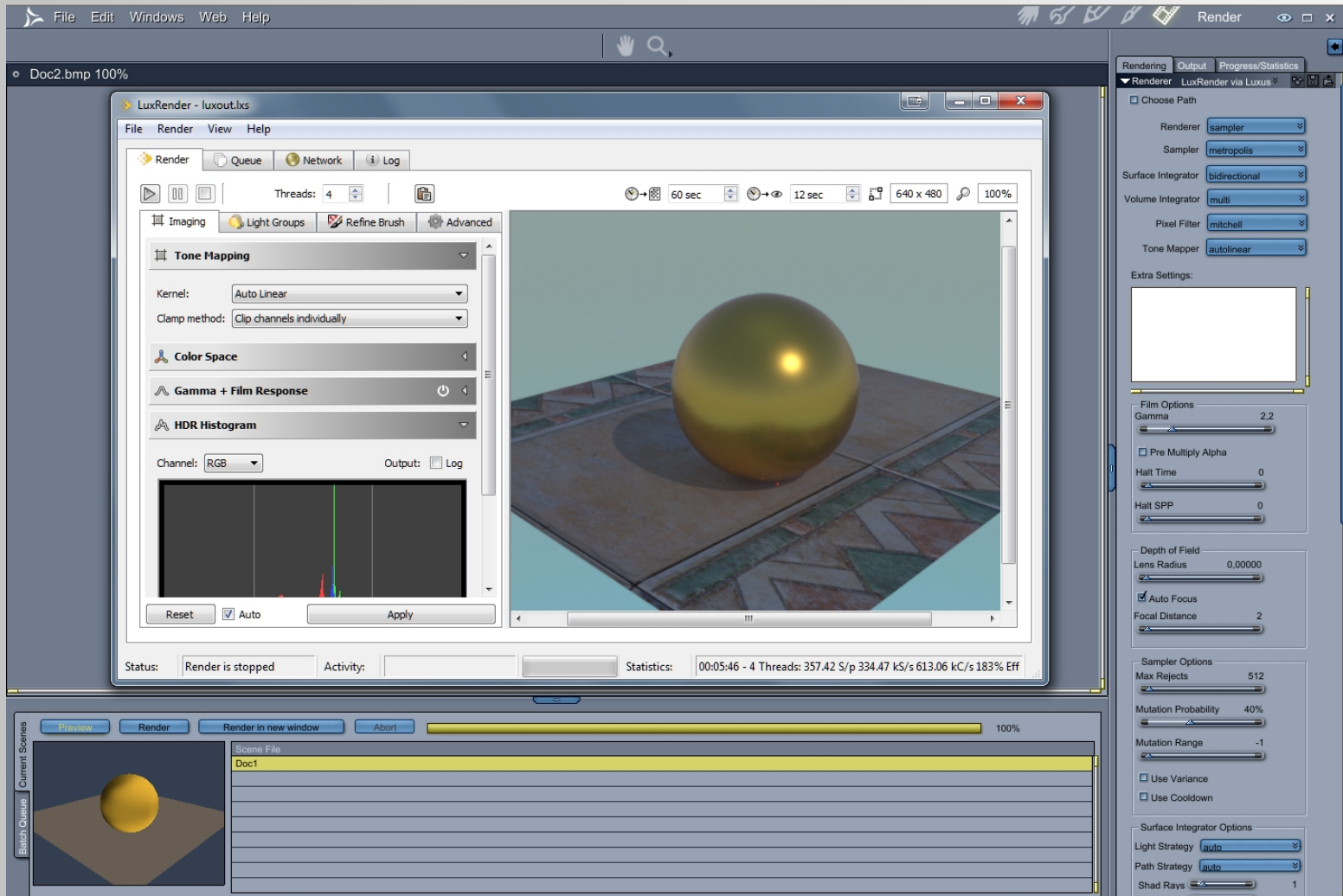
# LUXRENDER

For informations about the interface see please in the Lux Wiki

→ [http://www.luxrender.net/wiki/LuxRender\\_1.0\\_Interface](http://www.luxrender.net/wiki/LuxRender_1.0_Interface)

And for general informations about the other options in LuxRender see

→ [http://www.luxrender.net/wiki/Main\\_Page](http://www.luxrender.net/wiki/Main_Page)



# LUXCORE

For information about the new LuxCore look here:

LuxCore official Wiki

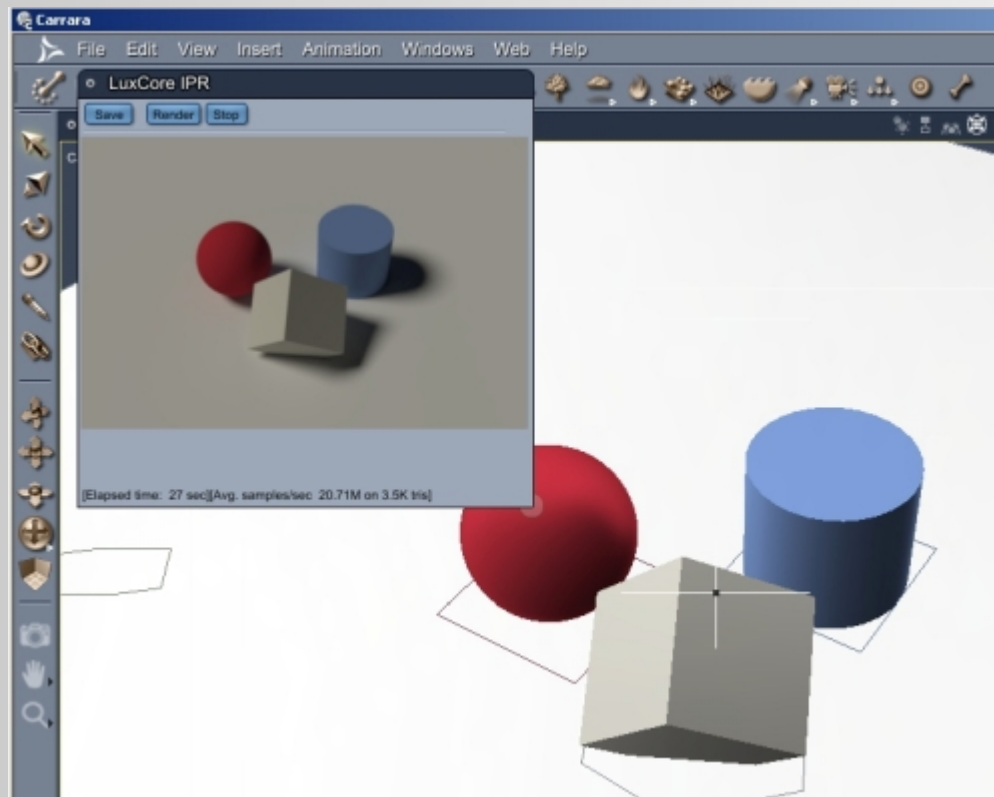
→ <http://www.luxrender.net/wiki/LuxCore>

LuxCore Carrara (Beta)

DAZ Forum → <http://www.daz3d.com/forums/discussion/50130/luxscore-carrara>

At CarraraCafe you can find a very helpful unofficial manual by 3dredero

Look here → <http://carraracafe.com/plugins/luxscore-for-carrara-plugin-unofficial-manual-2015-02-15/>



# TIPS & TRICKS

## Animation

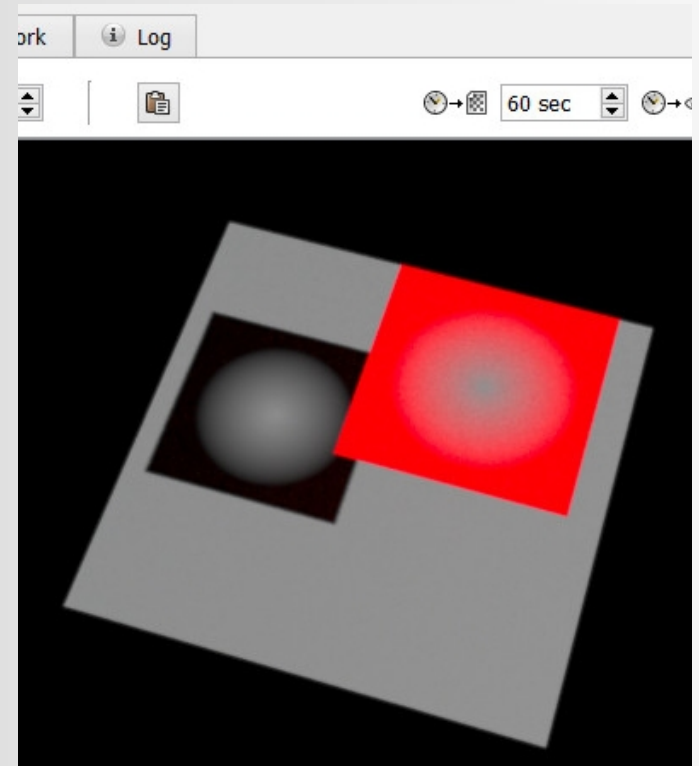
**Q: Ooseven:** In fact does it render animation .avi or .mov or any other format?

**A: Spheric Labs:** It renders an image per frame with the LuxRender GUI, then you would load an image compositing program, such as Final Cut Pro, to convert the image sequence to a movie.

## Alpha and Transparency

**Q: Jonstark:** One thing that I haven't figured out yet is how to use alpha maps/transparencies with Lux materials. I have a whole host of clothing I would love to use Lux cloth for, but need to be able to use alpha maps to make it work. Anyone know how to do this?

**A: Spheric Labs:** Use a mix material. Plug your normal material into the first channel. Plug a null material into the second channel. Plug a normal texture map into the amount channel.



### **LuxRender - make a movie** (by 3drendero)

Slightly more complicated to do animation in the old Luxus, than the new LuxusCore, but if you are on a Mac, then Luxus is the only option. Luxus only saves one file per frame of the animation, then you need to manually open the files in the Queue page of Luxrender, which renders an image of each file in the same folder.

1. First you MUST set ONE of these settings, otherwise the first frame will render forever: Render Room/Rendering/Film Options:
  - Halttime: 60 (means 60 seconds of rendering per frame)
  - Halt SPP: 100 (means 100 samples per pixel, maybe overkill for an animation)
2. Setup Carrara for animation rendering (Movie, frame rate... assume you know this)
3. Check "Choose path" in the Rendering page in Carrara/Render room/Render/Rendering, to make sure that you know where the \*.lxs files get saved
4. Press Render. Done. Super quick since only files are saved, no rendering
5. Load Luxrender and go to the Queue page and press "+" to load all the \*.lxs files.
6. Watch Luxrender do its thing, all images should be saved in the same folder
7. Enjoy!

DAZ Forum → <http://www.daz3d.com/forums/discussion/81796/luxrender-make-movie>

### **Skin Settings for Luxus** (by Jonstark)

DAZ Forum → <http://www.daz3d.com/forums/viewthread/29998/>

### **New User Tips and Tricks**

Lux Wiki → [http://www.luxrender.net/wiki/New\\_User\\_Tips\\_and\\_Tricks](http://www.luxrender.net/wiki/New_User_Tips_and_Tricks)

### **Common Error Messages**

Lux Wiki → [http://www.luxrender.net/wiki/Common\\_Error\\_Messages](http://www.luxrender.net/wiki/Common_Error_Messages)

# RELEASE NOTES

## Official Releases

### First Update 1.0.0.1 (October, 17, 2013)

#### **Spheric Labs:** List of changes:

- Production Frame and render match up perfectly.
- DOF parameters.
- Internal Saved Textures supported.
- Squelched some warnings related to textures.
- AreaLight bug that applied the light to multiple shading domains when it should not have.
- Fixed Cloth.
- Rendering will not hang the Mac while LuxRender does its thing.

### Final Release 1.0.0.0 (May, 26, 2013)

#### **Spheric Labs:** Feature list:

- 19 LuxRender Textures as Shader Nodes
- 17 LuxRender Materials as Shader Nodes
- 01 Top Level Lux Surface Shader Node
- Support for Carrara's Spot, Bulb, and Distant lights
- 05 LuxRender Specific Lights:
  - Infinite (HDRI/IBL)
  - Projection
  - Sun
  - Sky 2
  - Sun Sky 2



# Beta Releases

## 19th Release (May, 20, 2013)

**Spheric Labs:** New Builds for Win32 and Win 64.

Changes:

- Handle Internally saved textures.

## 18th Release (May, 18, 2013)

**Spheric Labs:** The first Win32 Build.

## 17th Release (May, 17, 2013)

**Spheric Labs:** New Win64 build.

This enables those the want to render animations. Rendering a movie will cause a series of files to be written using the format of name\_001.xls, name\_002.xls, etc. Luxus wil not autolaunch LuxRender in this case. You can then manually launch LuxRender and open the file sequence yourself and start your rendering epic.

## 16th Release (May, 15, 2013)

**Spheric Labs:** New Win64 build and some Sample Shaders.

Changes:

- Fixed a non exporting bug when exporting the indoor preset scene.
- Auto convert is changed and support shininess and reflection maps. Please provide feedback on if it's too much orite not enough.
- Preview of Glass2 is now a semitransparent white. Preview of metal2 with color is the shade of the color.
- Render Settings now includes the most common settings. Less common settings can be set through the extra settings field.
- UI tweaks per user feedback.

## 15th Release (April, 30, 2013)

**Spheric Labs:** Win64 Build and Mac64 Build.

Changes:

- Improve Autotranslation. V4 and M4 look halfway decent now.
- The cone angle and angular falloff now work on spot light.

### **14th Release (April, 26, 2013)**

**Spheric Labs:** Win64 Build.

Changes:

- Fixed crash on any object or shading domain that was not assigned a shader.

### **13th Release (April, 26, 2013)**

**Spheric Labs:** Win64 Build - Changes:

- Glossy, GlossyTranslucent, Matte, MatteTranslucent will now show the texture/color assigned to them in the preview shader pane.
- Fixed Crash when using internally saved textures.

**Spheric Labs:** Mac64 Build - Changes:

- I have changed when it asks for the LuxRender folder to when Luxus is first chosen as the Renderer. Mac 10.8 did not like the old way (crashed Carrara).
- Those using Mac's should run the LuxRender app at least once via Finder before attempting to render. You will almost for sure need to right click -> open to "enable" it through security. OSX will warn you about running application downloaded from the internet, say ok and you should be good.

### **12th Release (April, 25, 2013)**

**Spheric Labs:** Win64Build.

Changes:

- Autotranslation of Alpha and Transparency.

Update: Mac 64 Build online now.

### **11th Release (April, 24, 2013)**

**Spheric Labs:** Another Win64 Build.

Changes:

- Displacement Maps.

Carrara's displacement setup is very similar to LuxRender's so we are going to read displacement from Carrara's displacement channel.

### **10th Release (April, 23, 2013)**

**Spheric Labs:** And another Win64 build.

Changes:

- Carrara instances as LuxRender instances.

### **9th Release (April, 23, 2013)**

**Spheric Labs:** Another Win64 Build. I will update Mac end of week.

Changes:

- Normal Maps work. Plug a Carrara Normal map into the bumpmap channel (This is the way LuxRender does it). Want a bump and a normal map?, use a Lux Add texture or a Lux Mix texture to combine them.
- Lux Blackbody now has a temperature for settings the color.
- Lux Constant Color and Lux Constant Float. This solves the problem of "Some parameters values are too limited". You can use a Constant Color or Float for any spot where you need a much larger value/color or smaller value/color. Volumes are the most common case.

### **8th Release (April, 21, 2013)**

**Spheric Labs:** New Windows build.

Changes:

- Added Projection Light.
- Bump maps on all the materials that support one.
- UI elements for the lights.
- IES parameter on the AreaLight.
- Gain on AreaLight.
- Users can now choose where LuxRender is.
- Fabric (Weave) option on Cloth.

### 7th Release (April, 20, 2013)

#### **Spheric Labs:**

##### Changes:

- Fix Multiple Shading Domains and Gamma the colors properly.

### 6th Release (April, 19, 2013)

#### **Spheric Labs:**

##### Changes:

- All options for materials should now be visible.
- All the textures of the 1.0 spec implemented (exception band and multimix).
- Added Mac Build. Install/Copy LuxRender such that there is a folder right next to your Extensions folder called LuxRender that contains the LuxRender application.

##### Todo:

- Bump, Normal, and Displacement maps.
- A decent autotranslation.
- Some error checking before handoff to LuxRender. For example, you can plug a float texture into a color slot.
- Carrara Instances as LuxRender instances.
- Various UI and workflow improvements including choosing where LuxRender is.

### 5th Release (April, 18, 2013)

**Spheric Labs:** Little bug fixed: "Where is the Map field for Infinit Lights?" New build.

### 4th Release (April, 17, 2013)

**Spheric Labs:** Someone noticed that their file saved with an older version did not load in the latest version. This was due to the rapid changes. So here is a build that should be 99% file/load stable going forward.

##### Changes:

- It adds Lights: Lux Sky2, Lux Sun
- It adds some LuxRender textures, but I am in the middle of adding those.

### 3rd Release (April, 16, 2013)

**Spheric Labs:** This implements all the non deprecated materials from the 1.0 spec of LuxRender plus cloth (which is more recent).

CarPaint, Cloth, Glass, Glass2, Glossy, GlossyCoating, GlossyTranslucent, Layered, Matte, MatteTranslucent, Metal2, Mirror, Mix, Null, RoughGlass, Scatter, Velvet.

There are a few options that don't show on some of the materials, for example light cloth's thread count or metal2's fresnel file. Also, some paramters are setup to use Carrara percentage, but really need a much larger value. You can use Carrara's multiply, but a better solution will be addressed later. This build times out end of the month.

### 2nd Release (April, 13, 2013)

**Spheric Labs:** Another Proof of concept build for Win64.

Features (bold means new since last build).

- Lux Surface
- Lux Lights: **Sun Sky2, Infinite (HDRI)**
- Lux Materials: Matte, **Metal2** (partial), **Glass2, Area Light**
- Lux Volumes: **Clear, Homogenous**

The camera is still not right, but is a little closer. On the Infinite light, use forward slashes for setting the path to the map. HDR and EXR both work.

### First Release (April, 11, 2013)

**Spheric Labs:** I have made the following simplifications to get this to you quicker.

- Win64 only for now.
- LuxRender must be installed like so:
  - CarraraFolder
    - Carrara.exe
    - LuxRender
      - LuxRender.exe
- Autotranslation is very primitive. I doubt it will work at all.
- 2 new shaders. Lux Surface should be the top most shader, Lux Matte must be in the first slot of Lux Surface.
- Only the diffuse channel of Lux Matte will work. You can set a color or a texture there.

- The Rendering Options only let you specify general stuff, not options on those things.