



Render Studio Iray - Userguide

Welcome...

The most essential part of any visual art is the quality of the light.

"After over 30 years of photographic lighting experience and 16 years experience in CGI lighting. Render Studio for Daz Studio Iray is by far the most advanced iteration of Render Studio that I have ever created."

What's Included...!

Once you have Render Studio Iray installed and Daz Studio open navigate your Content Library to 'Light Presets' 'Render Studio'. Click through the white triangles on the left of each sub-category until you get to 'Render Studio Base. Here you will find the sub categories for Render Studio Iray.

Backdrops:

This contains the 'Floor and Wall' prop and the 'Infinity Cove' prop. This then expands in the the Materials/Iray sub-category. Here you will find all of the resources for loading textures and shaders onto the background props. They are split into different categories for easy navigation of the type of material and for the particular prop it is for.

'Background-Wall' refers to the Background material group on the 'Floor and Wall' prop. This is split in to 7 categories:

Bokeh, Brick and Stone, Canvas, Grunge, Matte, Smoke and Techno.

'Floor' refers to the Floor material group on the 'Floor and Wall' prop. This is split in to 3 categories:

Matte, Reflective, and Textured.

'Infinity Cove' refers to the Cove material group on the 'Infinity Cove' prop. This contains 10 large high quality texture/materials for the Infinity Cove.

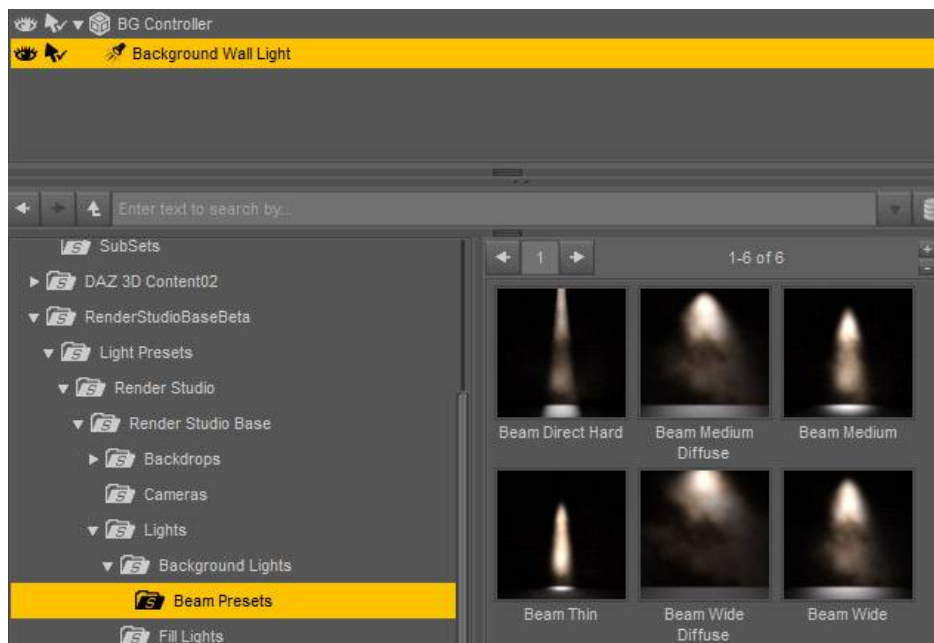
Cameras:

This category contains a large selection of camera pre-sets mimicking various angles, focal lengths and points of view that are typically used by photographers when photographing a single figure. They can be customized for for than one figure. All camera have the 'Headlamp' turned off. Note you can use the 'Ctrl+L' command to turn on the viewing light. This will not affect your scene.

Lights:

This is by far the most important and extensive category. It contains a large selection of some of the most commonly used lights in a photographic studio and for some lights in contains a selection of materials to change the colour and colour temperature of the light.

'Background Lights' contains two light pre-sets that can be used with the 'Floor and Wall' prop. 'Background Wall Light' is a single light that when loaded also loads a controller prop called 'BG Controller'. The Background Wall Light' is parented to this controller prop. When positioning the light you must select and use the 'BG Controller'. This is done by opening the 'Parameters' tab and dialling the 'Arc Rotate' dial. This will move and rotate the light left and right across the background wall always pointing at the bottom centre of the wall. For more precision or customizing you can move and rotate the light itself. The sub-category 'Beam Pre-sets' is a selection of different beam styles for the 'Background Wall Light'. You must select the 'Background Wall Light' in the Scene tab before loading the pre-set. It is intentional to have the background lights set very close to the background prop as this enables the beam of light to spread across the surface. The 'Background Wall Light Full' pre-set encompasses the entire background.



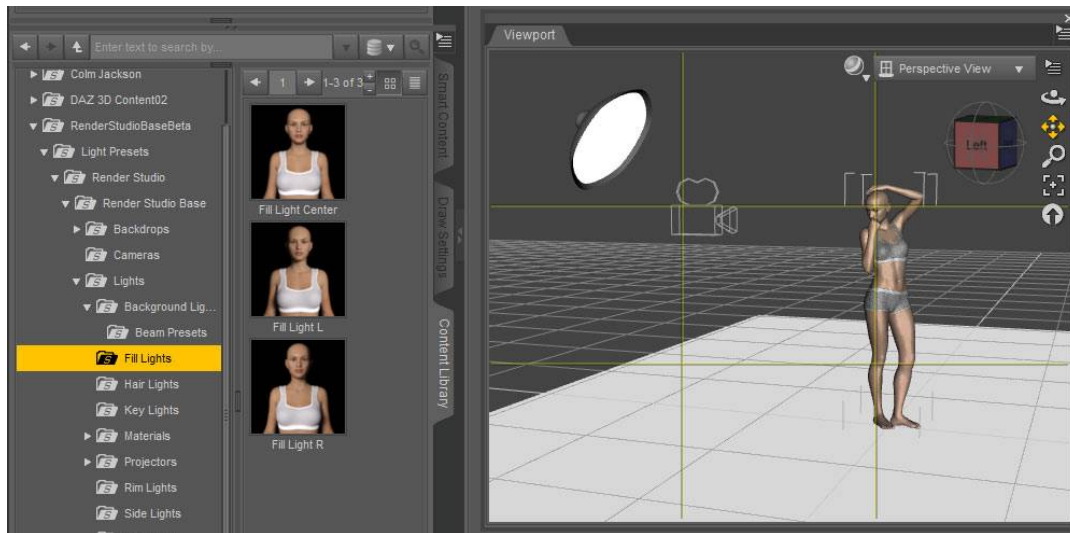
Beam Pre-sets

NOTE:

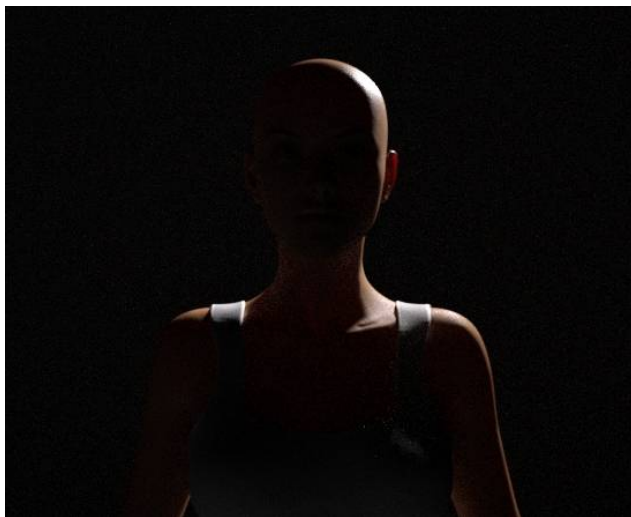
Mesh lights and photometric lights!!!

The background lights are Parametric Lights and therefore unlike the mesh lights in Render Studio are customized from the 'Lights' tab and NOT the 'Surfaces' tab.

'Fill Lights'. This contains a selection of three mesh fill lights. They are centre, left and right. These are usually used in conjunction with a key light, side light or rim light to lighten the shadows created by those lights.



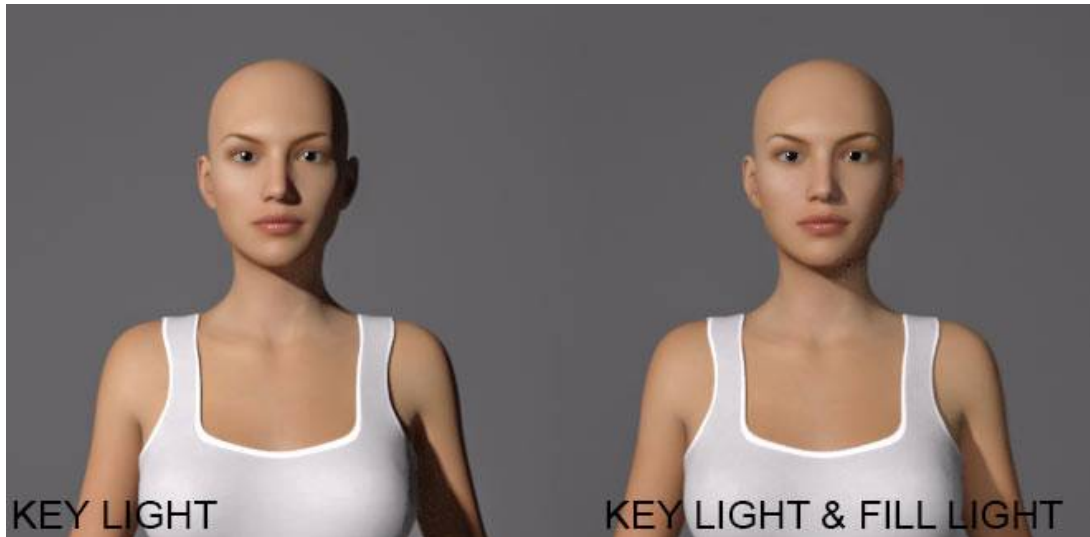
Fill Lights



Hair Lights

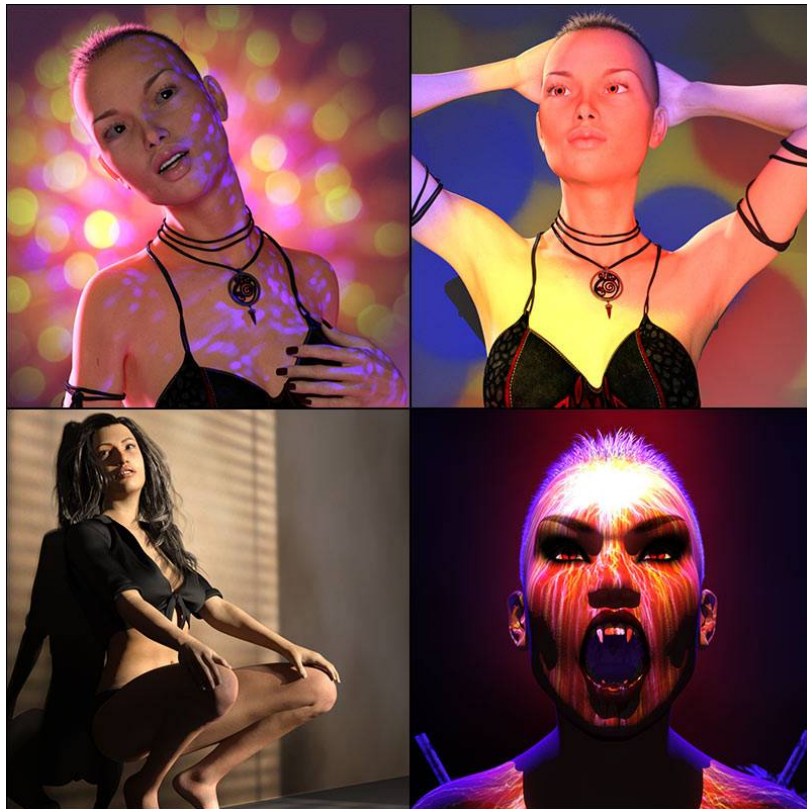
'Hair Lights'. Hair lights are similar to rim lights but are focused more onto the hair and shoulder area of the model. Note if your figure moves too far out of the default loading position the hair lights may not reach the figure. You can either move the mesh light into the correct position manually or you can select the light in the scene tab and in the Parameters tab, sub category 'Misc' you can use the 'Point At' function to point the light at the head or collar of the figure. Whichever works best. There is a left and a right hair light in this category.

'Key Lights'. This category contains four key mesh lights. The key light is the most important light as it gives the figure a 3-dimensional modelling. Because it creates shadows from an angle of usually around 45 degrees it will help to show angles, curves and detail in your figure or prop. You usually only need one key light in each scene. There are two types, hard and soft and both have left and right versions. You can use a fill light to 'fill in' the shadows created by the key light to give a softer look.



Key Lights

'Projectors'. There are three gel projection lights and if used wisely they can create stunning visual effects in your renders.



Projector Effects

The 'Projector Above' light will project gels directly down onto the floor of your scene. These will project over your model too similar to the vampire render in the above image.

The 'Projector Front' light will cast projections from high and far in your scene almost covering the entirety of the scene. These projections are soft and often colourful and add a subtle yet powerful light to your scene.

The 'Projector Wall' light is used to project images onto the background wall. The window blinds in the example image above is typical of it's use.

There are two sub-categories of materials for the projector lights. These are 'Above and Wall Projections' which are designed for use of the Above Projector and the Wall Projector. The 'Front Projection' category is for use with the Front projector and contains a selection of softer gels. However there is really not reason why you can not experiment with using any on the gels on any projector. That's just part of the fun...!



Back Rim Light 2 (PM) and Fill Light Center(M)

'Rim Lights'. There are ten Rim photometric lights to select from. These vary from hard to soft and are positioned left, right and behind. There are also two mesh rim lights to be found in the 'Mesh Lights' category. These lights are prefixed with the letter 'M'. It is important not to confuse them with the rest of the selection as different material sets will apply to these lights.

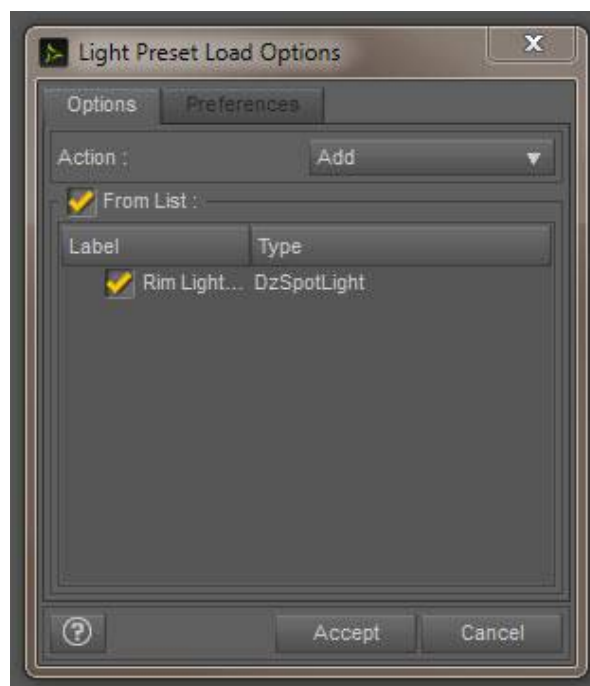
There are a large selection of colours for the photometric rim lights in the Materials sub-category. The Mesh Rim Lights can be coloured using the mesh lights materials in the main Materials sub-category under 'Lights'.

NOTE:

Use the Ctrl key when loading extra photometric lights!!!

It is very important to note that when loading lights (like the rim lights) that are photometric that you should hold down the control key when loading the light. If you have another photometric light or a projector light in the scene it may remove it and replace it with the newly selected one. If this happens you can simply undo the last procedure and restore the lights to the way they were.

Here is the dialogue box that pops up when you hold down (import) the 'ctrl' key. Just check the boxes as shown and click 'Accept' and the new light will load and your previous photometric lights will remain the scene.



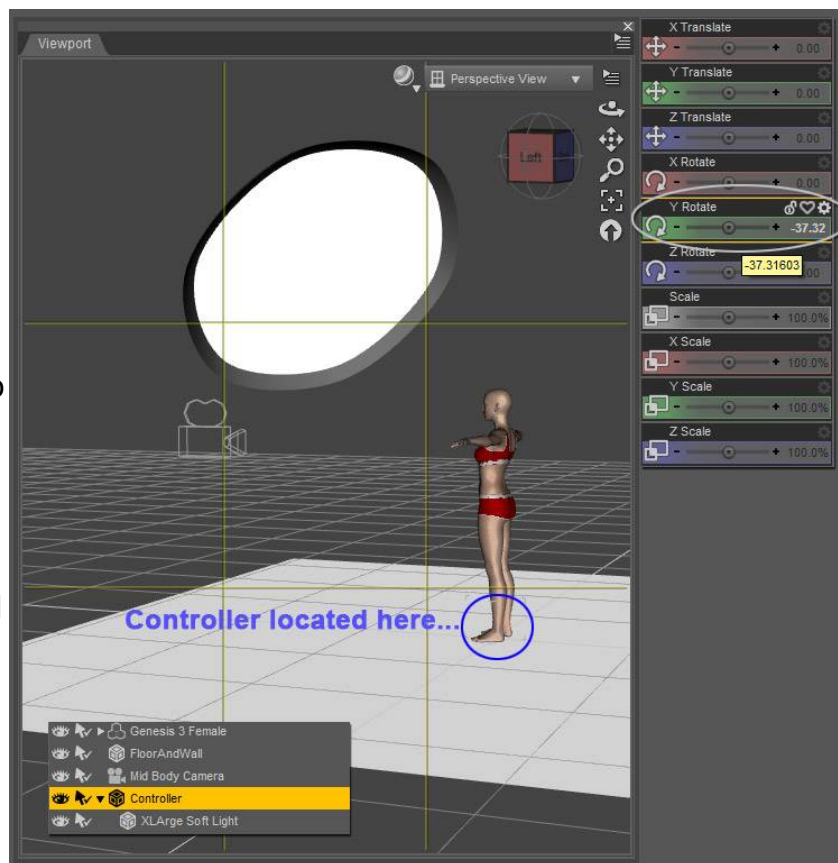
Import Parametric Light



Side Lights

'Side Lights'. There are two side lights in the mesh light category. They can be used to great effect like shown in the example where both side lights have been used. Each with a separate contrasting colour and an additional rim light on the figures right to add depth. They can also be used as a single light source to add great drama. Especially with a dark coloured background.

'Soft Lights' contains two mesh light pre-sets that when loaded also loads a controller prop called 'Controller'. The light is automatically parented to this controller prop. When positioning the light you must select and the 'Controller' in the scene tab. This is done by opening the 'Parameters' tab and dialling the Y Rotate dial to move the light around the scene 360 degrees. You can use the other translate and rotate dials for positioning and for more precision or customizing you can move and rotate the light itself.



Controller Prop



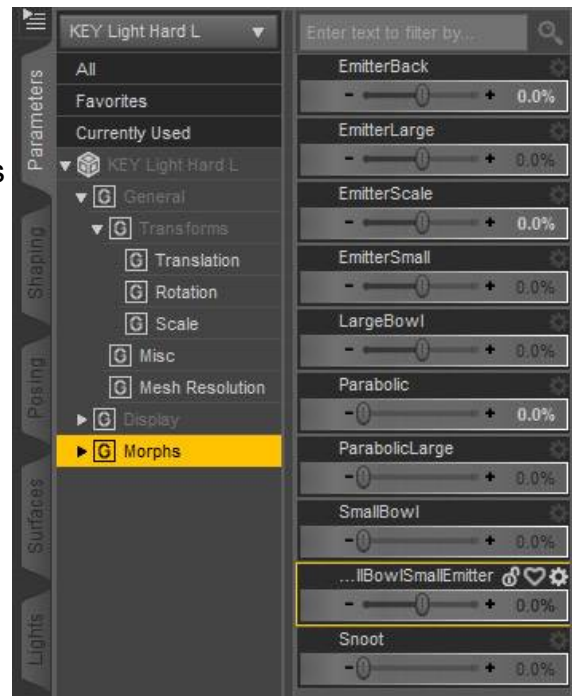
Specular Light

'Specular Light'. The specular light is used to bring out specularity in the eyes, lips and anything else that needs it. Although the specular light loads pointing at the head it is best to use the 'Point At' function to point it at the head or one of the eyes. It is also advised to move the light to the side after pointing to avoid pins of light directly in the centre of the cornea. This can look unnatural.

'Mesh Lights'. Almost all of the mesh lights in Render Studio come with a full compliment of morph targets that are accessible from the 'Shaping' tab. These morphs can be mixed and matched to provide a vast array of sizes and styles from a huge soft light to a tiny snoot light the size of a dime.

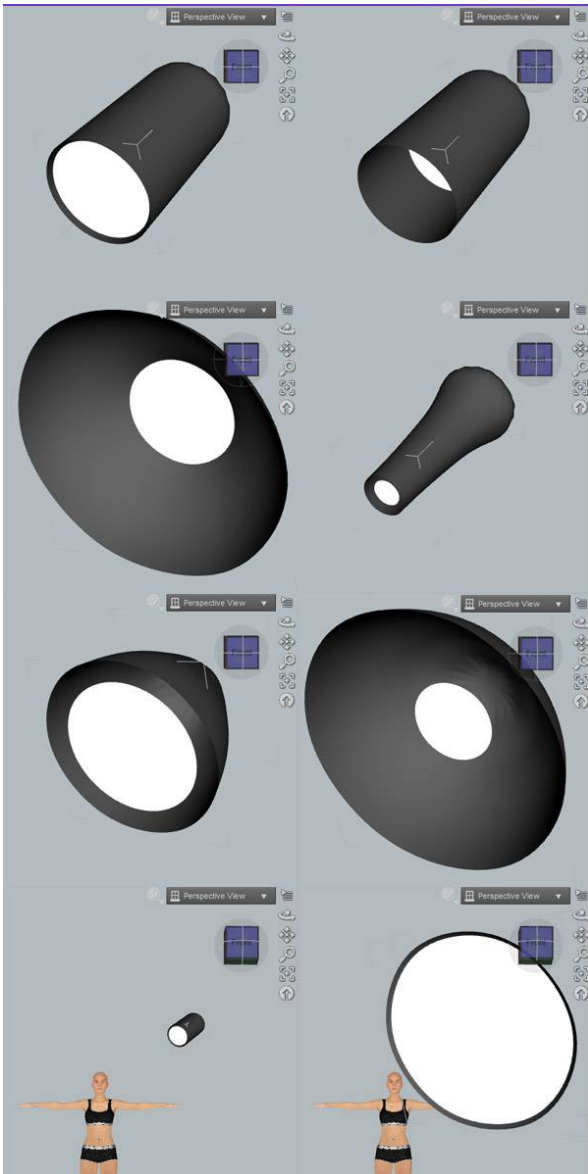
NOTE:
*Mesh lights.
 Light intensity changes with size of emitter.*

It is important to note that the intensity of the light changes with the size of the emitter. More about this later.



Morph Panel

In this illustration you can see just a few of the possibilities using the morph targets on the mesh lights. The lower images show the scale difference using the morphs, More scale can be had by using the Scale dial in the Parameters tab.



Morph Targets In Use

'Hide-Show Mesh Lights'. In the Utilities category of Render Studio there are two files to hide and show the mesh lights so that they do not show in your renders. To use these make sure that you have the light selected in the Scene panel and also in the surface tab.

Select light and on Surface tab select Casing and Emitter
HIDE

Select light and on Surface tab select Casing and Emitter
SHOW

Pre-Set Scenes.

There are five pre-set scenes included in Render Studio. These will load a complete scene derived from some of my promotional renders. All you need to do is to load a figure of your choice into the scene, clothe, pose and render. These scenes may also help you understand the basic principles of Render Studio. That in some cases you actually only need one light to create a great image and to other scenes were you may want to use many lights.

Render Settings.

There are five different render settings included. These range from 'Draft' which is a quick and dirty setting that I use all the time for test renders. Especially when I am in Nvidia screen mode and I can see the changes almost instantly. There are three settings ranging from low quality to high quality. If you want the best quality that I use then you should use the 'Ultra' settings. Bear in mind that if you do not have a very powerful computer and graphics card that the render times are extremely long. Especially with hair. Some of my renders at this setting have taken 15 hours.

There is also an additional 'Bloom' setting that will render your highlights with a soft glow. This can be applied to any render setting as it will only set up the Bloom filter at a threshold of 7k. Additionally there is a 'Bloom Off' setting for turning it off.

Important things to remember.

'Background materials'. When loading the background materials there are certain things you must do. You must have the background prop selected in the Scene tab and you must also select the corresponding material group in the Surfaces tab. When using the Infinity cove prop make sure to have it selected in the scene tab and the 'Cove' material selected in the Surfaces tab.

'Projector Materials'. The projectors have a child object called 'Gobo' in the Scene tab. This is what the textures/materials are loaded onto in the surfaces tab. Not the projector light.

'Background Lights'. The background lights are parented to a controller prop. Select this prop in the Scene tab and use the 'Arc Rotate' dial in transforms to move it's position. To change the beam shape select the background light in the scene before using the files.

'Soft Lights'. The 'Soft Lights' in the Mesh Light category are parented to a controller prop. Select this and use the dials in the transforms to move the light.

'Mesh Light Materials'. Changing the materials on the mesh lights you need to select the light in the scene tab and the Emitter material in surfaces.

'Hide/Show Mesh Lights'. To hide/show the mesh lights in the scene use the files in the Utilities folder. Make sure that the Casing and the Emitter are both selected in surfaces.

'Specular Light'. The specular light needs the 'Point At' function set manually to either the figures head or one of the eyes. It's best moved away from the centre of the scene (left or right) in order to not have bright white dots in the middle of the iris.

'Light Intensity'. The intensity of each light should always be adjusted when necessary as the default settings in Render Studio are only an approximation of the intensity that you may require in your scene. When using mesh lights please adjust the 'Luminance'. Or when the property is visible adjust the Luminous Efficacy slider too. Please note that large increments may be necessary such as adding or subtracting one or more zeros from the the total amount of lumens. When adjusting the intensity of Photometric lights such as rim lights, background lights and projectors please use the Luminous Flux slider.

That about wraps it up for 'All About Render Studio'.

Check out my Facebook page were I give you tips on using Render Studio and all my forthcoming products at Daz., Look out for those new products too. I have many planned.

<https://www.facebook.com/colmjackson3d>

I sincerely hope you enjoy using Render Studio and I would like to thank Syyd Raven and Eric Van Dyke for pushing me to start using Daz Studio. Also Kat Briggs for pointing me in the right direction with lots of tutorials.

I would also like to thank Suze, my tester for making sure that this product came to you in the best possible condition.

Have fun rendering.

A handwritten signature in black ink that reads "Colm". The letters are cursive and fluid, with a large 'C' and 'l'.