

Photo Studio - Point and Shoot 2 User Guide

Photo Studio - Point and Shoot 2 is an area light based set of lights for use in both DAZ Studio and LuxRender. These lights are designed to mimic the feel of real-world photographic lights as simply as possible. They are designed to give you superior results in a simple and easy to use format. Hopefully, this guide will help you get used to how these light work and make it easier for you to understand them.

Area Light Shader

An Area Light is actually an object that has been turned into a light source. The advantage of an Area Light is that a shaped object can create a much more realistic light source than a standard abstract light in either DAZ Studio or LuxRender. One of the disadvantages is that in DAZ Studio nothing shows up in the preview window to show you how the light sets you've set up will look. The only way to see what your lights will look like is to render your scene. Also, since they aren't seen as lights by DAZ Studio, they don't show up in the View/Camera list so that you can't use the 'look through' feature to pose an Area Light in DS. Another difference is that all adjustments to the settings of an Area Light are done on the Surfaces tab instead of the Parameters or Lighting tabs.

Area Light - Headlight Blocker

Since DAZ Studio doesn't see an Area Light as an actual light source it requires a special object called a headlight blocker to defeat the default lighting in DAZ Studio. Each light set will load up with its own headlight blocker but all you need is one single headlight blocker per scene. If you load up multiple light sets, or add in a single light(s) from Photo Studio – Point and Shoot, you can simply delete the extra headlight blockers that get created.

LuxRender

Photo Studio – Point and Shoot 2 uses the Luxus plugin to link DAZ Studio with LuxRender by adding extra material settings specific to LuxRender to the lights and props in this set. If you don't use LuxRender or the Luxus plugin, these extra setting will have no effect on the DAZ Studio sections of these lights and props. If you do have Luxus/LuxRender the light sets will give you the same results (render engine differences aside) in either render engine. All of the light, props, materials and settings have both DAZ Studio and LuxRender settings (except those marked as DAZ Studio only)

Light Sets

Photo Studio – Point and Shoot 2 is designed around the concept of combining several area lights together into one single 'figure'. The advantage of doing this is that you can move all the lights at once by applying a 'pose' and that you can adjust settings like intensity or light color on all of the lights all at the same time by applying a 'material'. The basic difference between these lights and a regular set of DAZ Studio lights is that they are designed to create one type or style of light, while the Point and Shoot 2 light set is designed so that you can turn one set of lights into any type or style of lighting you require.

Most of the light set's 'figure' is actually invisible making it hard for some people to visualize. To help with this I have made the figures bones visible in the preview window. I think this makes the light set figure more visually appealing and easier to understand. When rendered, these bones are completely invisible. There is also a central target object included at the junction of the three arms if you need it. By default it is invisible, but you can change that by adjusting the opacity setting of the 'target' on the Surfaces tab. Doing this will make the target surface visible in both the preview window and in your renders, so make sure you turn the opacity back to zero if you don't want to see it in your renders. **TIP:** The whole concept of a set of lights as a figure is easier to understand when you see it in action than it is to explain in words. Trust me, I've been trying to do this for years and as usual, one set of pictures is worth a few thousand words. On the Photo Studio – Point and Shoot 2 product page is a video that helps you visually see the light figure in action. I also highly recommend loading them up into a scene and just playing with moving them around, test rendering as you go.

Moving the Lights

The structure of the figure is that each of the three lights in the figure is attached to its own 'arm'. The three arms are all joined together at the center point of the light figure. Each arm can be moved up/down or side/side (with a slider on the parameters tab) moving the light around the center point while the surface of the light remains facing towards the center. There is also a zoom in/out option allowing you to move the light closer or further away from your scene. This can be very helpful if your scenery is interfering with your light's line of sight, or if you want to increase/decrease the width of a spotlight's beam. At the far end of each arm is a 'hand' bone that the area light is actually attached to. Using the 'Tilt' sliders allows you to change the facing of the light while still maintaining the lights physical position relative to the rest of the scene.

Light Set (with Helpers)

Photo Studio – Point and Shoot 2 has two light set figures, one basic set and one that comes with 'helpers'. These are actually dummy DAZ Studio Spotlights parented to each of the three lights. This allows you to use the 'look through' feature that is built into DAZ Studio. Simply select the desired light in the view pull down menu to look at your scene from the location of the light. When you change the position of the light (on the parameters tab or with a pose or script) your view will change with it. **TIP:** If you are using the look through feature of the light helpers you must use the movement dials on the parameters tab and not the camera controls. If you use the camera controls you will only be moving the dummy light, not the actual light itself. This is completely different from how the 'helpers' work in Photo Studio – Point and Shoot 1. This is an unfortunate but necessary change.

Geometry Switching

To add to this versatility, you can also change each of the 3 lights into any one of 18 different real world based models (floodlight, spotlight etc.). To do this you select the base of the Photo Studio – Point and Shoot 2 figure and then select the misc. section on the parameters tab. Here you will see that each light has its own geometry option. If you select 'default shape' it actually gives you no light model, effectively removing that light from the scene. Changing back to one of the other 18 light models will bring that light back into your scene and any changes you had made to the light will still be retained.

Light Setups

These presets are designed to total change the position and style of lighting created by the basic light set figure. Each preset's thumbnail image is an actual render to help give you a feel for how the preset will affect your scene. In most of these presets, Light 1 is the main (Key) light, Light 2 is secondary (Fill) light, and Light 3 is set up as a back light.

2pt Light Setups

These presets are meant to recreate the Light Sets that came with in Photo Studio – Point and Shoot 1. They only use Light 1 and Light 2. Light 3 is turned off but can be used and repositioned if you need it.

3rd Light Options

These presets allow you to quickly change the position of the 3rd light. You can set it up as a back light in various locations, or as a background light, that will help light the scenery behind the center of your scene, or to add light coming from the front of your scene. These are just a few examples of what you can do to change or individually 'flavor' your unique scenes.

HQ vs. Simple Light Setups

Some of the light sets have two versions, a HQ and a Simple Set. The HQ sets, while giving you very good light, can give you very dirty results out of the box, and will require having the light's Sample Rate (Quality) set to a much higher value (increasing render times) than with the other light sets to get good final quality results. The Simple sets use different lights that will give you a cleaner look and quicker render times.

Poses

While the Light Setup presets change everything about the Light Set, the poses only change the physical positioning of the lights themselves. They will not change the intensity (or any other settings) of a light, nor will it change the lights geometry as the setups will.

Individual Light Movement

No matter where your light is positioned, these scripts will allow you to 'nudge' the position of each light either up and down, or side to side by a set amount. These can be very helpful if one of the preset setups is close to but not quite what your unique scene needs. **TIP:** These scripts can be very useful when you are using the 'with helpers' set and are using the 'look through' feature.

Props and Cameras

Barndoors

Barndoors allow you to direct and control the direction of the cast light. You can adjust the position of each barndoor on the parameters tab. You can also adjust the length and width of each barndoor individually. Presets are also included to size the barndoors to fit most of the light models in the set. To get a barndoor in place onto a specific light: load the barndoor into your scene, uncheck the 'parent

items in place' option in the pull-down menu of the scene tab, and then parent the Barndoor prop to the light of your choice.

Cameras

The included camera presets are positioned to give the best lighting angle in regards to the target of the light sets. Feel free to move and adjust these cameras as the needs of your scene dictates, or ignore them completely and use your own cameras.

Intensity Settings

These presets allow you to change the strength of an Area Light in increments of 5%. Each preset is also labeled with the base intensity of the light. With how these lights are setup, moving them in or out will also affect how bright/dark they will appear in your scene. Moving them closer will increase their intensity while backing them up will lessen their effect. Basically you gain/loss about 5% in intensity for every 10% a light is moved in or out. This percentage changes greatly if you decrease the distance to less than 50%. Also changing a light's geometry can affect its relative intensity. **TIP:** In general you want to find the point where the intensity of your primary light is right on the edge of being too bright (giving you areas of blown out white highlights).

Light Colors (DAZ Studio Only)

These presets allow you to quickly change the color of each light in your scene. These presets only change the color of the light in DAZ Studio. Changing the color of a light in LuxRender should be done from within the LuxRender interface, where you can automatically see the effect of the color changes while you are rendering.

Quality Settings (DAZ Studio Only)

These presets allow you to increase the quality of the gradient in-between light and dark used by DAZ Studio. If the edges of your shadows look blotchy, you will need to increase your Sample Rate to compensate for that, but increasing the Sample Rate will increase render times. Default sample rate is 16 on Light 1 and 8 on Lights 2 and 3. Some of the lights (ie: Octabox, Beauty Dish) do need a higher sample rate to get you good final render quality results in DAZ Studio. **TIP:** Some people automatically up the quality setting to the maximum assuming this is best, but as you up the quality you reach a point of diminishing returns while render times start to be increasingly impacted. Most of the promo renders for this product were done at 36 samples for the key light and 16 for the fill light

Shadow Intensity (DAZ Studio Only)

These presets allow you to adjust the darkness of the shadows created by the light in DAZ Studio. Dropping the Shadow Intensity below 100% (default) will lighten the shadows created by that light.

Visibility (DAZ Studio Only)

These presets allow you to make one of the lights visible or invisible to the camera, while they are still casting light into your scene. Because of differences in the LuxRender engine these presets are designed only for DAZ Studio.

Background MATs

The included material presets will work on any of the three background props. The paper roll presets will affect all of the surfaces while the wall and floor presets will only affect these specific surfaces.

Light Model Types

There are 18 different light models available in Photo Studio – Point and Shoot 2. These light models can be broken down into two groups based on how they are set up in DAZ Studio and LuxRender: single lights and reflector lights.

Single lights have one single surface that acts as a light. Softboxes and Striplights are single lights. The reflector lights are slightly different. They have the same single surface that acts as a light, but they also have an additional reflector surface that is treated differently in either DAZ Studio or LuxRender. In LuxRender the reflector is just that, a reflector that bounces and redirects the light. In DAZ Studio the reflector is actually a secondary light source. Spotlights and Floodlights, Beautydish, Umbrellas and Octaboxes are reflector based lights.

Spotlights and Floodlights

These are your basic photographic studio lights. They give bright focused light and heavy dark shadows. A Spotlight has a more focused (narrower) beam than a floodlight. Each light comes in three sizes.

Softbox and Striplights

These are physically much bigger lights than either a Floodlight or Spotlight and are designed to light up a much wider area, creating much softer shadows. Generally a Softbox is more square shaped than the long/narrow Striplights. There are four Softboxes and three Striplights.

Beautydish and Octabox

These are large reflector based lights that give you results somewhat in between what you can get with either a Spotlight or a Softbox. The main difference between the Beautydish and Octabox is the size of the reflector. These lights require higher sample rates to clean up the very diffuse shadows they cast.

Umbrellas

There are two different types of Umbrella. The standard Umbrella casts its light through the umbrella to give you an effect similar to a Softbox. A Reflecting Umbrella bounces its light off the surface of Umbrella before casting it into the scene creating an effect similar to an Octabox.

Intensity Settings Chart

%	DAZ Studio		LuxRender
	Light	Reflector	Power
5	750	125	25
10	1500	250	50
15	2250	375	75
20	3000	500	100
25	3750	625	125
30	4500	750	150
35	5250	875	175
40	6000	1000	200
45	6750	1125	225
50	7500	1250	250
55	8250	1375	275
60	9000	1500	300
65	9750	1625	325
70	10500	1750	350
75	11250	1875	375
80	12000	2000	400
85	12750	2125	425
90	13500	2250	450
95	14250	2375	475
100	15000	2500	500

%	DAZ Studio		LuxRender
	Light	Reflector	Power
105	15750	2625	525
110	16500	2750	550
115	17250	2875	575
120	18000	3000	600
125	18750	3125	625
130	19500	3250	650
135	20250	3375	675
140	21000	3500	700
145	21750	3625	725
150	22500	3750	750
155	23250	3875	775
160	24000	4000	800
165	24750	4125	825
170	25500	4250	850
175	26250	4375	875
180	27000	4500	900
185	27750	4625	925
190	28500	4750	950
195	29250	4875	975
200	30000	5000	1000