

# IDG Easy Iray Studio User Guide

---

## Usage Notes:

We highly recommend that to get the most out of this product, and to make your experience the easiest, that you don't use Smart Content. Instead switch to File View and View as Tree. This will make everything more clear. While these lights are very easy to use, their structure isn't the same as your standard set of lights. We also highly recommend that if you are not sure just what is going to happen if you do something, that you give it a try and see what happens. You'll never know if you don't give it a try. Also don't feel that you are locked into things, especially when it comes to presets like the Render Quality settings. These are suggested settings. If you are happy with the results you get using the draft quality setting, don't feel obligated to use a higher setting just because it is there.

## Easy Iray Studio Overview

The idea behind the IDG Easy Iray Studio is to give you a light set that is both simple and easy to use, while also being incredibly versatile at the same time. The goal is to be easy enough for a new user to use and grow into, while still giving the advanced user some powerful tools. At its heart, all you really need to do is load up a set of lights and apply one of the premade scene presets to those lights and hit the render button. It is really that simple.

## The Lights – a walk through

While these lights have been designed to be very easy to use, they are different in design than just about any other light set. If you are familiar with any of our Photo Studio or Phot Studio – Point and Shoot products, you will find these lights to be very similar to those you are already familiar with. If not, it is a bit easier for me to show you these lights than it is to try to explain it to you. So start up Daz Studio. In Light Presets/IG Lights/IDG Easy Iray there are 4 items. The first one is a link to the guide you are reading right now. The Paper roll is a background prop. The other two items are the actual light sets themselves. Load up the Easy Iray Spotlight set as this set is slightly easier to visualize. In the scene tab, select the set of lights and zoom your view point out until you can see the three lights that have been loaded into your scene. What you are seeing is actually a figure that includes these lights into one single unit. If you open up the light set figure and select one of the Arm bones, you will be better able to visually see the bones that hold the light set together. Select Arm 1. In the Parameters tab you will see controls to move the arm, and the light connected to the end of it, up and down, side to side, or in-out. With Arm 1 still selected, choose one of the presets in the Premade Light Setups folder. You should see all the lights move around in the scene as you continue to choose different presets. While you see the lights moving around, the premade setups are also adjusting the intensity settings of the lights themselves. With the base of the figure selected, if you look at the parameters tab, you will see that the controls for each of the lights have been added to the base of the figure itself, making adjusting the lights easier. This is the heart of the Easy Iray Studio lights: a single figure that can be moved, posed and adjusted all with one single click, giving you one single set of lights that can be posed into an infinite set of lights.

## Spot lights and Point lights

There are two separate light sets in IDG Easy Iray Studio, one that uses Spot lights, and one that uses Point lights. Each set has its own unique characteristics or 'feel'. Ultimately the choice between each set of lights you want to use depends on your own individual style and the needs of your scene. Because of the design of Daz Studio, the Spot light set is a little easier to see in the preview viewport. Point lights don't really create very much light in the preview window. To compensate for this we have added a headlight blocker to the point light set so that you can still see what you are doing when you load up the set of lights. Otherwise your scene would turn mostly black with the amount of preview light the point light casts. Besides that, the Spot lights set has a tighter, more focused set of lights, while the Point light set gives you more overall ambient lighting. The spot lights will also render a little quicker but also a little dirtier than the Point light set. Adjusting the Render Quality setting higher on the Spot lights will compensate for this, but the increase in render time this requires pretty much equals out the render times between the two sets. Each of the light sets use different settings to help simulate one of several different types of photographic studio lights, making not only each light set different, but each premade setup different from each other.

## Interchangeability

All of the presets have been designed to work with either set of lights. Each of the premade setups or intensity setting etc., will work on whichever set of lights you have selected.

## Premade Setups

The premade setups allow one to quickly and easily adjust both the position and light settings of all three lights all at the same time, giving you the ability to re-create several types or styles of real world photo studio lighting with just one click. While we only used the built-in spot and point lights in these sets we were able to simulate several different types of real-world photographic lights by adjusting the setting of each light individually in the premade scenes.

## Paper Roll Prop and Materials

The material library gives you a whole host of available options, and it is also interchangeable with the paper roll and the materials from any of the Photo Studio or Photo Studio – Point and Shoot products. If you are using any of the materials from Photo Studio or Point and Shoot that were set up to be rendered in 3Delight, it is recommended to decrease the bump setting by about half for rendering in Iray.

## Render Quality Presets

These presets change the global render settings. Their main effect is to change the quality in the shadows in your scene. The lower the quality, the faster the render time but the dirtier the resulting render will be. In general, the Spot light set needs a higher quality setting to render cleanly. Ultimately this is scene specific and somewhat subjective.

## Advanced Settings

All of these settings are designed to help give you better control over your lights. All of these presets are optional and generally require that you have a good familiarity working with these lights before using them.

### Individual Light Movement

While you can easily move the lights wherever you want, these presets allow you to quickly adjust each light based on each light's current location.

#### Design Note:

One thing you need to be careful of is accidentally moving the actual lights off the position they are parented to. While the movement parameters are all locked down to prevent this, it is possible to move the Spotlights by using the look-through aspect built into Spotlights and the built-in camera controls

### Intensities & Lights

These presets allow you to set the type of light you are using while also adjusting the intensity of the light at the same time. While we would have liked to have done one simple set of universal presets the actual design of the built-in Daz Studio lights didn't make this possible. Technically, the relative intensity of the spot lights greatly varies with the spread angle you have selected, while the geometry size coupled with the IES file affect the point light intensity. So to (hopefully) simplify things we have included a set of presets based on the type of light and the intensity you want. Unfortunately, another part of the built-in design of the lights is that you can't quickly see just what type of light each spot or point light is trying to simulate. To help you identify what each light is representing, there are two tables below listing just what light is used in each preset setup and the technical data on each simulated light design.

#### Design Note:

Snoots and Beauty Dishes are actually type specific. Snoots are only available on the Spot light set while Beauty Dishes are only on the Point light sets. To fit with the global nature of the rest of the presets, these presets load up the closest equivalent type of light. (Spot lights for Snoots and Soft boxes for Beauty dishes)

### Light Color Temps and White Balance Presets

Color Temperatures and White Balance can add that extra step of realism to your renders. It is a highly advanced and wholly optional set of adjustments. These settings require you to have a good working understanding of light color theory and white balancing. Fully explaining this would take more space than this whole guide but I will try to give you a short description of the theory here. Basically light color theory deals with the concept that light has a spectral color to it based on its temperature, notated in Kelvin degrees. Lower temperatures are redder, while higher temperatures are blue. Generally, this kind of goes against our perceived notion that blue light equals cold while red is warm. White balance is the concept that both digital camera sensors and our own eyes can adjust to, and compensate for, the prevailing light conditions. That is why you can sit in a room filled with incandescent lights that create an orange tinted light and not even notice the color cast on everything around you. Your eyes and your

mind automatically adjust themselves based on your location. Most digital camera will do the same thing. Unfortunately Daz Studio doesn't make this kind of automatic conversion for you need to do it manually for each scene.

In Daz Studio the White point is set to 6500K, which is the industry standard white point your monitor is calibrated to, while in the real world the white point is closer to 5500K. Most of the light color data you will find on the internet is based on the real world white point. The data in the presets you have here has been adjusted to compensate for this difference in white points. In a real photo studio the lights we are trying to simulate here would temp at 5000-5500K with a white point about the same, but there can be a lot of variation in temps and white points.

## **Glossary of Photographic Light Types**

### **Spotlight**

This is the most basic type of photographic light. They give bright, focused light, and heavy, dark shadows.

### **Floodlight**

Flood lights are similar to Spot lights but they usually have a broader, wider arc.

### **Softbox**

Soft boxes usually involve having their light cast through a diffusing material softening the light they cast. While we haven't exactly duplicated that here, what you do have is a simulated softbox that will give you softer light than you would get with a Spot or Flood light.

### **Octabox**

The octabox is a variant of a soft box. It is a fairly large light source, very diffuse, that produces extremely soft light and very flattering shadows.

### **Beauty dish**

The Beauty dish is somewhat of a cross between a soft and a direct light. It provides a beam of reflected light, with good modeling to the shadows.

### **Snoot**

A Snoot is actually an attachment added to a spotlight that focuses the light into a very tight beam.

### **IES File**

While not technically a type of light an IES file allows you to simulate the effect of different types of light case by different styles and shapes of lamps. In this case we can take a point light that should cast light equally in all directions and turn it into a directional beam of light.

## Premade Light Setup Chart

|    | Spotlight<br>1 | Spotlight<br>2 | Spotlight<br>3 |    | Pointlight<br>1 | Pointlight<br>2 | Pointlight<br>3 |    |
|----|----------------|----------------|----------------|----|-----------------|-----------------|-----------------|----|
| 1  | Softbox        | Softbox        | Snoot          | 1  | Beautydish      | Softbox         | Floodlight      | 1  |
| 2  | Softbox        | Softbox        | Octabox        | 2  | Beautydish      | Softbox         | Octabox         | 2  |
| 3  | Floodlight     | Spotlight      | OFF            | 3  | Floodlight      | Spotlight       | OFF             | 3  |
| 4  | Floodlight     | Floodlight     | OFF            | 4  | Floodlight      | Floodlight      | OFF             | 4  |
| 5  | Floodlight     | Floodlight     | Softbox        | 5  | Floodlight      | Floodlight      | Softbox         | 5  |
| 6  | Octabox        | Softbox        | Snoot          | 6  | Octabox         | Beautydish      | Spotlight       | 6  |
| 7  | Floodlight     | Octabox        | Octabox        | 7  | Floodlight      | Octabox         | Octabox         | 7  |
| 8  | Floodlight     | Softbox        | Spotlight      | 8  | Floodlight      | Beautydish      | Spotlight       | 8  |
| 9  | Spotlight      | Softbox        | OFF            | 9  | Spotlight       | Softbox         | OFF             | 9  |
| 10 | Spotlight      | Softbox        | OFF            | 10 | Spotlight       | Softbox         | OFF             | 10 |
| 11 | Spotlight      | Octabox        | Softbox        | 11 | Spotlight       | Octabox         | Softbox         | 11 |
| 12 | Floodlight     | Softbox        | OFF            | 12 | Floodlight      | Softbox         | OFF             | 12 |
| 13 | Floodlight     | Octabox        | OFF            | 13 | Floodlight      | Octabox         | OFF             | 13 |
| 14 | Softbox        | Softbox        | Spotlight      | 14 | Beautydish      | Softbox         | Spotlight       | 14 |
| 15 | Floodlight     | Octabox        | OFF            | 15 | Floodlight      | Octabox         | OFF             | 15 |
| 16 | Softbox        | Floodlight     | OFF            | 16 | Softbox         | Floodlight      | OFF             | 16 |
| 17 | Octabox        | Softbox        | OFF            | 17 | Octabox         | Beautydish      | OFF             | 17 |
| 18 | Octabox        | Softbox        | Softbox        | 18 | Octabox         | Beautydish      | Beautydish      | 18 |
| 19 | Floodlight     | Softbox        | Snoot          | 19 | Floodlight      | Softbox         | Spotlight       | 19 |
| 20 | Octabox        | Softbox        | Snoot          | 20 | Octabox         | Beautydish      | Spotlight       | 20 |
| 21 | Octabox        | Softbox        | Snoot          | 21 | Octabox         | Beautydish      | Spotlight       | 21 |

## Light Type Data Chart

|            | Geometry<br>Size | Spotlight<br>Spread Angle | Pointlight IES File |
|------------|------------------|---------------------------|---------------------|
| Spotlight  | 10x10            | 60°                       | IES MH Spotlight    |
| Floodlight | 15x15            | 90°                       | IES MH Floodlight   |
| Softbox    | 60x60            | 120°                      | IES MH Softbox      |
| Octabox    | 120x120          | 120°                      | IES MH Softbox      |
| Beautydish | 120x120          | n/a                       | IES MH Beautydish   |
| Snoot      | 10x10            | 30°                       | n/a                 |