

IDG Easy Iray Studio 2 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, give it a try and see what happens. Press the button and see what happens. 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 2 Overview

The idea behind IDG Easy Iray Studio 2 is to build on the basics that was IDG Easy Iray Studio: a light set that is both simple and easy to use, while also being incredibly versatile at the same time. We wanted to build on that base while adding more tools and options to your lighting tool set. 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 one of the premade starter light scenes 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 Photo 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 and go to: Light Presets/IG Lights/IDG Easy Iray 2. The first item is a link to the guide you are reading right now. The other 74 items are ready-to-go light sets. Load up DS Default Light Scene 03 as this is one of the sets that it is the easiest to visualize with. In the scene tab, select the set of lights and zoom your camera view point out until you can see the three lights that have been loaded into your scene. What you are seeing is actually a three-armed figure that includes a light attached to each arm as 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 pose presets in Light Presets/IG Lights/IDG Easy Iray 2/ 2 Light Sets/Poses folder. You should see all the lights move around in the scene as you continue to choose different presets. This is the heart of the Easy Iray Studio lights: a single figure that can be moved, posed all with one single click, giving you one single set of lights that can be posed into an infinite set of lights.

Differences between IDG Easy Iray Studio & IDG Easy Iray Studio 2

The first Easy Iray was designed to be as simple and as one-click as it was possible to make it. Easy Iray Studio 2 is meant to be more versatile but to give it that versatility we lost a little bit of the one-click simplicity. Basically, the difference is that with Easy Iray 1 you loaded up a light set and then you could change it into something completely different by applying one simple pose/material preset. Easy Iray 2 gives you a lot more light options so the one-click one-size-fits-all option doesn't work. While both sets use Daz Studio Default Lights, the light intensity scale for them are very different. All the Lights in Easy Iray 2 have been calibrated so that each light have the same relative brightness as every other light in the set making it easier to get predictable results while switching to a different type of light.

Daz Studio Default lights and Emissive lights

There are two different types of lights in IDG Easy Iray Studio 2, the default Daz Studio Lights (Point and Spotlights) and Emissive Lights. Emissive lights are material zones attached to mesh/geometry. The size, shape and orientation of the mesh help determine the characteristics of the light it casts allowing you to get a bit more realism than you can get with standard Daz Studio Default Lights. There are two sets of Emissive Lights, one is based on the Lights that came in IDG Portrait Studio 1 & 2, while the second set is based on the lights from IDG Impact Lighting. Each Emissive Light uses a High Dynamic Range Image and an IES Profile to create that extra dimension of realism. The Daz Studio Default Lights use a combination of different settings (listed in the table at the end of this guide) to help them recreate different types of photography lights. All of the Lights in Easy Iray Studio 2 have been designed to be as interchangeable as possible so you can mix and match between Emissive and Default Lights as you choose.

Premade Starter Light Scenes

There are 74 ready-to-render light sets in Easy Iray Studio 2. Technically it's actually two sets of 37, one set up with the primary light coming from the right, the other from the left. The thumbnails for each scene should give you some idea just what results you can get with each starter scene. The ultimate idea is that you can pretty much just drop them into your scene and hit render and get a pretty good result and then with a little adjustment you can quickly get amazing results. The premade scenes are mixed into 3 sets: those using just default lights, those with just emissive lights and those that mix default and emissive lights together. These scenes are meant to be exactly what they say: Starter scenes. If they give you just what you want out of the box great, but don't be afraid to move, modify and adjust anything or everything to help get the results you want. Ultimately no premade scene is ever going to be perfect. Lighting depends on the position and pose of three elements: your subject, your lights and your camera. All three elements must be considered in tandem.

Light Sets and Poses

While each starter scene is optimized and customized for the specific scene's exact needs, the light sets and poses are more generic in nature. These are meant as an alternate workflow to using the Starter Light scenes. While they are pretty much ready to go, these you will need to pose, adjust and customize as you go. It really comes down to what you feel most comfortable using.

Light Pointers

When using point lights or emissive lights it can be a little confusing as to what direction the light is really pointing. Plus, neither point or emissive lights have the 'look through' feature that default

spotlights have built into them. Light Pointers are dummy spotlights that can help you visualize where your lights are pointing, and let you look through them. Select the base of the light figure when loading these up.

Background Props and Materials

There are 6 Background Props provided, each with its own style and flavor. The Materials for the Corner and the Curtain are unique to themselves while the 2 Paper Rolls, Reflector and Screen all can use the same material presets. While these material presets are interchangeable you will get subtly different results from each material preset on each of the 4 props. The materials for the backdrops are interchangeable with the equivalent backdrops in IDG Impact Lighting.

Render Quality Presets

These presets change the global render settings. Their main effect is to change the grain quality in the shadows in your scene. The lower the quality, the faster the render time but the grainier 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

The Advance Settings 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.

Daz Studio and Emissive Lights

These individual lights can be used in a couple of ways. You can replace any of the lights in the Starter Scenes or Light Sets, or you can use them to build your own set of lights by loading them onto the empty Light Figure. Alternatively, the single lights can be used much like traditional lights by simply placing them wherever desired in the scene. Use whatever method works for you, whatever you're most comfortable with, whatever fits into your workflow the best.

Design Note:

To build your own light rig and attach one of the lights to the Light Figure, load the light and parent to one of the 'Light' bones (Light 1, 2 or 3). Then to make sure the light is in the right position and facing the right direction, zero (or reset) the Translate & Rotate Parameters for that light. This puts the light into the right place, and facing the right direction. Exception: When loading up one of the Daz Studio Default lights, zeroing the Z Translate will put the light in the middle of the scene and not where it needs to be. Either reset it to default or set Z Translate to 250 to set it up correctly.

Daz Studio Default and Emissive Light Intensity Presets

To apply these, select the light you want to change in your scene tab. The Default presets are designed to work interchangeably on either the Point or Spotlight. Each Daz Studio Default Light can simulate one of six different light types. Each one uses its own unique Intensity scale so you need to make sure you are using the right intensity scale. All the Emissive Lights use the same Intensity Scale making them a bit easier to use than Default Lights.

Design Note:

Make sure you have the parented Light or Emissive prop selected in your scene before applying one of these presets. This is a significant change from Easy Iray Studio 1, where you could adjust any (or all) of the 3 lights by just selecting the base of the figure and applying a preset. With a lot more options on what type each light in the set can be, that wasn't possible anymore.

Emissive Light Accessories and Materials

When loading up one of the accessories, select the light you want to apply it to in your scene tab, and it will load up the accessory parented to the light and in the correct location. These accessories are designed to modify the light created by an Emissive Light. The Floodlight Accessories will work with either of the two (Impact or PS) Emissive Floodlights. The Spotlight Accessories will work with either of the two (Impact or PS) Emissive Spotlights. The Gel Material options are for the Gel Filters but they can also be applied to the Emissive Octabox or Softbox Lights. With one of these Gels applied to an Octabox or Softbox they will be significantly brighter. The Diffuser Materials are for the Octabox or Softbox Lights but can also be applied to either Gel Filter. This will soften (and darken) the light instead of coloring the light.

Emissive Light IES Profiles

IES (Illumination Engineering Society) Profiles tell Iray about the relative intensity, direction and strength of a real-world light source instead of it needing to be calculated during rendering, giving you finer detail than you would normally get while also saving memory space and render times. The presets in this folder are meant as options for the Impact Emissive lights. To use one of these presets, select the light you want to change in your scene tab.

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, without having to adjust any of the parameter dials. Make sure you have the base of the Light Figure selected when using these presets.

Design Note:

One thing you need to be careful of is accidentally moving the actual lights off of 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. It is not suggested to use the camera cube while looking through a spotlight, but instead use the parameter dials or the individual light movement presets.

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. Simply, light color theory deals with the concept that all 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 try to do the same thing. Unfortunately, Daz Studio doesn't make this kind of automatic conversion for you, you need to do it manually for each scene.

In Daz Studio the White Point (RGB 0,0,0) 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-6000K. Most of the RGB 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 have a temperature of 5000-5500K, with a white point around 5500K-6000K, but there can be a lot of variation in temperatures and white points.

There are two sets of Light Temperature presets, one for the Daz Studio Default Lights and one for the Emissive Lights. Select the light (or lights) in the scene to apply one of these presets. The Daz Studio Default presets change the Temperature (K) setting in: Properties/Light. The Emissive presets are material presets that change the Emission Temperature (K) setting for the Light Material.

The White Point Render Presets are global adjustment, you don't need to have anything special selected in your scene to apply them. It changes the White point color in: Render Settings/Tone mapping.

Glossary of Photographic Light Types and Terms

Spotlight

This is the most basic type of photographic light. They give bright, focused light, with very sharp (sometimes unflattering) shadows.

Floodlight

Flood lights are similar to Spotlights 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. The Emissive Softbox is set up to do this while the default Point or Spotlight only simulated this effect giving you softer light than you would get with a Spot or Flood light.

Octabox

The octabox is a variant of a soft box (octagon shaped instead of square). It is a fairly large light source, very diffuse, that produces extremely soft light and very flattering soft 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 more diffused shadows.

Snoot

A Snoot is actually a Spotlight with a Snoot Filter (similar to a Top Hat Filter) applied giving it a very narrow beam. The Emissive Impact Spotlight will give you similar results.

Grid Filters

Grid Filter add a little control over the spread of the light while also slightly softening intensity of the light. They also meant to help mask the light from being directly visible to the camera (something that has a much greater effect on real-world cameras).

Top Hat and Half Top Hat Filters

Top Hats Filters focus the light into a tighter beam helping you to put light where you want it and not where you don't. Half Top Hats are similar to Top Hats, but are cut on an angle so that it restricts the light in one direction but not in the opposite direction. Rotating the light allows you to control the directionality of the light.

3 and 4 Ring Filters

Similar to Top Hats, the Ring Filters control the spread of the light but the multiple rings in the filter soften the light cast through the filter.

Barndoor Filters

Also, like Top Hats, Barndoors are a figure that allow you greater control the spread of light by allowing you to position each door individually.

Gel Filters

Gel Filters simulate putting something in front to the light to either color or soften the light.

Daz Studio Default Light Type Data Chart

Light Type	Geometry Size	Spotlight Spread Angle	Pointlight IES File
Spotlight	10x10	60°	PS- Spotlight
Floodlight	15x15	90°	PS- Floodlight
Softbox	60x60	120°	PS- Softbox
Octabox	120x120	120°	PS-Softbox
Beautydish	120x120	120°	PS- Beautydish2
Snoot	10x10	30°	PS-Snoot