IDG Impact Lighting User Guide

Intro

IDG Impact Lighting is an attempt to bring you the most realistic, the most true to life, real world lighting to your simulated 3d scene, in a quick and easy to use format. These models are representative of some of the newest and most cutting-edge lighting now being used in both photography and cinematography today. The general theme is that you can use these lights just like they would be used in the real world if you want to, but at the same time you can discard that and use them just like you can use any other 3d lights.

Exposure Levels, Stops etc.

Several of the presets in this set mention that they are +/-1 (or more) 'Stops'. That is an old photography term used to help explain how bright or dark the value of the light is. One full Stop is equal to one full level of Exposure Value (EV). In simpler terms, going down one level, halves the amount of light created, while going up one level doubles the light. The effect is cumulative so at -3 Stops the light created is 1/8 what it would be at full strength, while +3 stops creates 8 times as much light.

Impact Emissive Lights

Light Intensity

These lights have been specially tuned so while each model creates a different shape and size of light, they all are relatively equal in brightness and they all use the same exact Luminance intensity scale. Basically that means that even though the Soft LED creates light over a much wider field than a Spotlight, they both are equally bright while set to 100%

IES Profiles

An IES (Illuminating Engineering Society) Profile is a file that tells Iray the shape, size and intensity of the light created. It is quicker and more accurate than what can be generated by Iray by itself. IDG Impact gives you several IES Profile options for each type of light. The spotlight IES options are pretty self-explanatory, they either open up or tighten the beam created by the light. The Flood lights IES Profiles each have their own unique flavor that is harder to quantify.

Light Spectrum

Not all types of light are created equal. Different sources create different amounts of light across the spectrum but in our 3d simulations everything is equal. The high dynamic range images used with these lights are an attempt to bring a little of these differences to your renders. The default (weak) set is designed be used with Daz Studio's default 6500K color temp and white point but you can also use the included white point preset. The stronger set (still not as strong as it would be in the real world) may require you to adjust the white point as needed on a case by case basis. One last note, they light spectrums are based on data from the best high quality photographic lights, all with very high color rendering indexes. The average CFL or incandescent lights you're likely to find in your average home have a much lower range.

Note on the design of the models

Due to a quirk in how Daz Studio handles IES Profiles these lights needed to be constructed a bit differently than normal. Normally, I would have built a light sitting on a tripod so that the base of the figure was the base of the tripod with the bones extending up to light on top. That is the easiest, most logical way to do it. But that wouldn't work here. Right now, the directionality of an IES Profile is locked into the base of a figure. What that means is the direction of the light would only move when you moved the base of the figure. So, no matter how you turned the light at the end of the tripod the light would still be pointing in the same direction. So, these models had to be constructed a different way, from the top down, instead of from the bottom up. Generally, this works just fine. Simply move and point the light where you want it, and with the help of some creative rigging the tripod will move with you, raising and lowering, tilting or twisting as needed so the base of the tripod should stay rooted to the floor. The only problem figure is the Boom Stand. With its extending, tilting and rotating arm, I wasn't able to keep the base locked to the ground, so this needs to be done

manually. In the parameters tab, under the Tripod Controls you can raise or lower the whole base of the tripod with one single slider. Another option is, if you don't care about how the light stands look, or that they need to be fixed to the ground, there is a preset that will turn any light stand invisible allowing you freely place your lights anywhere you want them.

Light Accessories

The flood lights and spotlights have a collection of optional use parented props. They are physical filters that modify or shape the light. The Barn Doors & Top Hat focus the light. The Grids help diffuse the light slightly which is great for when you need to knock down the specular shine of a light. The 3 & 4 ring filters both focus and diffuse the light. To load up and use these props, select the light in the scene tab before loading the prop, then it will parent-in place. If you are loading them to a light on a Boom, Mini or Tiny Light Stand, have the accessory selected and then apply the correct fit-to pose preset to the prop.

Backdrop Props & Textures

The backdrops are meant to be functional two ways, both a portrait background in the render, and also as a general scenery prop. All of the backdrops load with a stand by default. When using the backgrounds strictly for render backdrops and not additionally as scene props, the stands may be deleted from the scene if it is desired to conserve polygons in the scene

There are two Reflector props, one with a posable stand and one without if you don't need that behind the scenes type element.

The texture options for the Paper Roll and Screen are interchangeable.

Starter Lighting Scenes

These are just what they say they are, starting points for lighting your scene. To create good lighting requires three things: light placement, camera placement and model placement/pose. With a premade set up I can give you two of the three, but without all three sides of the triangle you're never going to achieve great lighting. With that in mind, I can't give you a set of universally good lighting that will work in every situation, with every model pose. But what I can give you is a bunch of good starting points that can get you onto the right path. The general theme to these scenes is minimalistic, high contrast, low-key, chiaroscuro style lighting.

Accent Lights and Background Lights

There are two elements that are also missing from these sets that you might need but aren't included. Accent lights (also referred to as back or hair lights) and background lights. To use either is totally scene dependent and not every scene will require either type.

An accent light is meant to help your focus subject stand out from your background. These are placed behind your character and to the side (or above), just out of view of the camera, with the light focusing on some detail of the subject that you wish to accentuate. The intensity of accent lights is generally lower than the main focus key light so it doesn't overpower your scene. Using a filter like the barndoors, 3 or 4 ring filters or the top hats will help control and focus the light to just where you need it.

A background light is a light pointed directly at the backdrop to bring out the backdrop's colors or textures, providing a frame for the model. Not every scene needs one, and many of the Starter Scenes are designed to not light up any backdrops. Background lights are hidden from view of the camera by placing them waist height or lower behind the subject, or to the side or above the subject. Light intensities vary from the subtle to the dramatic, and the use of light filters and accessories can really help focus and mold the light exactly where it is required to best frame the subject.