Poser Lighting Tips Part 2:
IBL / HDR Lights

Introduction

This is the second in a series of tutorials on Poser lighting. The first, which uses just a single spotlight and covers soft shadows and volumetric light can be found here.

Topics Covered

Adding HDR Lights in Poser
Tweaking HDR Lighting
Altering Brightness in HDR Lights

Software / Hardware Notes

- I've created this using Poser Pro 2012, but the majority of this functionality is available in older versions of Poser Pro / Poser standard version.
- I'm using a 3.3ghz hex-core (AMD, not Intel, I hasten to add!) with 12GB of RAM. Ramping up some of the settings described in this document may well eat RAM / processing power and/or take ages to render. It'll (probably) be worth it.

Prepare your Scene

1. Load a figure and add a MAT. I'm using M4 and Mask's M4 Skinz
2. Load a scene item into your background. I've used Awful-Soul's Gothica set here.

Illustration 1: M4 in the render preview window

Adding HDR Lights in Poser
Most 3D rendering packages can make use of HDRI lighting, which can give some lovely realistic effects. Poser comes with several already installed, and you can change the image map assigned to them just as you'd change any other material. There are a ton of great free HDR image files available here, and you can find tons more with a quick Google search.

1. Go into the Poser light library and find the Image Based Lighting category > HDR IBL.

2. Find the light setting called 'Albany Night'. There's also one with AO (ambient occlusion). We don't want that one!

3. Apply the Albany Night light preset to your scene, and click Render

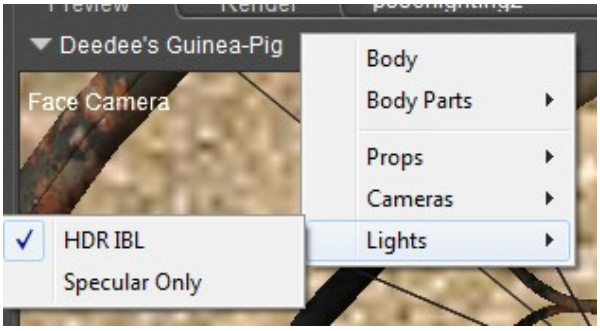

Illustration 2: BORING!

You should get a rather unimpressive render, as above. There's some shine on the skin because the light setting has a specular light added, but that's about it. The shadows are noticeably absent.

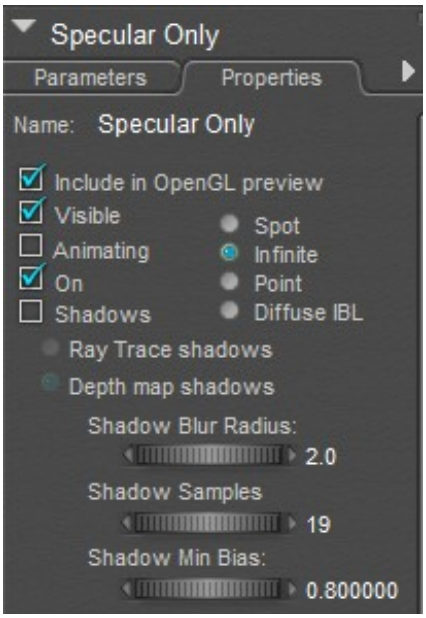
Let's improve it!

Tweaking HDR Lighting

4. Click on the object dropdown and review the 2 lights you have under the Lights menu. You'll see that as well as the HDR IBL, you have a Specular Only light.



5. Select the Specular Only light



You'll see the settings show that this is an infinite light, and Shadows are not selected.

The first thing we're going to do is turn this light down to 0 so we can see what it's doing. This specular light only adds highlights to your objects.

6. Select the light and drag the brightness slider right down until the light turns black, or in the light parameters tab, set its intensity to 0.

7. Render

Illustration 3: Specular Only = 0

The figure is less shiny. It's still a bit pants though!

8. Undo your last change so your specular light is back to the original setting

9. Now select the HDR IBL light, and view the properties tab.

10. Turn shadows on

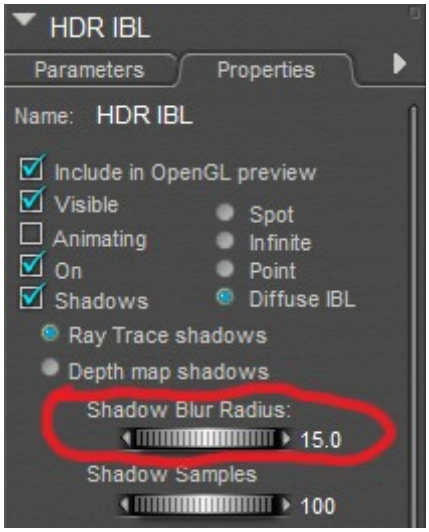
11. Render
    N.B. You may get a black figure!

12. Click the 'Ray Trace Shadows' option in the Properties tab.

13. Click Render again.

Illustration 4: Dark shadows!

OK, we have shadows but they're really heavy and obtrusive.



14. Change the Shadow Blur Radius to 15.

15. Click Render. This may take some time.

Illustration 5: Shadow Blur Radius = 15

Now we're getting somewhere, but we've now got something of a splatter effect in the background shadows.

16. Increase the pixel samples to 100

17. Click render

- This may take some time!
- You can increase the pixel samples up to a max of 255.

Illustration 6: Pixel samples = 100

Comparison

Here's a comparison of our original render with the Albany Night preset with default settings, and our tweaked version.

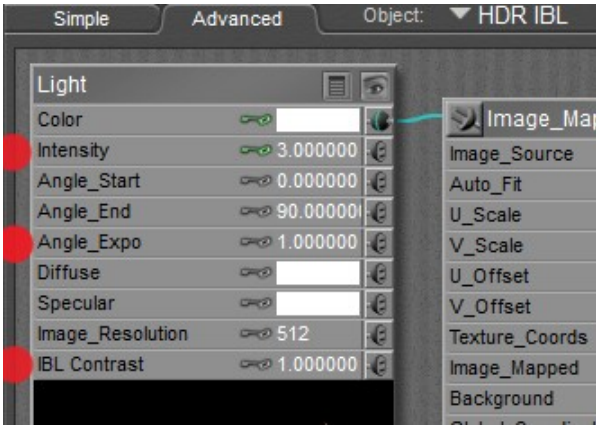
Illustration 7: Left - Albany night default. Right - our tweaked version

Altering Brightness

If you want to reduce or increase the brightness on HDRI lights, there are a few things you can experiment with.

18. Go into the Material room and select your HDR IBL light.
19. Try playing around with one or more of the following:

- Reduce or increase the Intensity of the light
- Reduce or increase the Contrast of the light
- Reduce or increase the Angle Expo setting



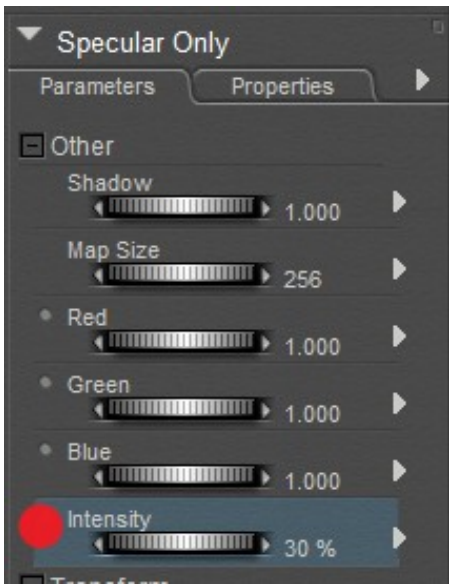
20. Go to the Material room and find your HDR IBL Light.

21. With our current settings, increase the IBL Contrast to 1.0

Illustration 8: IBL Contrast = 1

When you've reduced your brightness, you might also want to tone down the specular light. At the moment, our figure is in darkness but still really shiny!

22. Select the Specular Only light from your object dropdown
23. Reduce the intensity to around 30%



24. Render

Hey presto, he's a bit more in keeping with his surroundings now!

Illustration 9: Albany Night: IBL Contrast = 1; Specular Only Intensity = 30%

Happy rendering!

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