Subject: Lighting a sculpture / Glow
Posted by BobCummingsDesigns on Wed, 13 Feb 2013 05:22:47 GMT
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Does anyone have any experience with installing
miniature lights (LED) inside a 3d sculpture?

Subject: Re: Lighting a sculpture
Posted by stonysmith on Wed, 13 Feb 2013 06:29:41 GMT
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What are your questions? It's not all that difficult if the geometry of the model allows it.

Subject: Re: Lighting a sculpture
Posted by BobCummingsDesigns on Wed, 13 Feb 2013 14:52:00 GMT
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Hi,

My sculpture is 12 inches in height and has a number of curves
to it (picture two figure 8's as a reference).

Ideally I'd like the 3d sculpture to glow, with the light
starting at one point and progressing along inside till
the entire piece is lite.

or

a simpler version would be that the glow starts off very dim
and slowly grows in intensity inside the entire piece.

I realize now that just putting in small LED lights is not the
look I'm going for because that won't give me the glow
look and be more of a spot light look.

If you have any thoughts on how to do this I would
greatly appreciate it.

thanks,

bob

Subject: Can a 3d sculpture Glow
Posted by BobCummingsDesigns on Wed, 13 Feb 2013 14:55:46 GMT
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Hi,

I'm making a 3d sculpture that's 12 inches in height
and has a number of curves to it
(picture two figure 8's as a reference).

Ideally I'd like the 3d sculpture to glow, with the light
starting at one point and progressing along inside till
the entire piece is lite.

or

a simpler version would be that the glow starts off very dim
and slowly grows in intensity inside the entire piece.

I realize that just putting in small LED lights is not the
look I'm going for because that won't give me the glow
look and be more of a spot light look.

If anyone has any thoughts on how to do this I would
greatly appreciate it.

thanks,
bob

Subject: Re: Can a 3d sculpture Glow
Posted by Youknowwho4eva on Wed, 13 Feb 2013 14:59:44 GMT
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Paint it with glow in the dark paint? The glow of the paint won't charge itself, but it will charge faster/brighter closest to the light source. Just an idea.

Subject: Re: Lighting a sculpture
Posted by Mhagan on Wed, 13 Feb 2013 15:40:28 GMT
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You might want to try LED strips http://www.bphobbies.com/view.asp?id=C3351881 and http://adafruit.com/products/306 for example. They are easy to install even in tight spaces and produce a fairly even directional light.

Subject: Re: Lighting a sculpture
Posted by BobCummingsDesigns on Wed, 13 Feb 2013 15:47:23 GMT
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Hi Mhagan,
Terrific!!! That's the ticket! Also appreciated the website that had the video of how they lite the pumpkin. Thanks!!!

Subject: Re: Lighting a sculpture
Posted by mkroeker on Wed, 13 Feb 2013 15:51:53 GMT
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Can you make it hollow, and thread LED strips inside ? (I seem to remember that someone posted
images of a translucent nautilus shell in "full color sandstone" sometime last summer - ah yes, here it is)
For lighting from below, i.e. putting the sculpture on a small stand with an LED inside (seen this for
sale with some more or less esoteric glass or plastic object on top) one of the acrylic materials (detail/ultra detail) is probably your best bet.

EDIT: garbled url...

Subject: Re: Can a 3d sculpture Glow
Posted by virtox on Wed, 13 Feb 2013 16:10:33 GMT
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Perhaps you could try something with EL-wire?
http://en.wikipedia.org/wiki/Electroluminescent_wire
Or Leds with glass-fibers, where the end point end up in different concentrations around the

sculpture.

Subject: Re: Can a 3d sculpture Glow
Posted by BobCummingsDesigns on Wed, 13 Feb 2013 16:26:38 GMT
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This is what I've been looking for, without knowing exactly what is was. Thank you so very much. I give the Electroluminescent Wire a glowing review!!! Thanks again!

Subject: Re: Lighting a sculpture
Posted by UniverseBecoming on Wed, 13 Feb 2013 16:44:20 GMT
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Yeah, the problem with LEDs is they are highly directional. What you could do is design a 3D printed diffuser that goes over the LEDs to diffuse the light. Or you can buy diffused LEDs. Diffused LEDs are designed to be less directional. Like these.

Completely aside from LEDs is EL wire. I first learned of this when I went to Burning Man one year. This stuff is amazing!

One other option I can think of is seeing about making your sculpture design into an actual light by making it into a neon light. I don't know if anyone's ever tried this with 3D printed materials, but it might be fun to look into.

Oh, and if you only need a temporary lighting effect you can use glow sticks. And since the chemicals that make the glow are nontoxic you can break open a glow stick and coat the inside of your sculpture to have a lighting effect that lasts for numerous hours. I once opened a red glow stick and painted the eyes of a gargoyle sculpture red and they glowed red all night.

James

Subject: Re: Lighting a sculpture
Posted by BobCummingsDesigns on Wed, 13 Feb 2013 18:16:32 GMT
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That's an interesting thought, about making the whole sculpture
into a light. Having it made in Neon would probably be way to expensive.
Can Shapeways print in glass?

Subject: Re: Lighting a sculpture
Posted by BobCummingsDesigns on Wed, 13 Feb 2013 18:43:24 GMT
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So very helpful! Thanks for the link to the Nautilus Shell
and placing the sculpture on a lite base.

Subject: Re: Lighting a sculpture
Posted by UniverseBecoming on Thu, 14 Feb 2013 11:58:01 GMT
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They did print in glass but recently abandon that material cuz of lack of interest.

Subject: Re: Lighting a sculpture / Glow
Posted by virtox on Thu, 14 Feb 2013 12:34:13 GMT
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I have merged your two topics about the same subject.

Subject: Re: Lighting a sculpture / Glow
Posted by BobCummingsDesigns on Thu, 14 Feb 2013 13:10:06 GMT
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thanks

Subject: Re: Lighting a sculpture
Posted by modelmade on Wed, 06 Mar 2013 03:31:04 GMT
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Thats terrible news, I spent quite some time fixing the model so I can get it printed in glass....
Is it possible to do a custom material request for glass?