

Glass Gambit: Chess set and shader presets for DAZ Studio

This product includes a beautiful glass chess set, 70 faceted glass shader presets and a 360 degree prop with 5 material files. Some people find glass tricky to work with so this document will go over all the things you need to know to get the most out of your glass.

The individual pieces will load with clear glass and gold shaders. If you want them a different color you can use the surface selection tool to select the section you want to recolor on each piece. Once you have the surface selected simply apply the shader preset. You will also find a fully set up chess board called "Board and pieces" in the same file that will load with all the pieces parented to the board at 0/0. The pieces will load with clear and gold for white and dark gray and silver for black.

Shader presets are broken into two parts. The first part consists of 40 single color glass presets and the second has 30 glass presets with an extra color in part of the specularly.

The first 40 will give you more realistic single color glass. The darker colors will look less transparent than the lighter colors so you should take that into consideration when you make your selections. The second 30 presets are more "for fun" and may not give you results that are as realistic. The second color is part of the specularly so it will be more obvious in situations where there is specularly in the scene and will depend on how the light hits the glass.



Lastly the product includes a 360 degree prop with 5 different material options. This prop will make setting up your scenes easier so you will not need to build an enclosed environment every time yourself. The prop is set not to cast shadows so you can use distant lights with shadows if you need to. That means that you will not be able to see the prop from the distant lights so don't panic that it has vanished. It will still show up in the render.

In order for glass to work well in DAZ Studio it needs 3 things. The first is enough light so that the glass has a chance to sparkle. That does not mean that you need to over light your scene. None of my promo images were done with more light than an average character texture would require and many of them were done with just 2 lights. A spot angled from one front corner and set at 75% and a point light in the opposite corner but behind the chess set at 25%. Just how much light and where you need it will depend on your scene and what else you have in the scene. You will however want to make sure that at least one light in the scene is sending light from the back forward through your glass.

The second thing that glass needs to have is something to reflect. You won't have good glass unless there is enough in the scene that it can reflect. Those things need to be in front of and beside glass even if those things will not be shown in your render.

The last thing that glass needs in a scene is an enclosed environment of some sort. If you don't have a closed environment then the refraction will cause big black spots in the glass. You can deal with that in one of two ways. You can set up a scene that is "closed" and does not have any open spaces. An example of this would be a closed room with no windows. You could also use a cube that encloses the scene. But unless you add textures to the cube it will be a very bland render. To save you set up time this product includes a 360 degree prop with 5 material presets.

The first image used the black and white material for the 360 prop. This is ideal when you don't want the reflected colors to change the color of the glass or when you need a simple reflection for part of the scene.

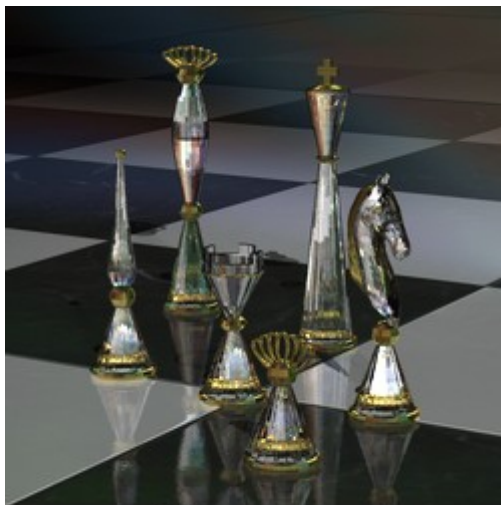


The other presets give varying degrees and types of colors. There are other options for enclosing your environment. Many HDR/uberlight sets come with beautiful textures. Some of them will be set up to be visible in your render and others will need to have that turned on.

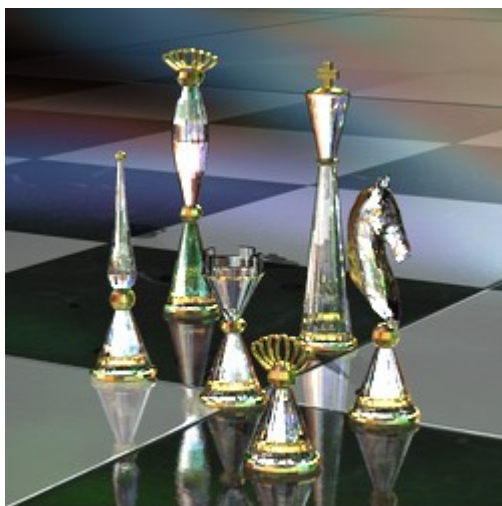
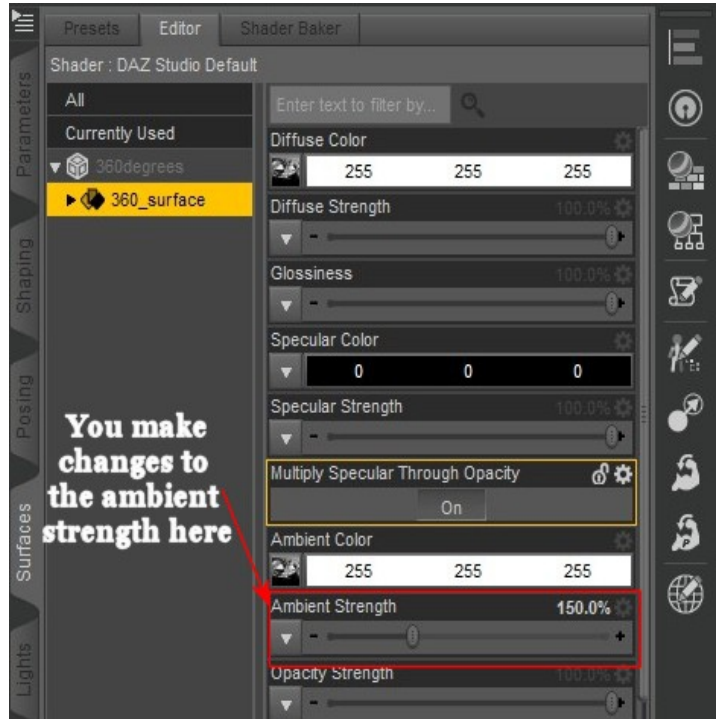


Something people often forget is that not only does what is being rendered need to be lit but what ever is being reflected needs to be viable in the render as well. That means that light needs to be shining to some extent on pretty much everything in the scene to avoid black spots or the objects need to have the ambient turned up so that they are reflected. With the 360 prop this is already done but you may want to adjust the amount of ambient that is used for your renders.

When the materials load the ambient will be set to 250% which is good if you have other things in the scene that are obscuring parts of the prop from being reflected. Be aware however that to some extent the ambient reflections act almost like additional lighting in the scene.



Ambient at 100%



Ambient at 250%



Ambient at 400%

All of the above images were rendered with the same level of lighting. The only change made was to the amount of ambient used on the 360 prop. This is an extreme case of course because the ground plane and the 360 prop were the only things in the scene other than the chess pieces and the glass. When there are other things in the scene they will break up 360 environment and you may need more lighting to compensate. This does not mean that you will need to over light a scene to get your glass to sparkle.

If you are using a closed environment and not the 360 prop you will need to increase the ambient on the surfaces to be reflected or light the things in your scene to be reflected. One option to do that is to have spotlights facing away from where your rendering. For example if you had one just behind your camera facing the other way.

Part of the fun of a product with shader presets is trying them on other things. Think out of the box as far as what you can use them on. But keep in mind that if there are internal surfaces those may give you unexpected results.

The shaders all have smoothing turned off to get the faceted effect. You may want to try some of them with smoothing on for a smooth finish. However, some of the mixed color shaders may give unexpected results.

I suggest that when you start working with the glass you try small test renders till your use to working with them. These shader presets were created to render quickly but any time you use reflection and refraction it will add some time to your renders.