

# Creating Custom Art Easels as 3D Objects for Oculus Home

This template can be used to create your own custom easels that can be placed in your Oculus Home.

I have also created a Custom Book Template, which is available for download (along with other various objects I've converted and resized) at: <http://cscotttdavis.com/Oculus3D>.

## ***\*Disclaimer\****

I actually know very little about how to create and manipulate 3D objects. I have basically had to figure out and reverse-engineer how to do various things, often through trial-and-error, and there are almost certainly better ways to do some of these things than the way I'm doing them here.

I have also built on information and existing files from other people, and I have tried where possible, to give credit and provide links (*see below*).

## ***Files and Tools***

This template is designed for use with Photoshop and Paint.Net, but also includes PNG files that can be used with other image editing software. Unless you have software installed for packing GLTF files into GLB files, you will also need Internet access (for the web-based software, *see below*).

## ***Getting Started***

First, you will need to make a copy of the "Custom Art Easel (output)" folder and all of its contents, and name it appropriately (probably the name of the art easel you're creating). This will be where you will save the modified texture file to create your custom version. *Note: Do not rename any of the files within the folder, just the folder name itself.*

You will also need an image file for the painting you want to place on your easel.

For best results, the image should be at least 277x391. Because of the way the textures will be displayed, the exact dimensions of the source image aren't important, but your painting may turn out blurry if the source image is too small.

## ***Preparing Your Image File***

Before it can be placed in the texture file, the orientation of the image must be adjusted. Due to the way it's mapped onto the 3D frame, it will need to be a reverse (mirror) image of the actual cover, and because of the placement of the composite file, it will also need to be turned upside-down.

To reverse the image, you will need to **flip** it horizontally (or left-to-right, depending on how it's worded in your software). *Note: It is very important that the image be flipped, rather than rotated, in order for the image to be mapped correctly. If the result looks like a mirror image, then you've done it correctly.*

To turn the image upside-down, you will need to **rotate** the image 180 degrees. *Note: For this step, it is very important that the image be rotated, rather than flipped, because flipping the image would also undo the mirror imaging from the earlier step.*

## ***Placing the Image into the Texture File***

Next, load the appropriate template file(s) for your image editing software, and hide all of the other layers, except the "Painting Boundary Reference" layer, which should be visible.

Then import your adjusted painting image as a layer (above the reference layer, but below the "Texture Map (with cutout)" layer), and resize and place it so that it fully covers the yellow area of the reference layer. It can

extend beyond the yellow area on any side(s), but only the parts of the image within that area will show in the model.

Once the image has been positioned correctly, hide the “Painting Boundary Reference” layer and make the “Texture Map (with cutout)” layer visible. *Note: It is important at this point that only 2 layers be visible: The “Texture Map (with cutout)” layer and the layer containing your painting image. All other layers should be hidden.*

If everything looks okay, flatten the image and save it in the copy of the output folder you made earlier (*see above*), as “ArtEasel\_baseColor.jpg” (replacing the file of the same name, inside the “textures” folder), and making sure that your quality settings are as high as possible.

Congratulations! You just created your custom easel!

## **Converting for Oculus Home**

Oculus Home requires files to be in the GLB format, so it will need to be converted. If you have [glTF-Shell-Extensions](#) installed, you can simply right-click and choose “Pack to Binary glTF...”. If not, then you can use this GLTF to GLB Packer web site: <https://glb-packer.glitch.me/>, as follows:

Launch the web site and then drag the contents of your output folder (the “ArtEasel.gltf” file, the “ArtEasel.bin” file, and the “textures” folder) and drop them onto the page. This should immediately initiate a download of an “out.glb” file. Save this file as the name of your custom book.

Once the model has been converted (using either method), you now have a 3D object that can be imported into Oculus Home. Since I created the template from an object that had already been resized for Oculus Home, there is no need to resize it, but if, for some reason, you want to change the size, I recommend this online resizing tool: <https://glitch.com/~glb-scale-o-matic>.

## **Importing into Oculus Home**

Open your “Documents” folder, then open the “Oculus Home” folder that is inside it. Inside that folder should be an “\_Import” folder (if there isn’t one there, create one). Any GLB files located within this folder will show up as imported items in your item Inventory. You can also create subfolders, if you’d like to organise your imported items (by type, source, or some other method).

To import your custom art easel, simply drag a copy of the GLB file into the “\_Import” folder (or a subfolder).

## **Credits**

### **IS301**

Other than what I worked out for myself, the vast majority of info came from this video about importing and resizing existing 3D objects: <https://youtu.be/EN31ATbwe8>.

I have since discovered this companion blog entry, that goes into a bit more detail: <https://is301.com/2018/10/importing-3d-models-into-oculus-home-from-sketchfab/>.

I am quite sure that I would never have been able to create custom books or these templates without the information that IS301 posted.

### **Alina Lukina (on [Sketchfab](#))**

This template was created from this easel that was originally downloaded from Sketchfab: <https://sketchfab.com/3d-models/3d-prop-easel-a2153c35659347879d1ff9ce5b796100>, although I started from a version that had already been resized for Oculus Home (and modified slightly) by someone else, but there were no credits listed, so I don’t know who it was.

## **r/OculusHomeObjects**

Another source of valuable info was the r/OculusHomeObjects group on reddit:

<https://www.reddit.com/r/OculusHomeObjects>. They also have links to several repositories of Oculus Home objects.

## ***Contacting Me***

If you have any questions or can offer any additional information about dynamic physics or 3D objects in general, please feel free to email me at: [oculus@cscottdavis.com](mailto:oculus@cscottdavis.com)

Please also feel free to email me links to any custom easels you create with this template. I would love to see them!

I also have several public Homes on the Oculus Rift, that are decorated with objects I've created and adapted. Please feel free to visit them (Oculus User **cScottD**) and let me know what you think!