

Create UVs – Planar Mapping

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What is it – Imagine taking your 3D model and grabbing sections of it, one at a time, to lay out flat as a 2D image. The difference between this and Automatic Mapping is that you decide ahead of time which faces you want stitched together.

When to use it - Great when you have curvy, organic or more complex models. Instead of breaking it up into lots of little pieces all at once (like in Automatic Mapping) you just take one section of it at a time.

How to use it -

1) As in all UV mapping, start by creating a new Lambert material and naming it uvTexturingMaterial. Apply the uv-map rainbow grid file to that lambert's color channel then assign the uvTexturingMaterial to the object you want to uv map. That rainbow grid will make it easy for you to spot any texture warping early on before you spend time doing good work in photoshop. (The uv-map rainbow grid can be downloaded here: http://www.highend3d.com/maya/downloads/shaders/4952.html)

NOTE: Make sure all modelling is done before you start UV mapping! While you can add geometry later, it will be tricky to map those new pieces in and will require more work. Only add more geometry after UV mapping if ABSOLUTELY necessary (if your director threatens to set you on fire if you don't fix the seam in the lead character's arm for example).

- 2) Open your UV Texture Editor (Edit UVs > UV Texture Editor)
- 3) You'll be working on one axis at a time. Select the faces you want stitched together on the top, bottom or sides of your object then navigate to **Create UVs > Planar Mapping > Options**. Set the axis that those faces are sitting on (top would be Y axis for example) and hit "project". You'll see those faces highlight in the UV Texture Editor. Move them to the side, off the grid.
- **4**) It probably starts off looking a little squished. Select the shell of that group of UV faces you just created (select a UV and go to **Select > Shell**), and hit "**unfold selected UVs**" in the UV Texture Editor. This will spread those UV faces out into a shape that more closely resembles the proportions of the faces on your 3D model. You may need to adjust individual UVs if there's minor distortion (use the rainbow grid texture as a reference!)
- **5**) Repeat this for all the sides of your object, choosing the relevant axis to project the new UVs on. Use the full UV Texture Editor space while you're working. Scale and move shells as you work. When you're done, scale and move everything back into the square in the top right hand corner of the grid.
- **6**) Export a UV snapshot to bring into Photoshop and starting painting on by selecting your model and navigating to **Polygons > UV Snapshot...** in the UV Texture Editor.