

Using UVMapper for PowerMac

v 0.2.6

A short tutorial demonstrating a few of the features of UVMapper Mac.

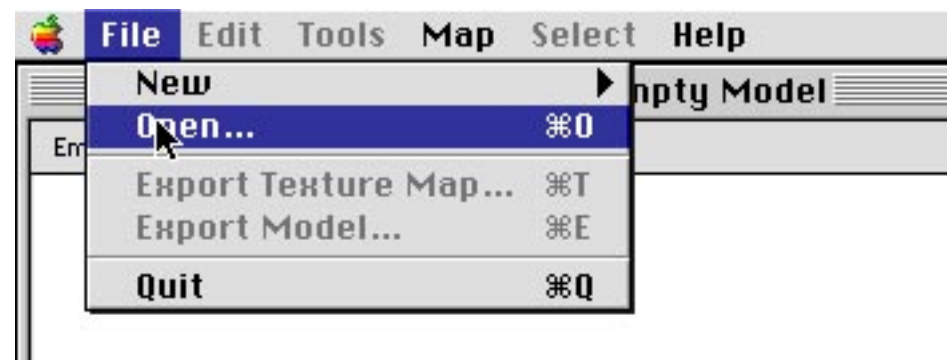
Plus...

A [keystroke reference](#).

[Using UVMapper with Poser](#).

UVMapper works with 3d files in the Wavefront '.obj' format.

Open a model...



For this tutorial, I selected the model knoxS.obj which was included with the Apple MRJ demo applet called 'wireframe'. The model has no texture map, so when it opens, the UVMapper window is empty. The window is now named 'knoxS.obj'.



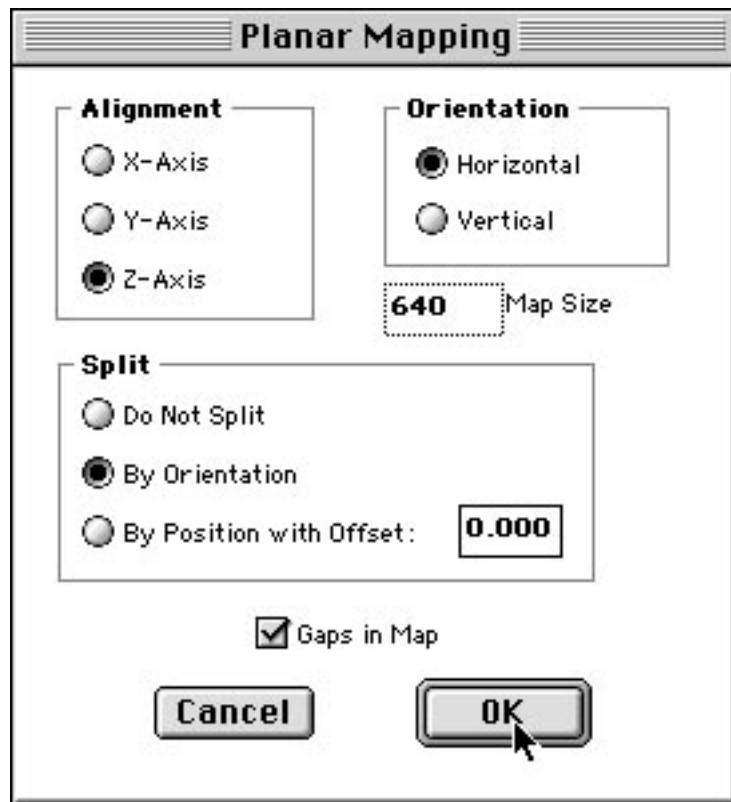
To add a texture map to the model, I select the type of mapping I would like from the Map menu. Hmm.. think I'll go for planar.



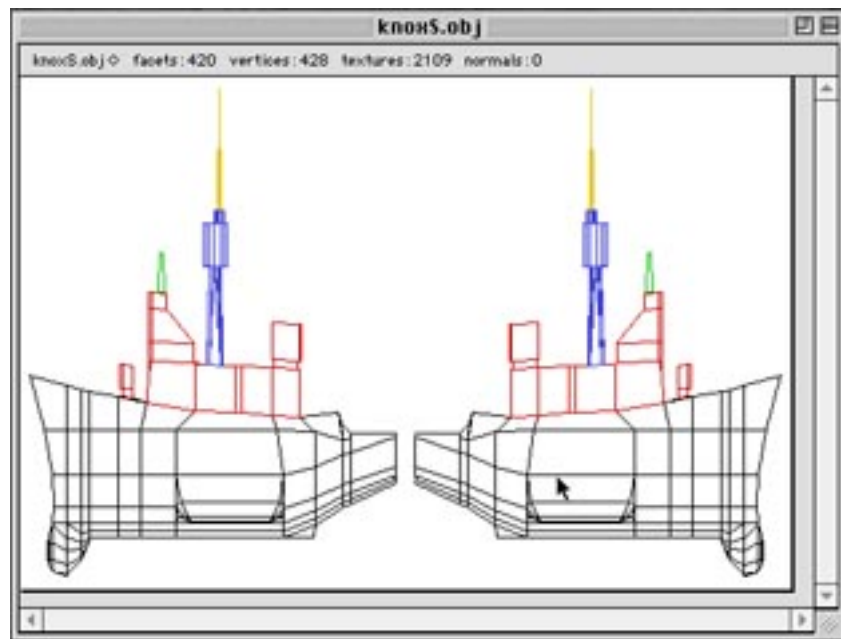
I fill in the Planar Mapping Dialog. Note that the Scaling/Map Size feature of Steve Coxs UVMapper is not available presently. The 'Map Size' text field is not enabled, shown by the dotted outline. The size of the

texture map produced by UVMapper Mac can be set in the Preferences Dialog. Try out some really big sizes if you have plenty of RAM and HD space, and need lots of detail.

TIP: if you only need high detail in one part of your model, scale that part of the model up later, so it uses most of the map space. Scale down the other areas to make room.

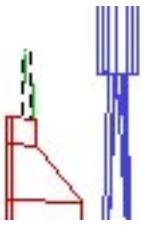


I decided to split my map down the centre of the ship, to show each side separately. I wanted some gaps between the 2 sides. Try other settings and see what they do. You can go back again and again, until you find a combination of settings which suit you best. The model does not need to be reloaded.



Above is my map. The model has several groups defined in it. My preferences have groups shown in different colours, which you can see in the map.

When I drag with the mouse around a small group of vertices in the map, that area becomes selected. Any vertices inside the area extend the selected area outwards so all faces to which they belong are selected. Try it.



I selected the green area by dragging around the top two corners of that shape. The selected area is indicated by the marching ants outline. Note the area surrounded by the marching ants is the smallest rectangle which contains the whole selection.

Note: If I select part of a facet with an irregular shape, the rectangle may cover some other parts of the map which are not selected. Not everything inside the rectangle is necessarily part of the current selection.

Try selecting a small area of a map and press the up arrow on the keyboard a couple of times. The area will be nudged upwards. The down arrow key will bring it back. Click carefully within the rectangle, and drag with the mouse. A small square will follow. When you let go of the mouse button, the selected area of the map will be moved to the last position to which you dragged. The facets are still selected. So you can move them further. Or scale them up or down. Or remap them independent of the rest of the model e.g. cylindrically, box mapping etc.

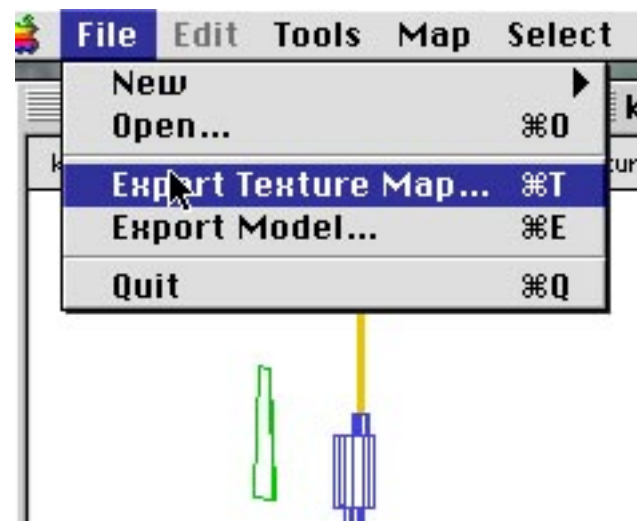


This is how it looks after I drag the green area upwards and let go. Then I hit the '*' key, and the selection is scaled up (multiplied). The '+' key would have incremented the size of the selection slightly. See below for a complete description of the keyboard commands available for manipulating selected facets in the map window.



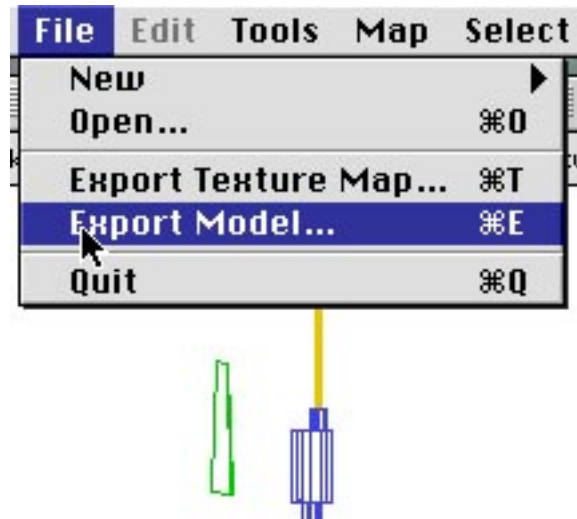
After scaling, the green area now looks like this. So I might save my work, so I can carefully colour in the map of the knoxS.obj model, and render it in Poser.

First I will export the texture map template. (The order is not important, I could have exported the model first.)

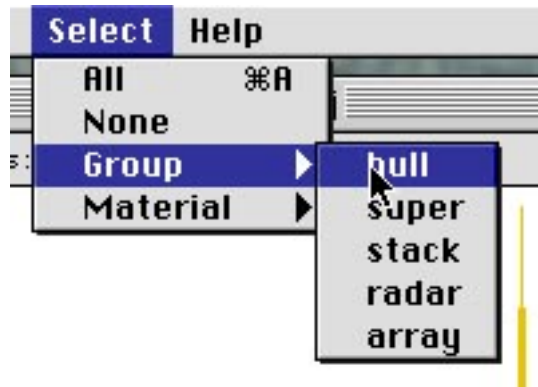


TIP: What *IS* important is to export the model. UVMapper has changed the original

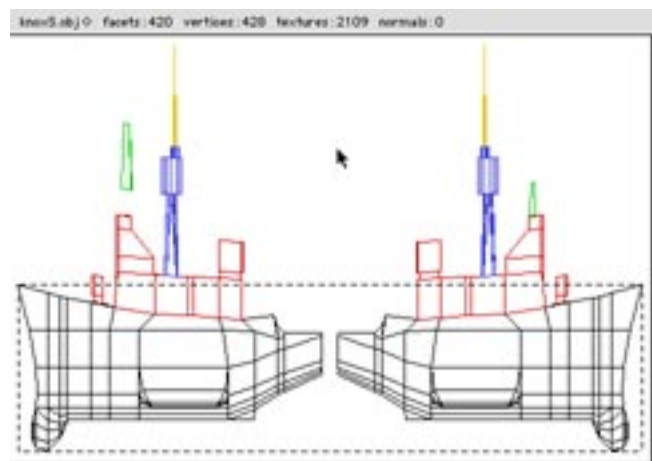
model so it can use the modified map template. The original model is no use with the remapped template. UVMapper gives the new model a different name, so you will not accidentally overwrite your original model.



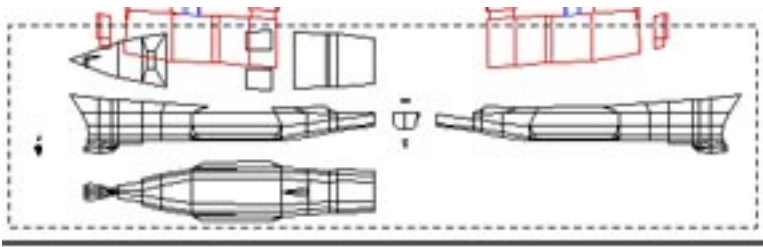
After saving, we can play some more with the model, and save another version of the map and its template if we like. knoxS.obj has some groups defined. I select the 'hull' group from the Select menu.



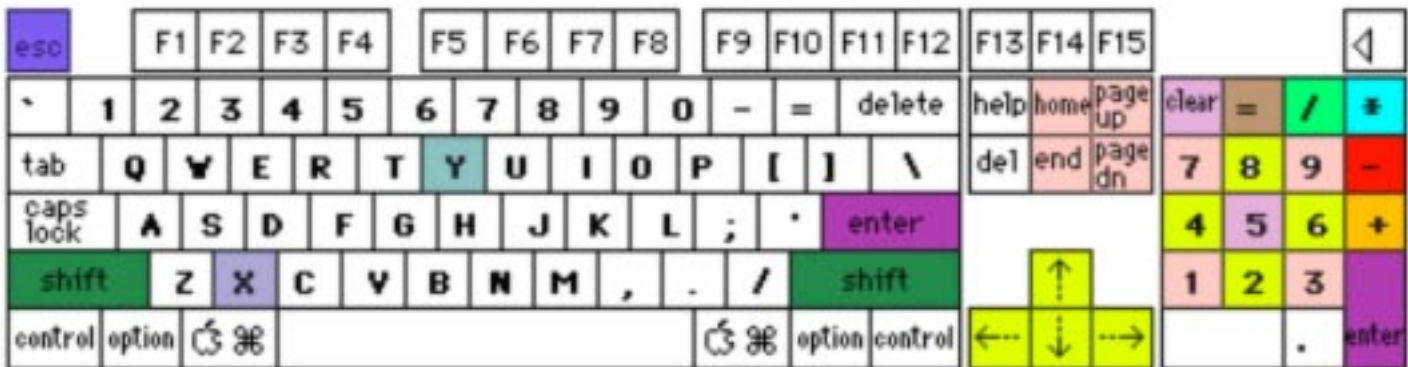
The selection rectangle selects the ships hull. Note the red superstructure is not part of the selection.



I think I will use Box mapping on the hull. The newly mapped hull (6 sides of a box, because I used the 'split' option) fills the selection rectangle. Some parts overlap the red superstructure. Oops, I will clean that up before saving. Perhaps I will decrement the selection size. Or move the superstructure upwards/scale it smaller. There are lots of options. Play around and try them out.



Below are the keystrokes for manipulating the selection in the map window. The keyboard shown is an Apple extended keyboard. Other models may have keys placed a little differently. Note that numeric pad keys duplicate the functions of home/end/pageup/down which are not included on some keyboards.



Key

return , enter

esc

'*'

'/'

up arrow, numpad 8

shift / up arrow, numpad 8

down arrow, numpad 2

shift / down arrow, numpad 2

left arrow, numpad 4

shift / left arrow, numpad 4

right arrow, numpad 6

shift / right arrow, numpad 6

numpad '+'

numpad '-'

'home', numpad 7

'page up', numpad 9

'end', numpad 1

'page down', numpad 3

Action

done

deselect without changes

multiply size

divide size

nudge upwards

step upwards

nudge downwards

step downwards

nudge left

step left

nudge right

step right

increment size

decrement size

to top left corner

to top right corner

to bottom left corner

move to bottom right corner

'clear', numpad 5

'x'

shift / 'x'

'y'

shift / 'y'

'='

to centre

increase x scale

decrease x scale

increase y scale

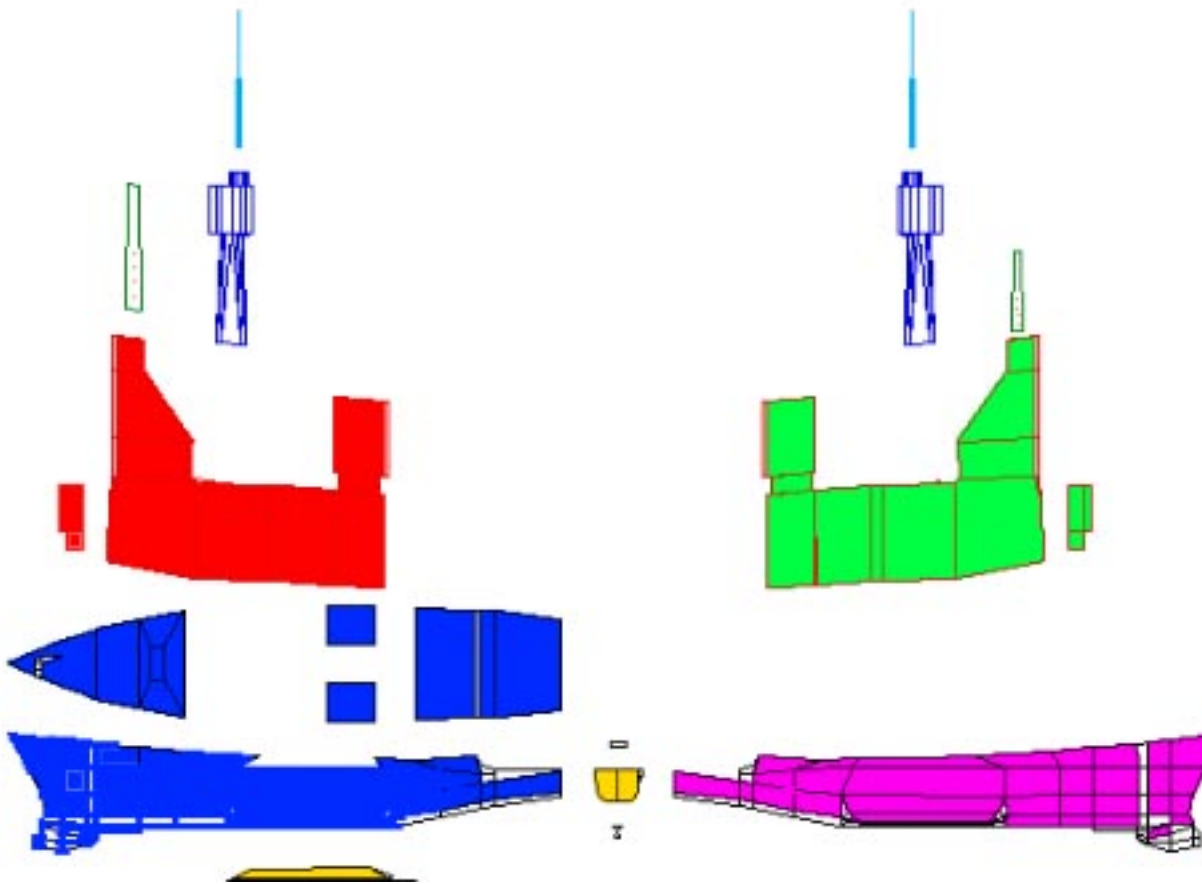
decrease y scale

maximise scale

[Top](#)

Using the new model and map in Poser

Once the model is mapped and exported, the template can be used to paint a texture which will render over the surface of the model in Poser or other 3D rendering software.

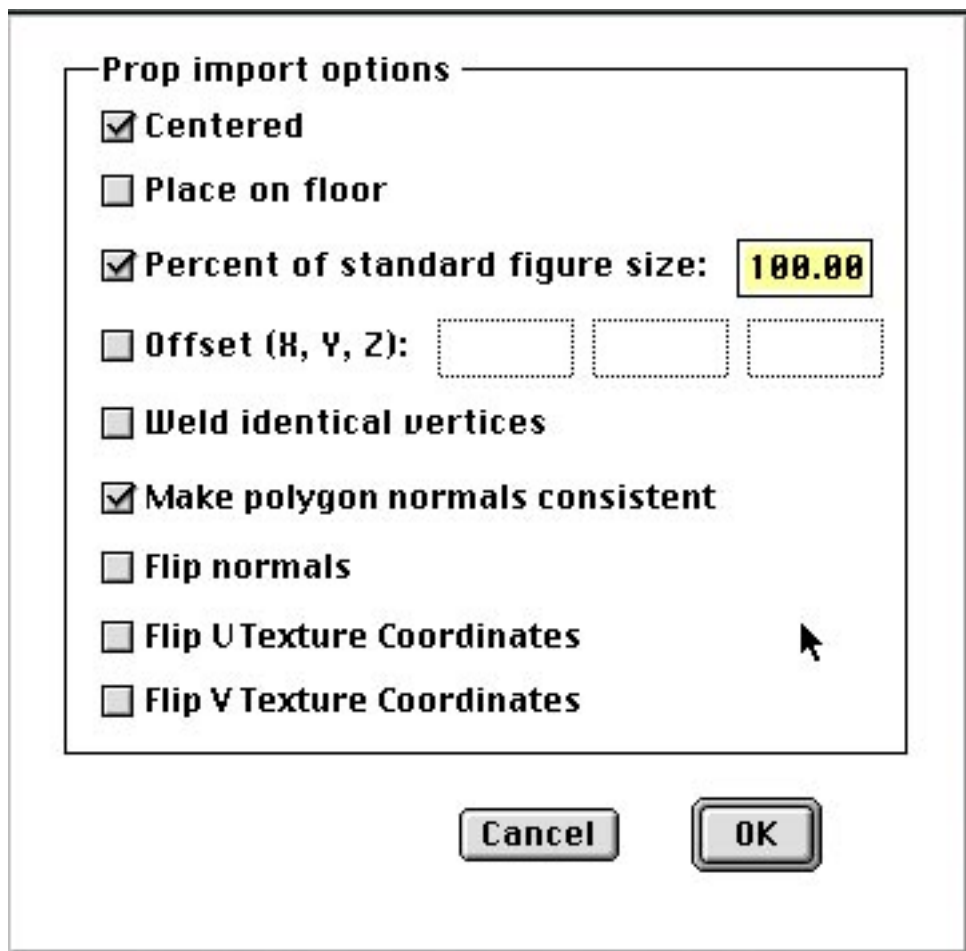


I quickly put a wild colour scheme onto the Knox with a paint bucket tool.

Tip: use a copy of the template, so you can begin again if you are not satisfied with the first attempt at your map.



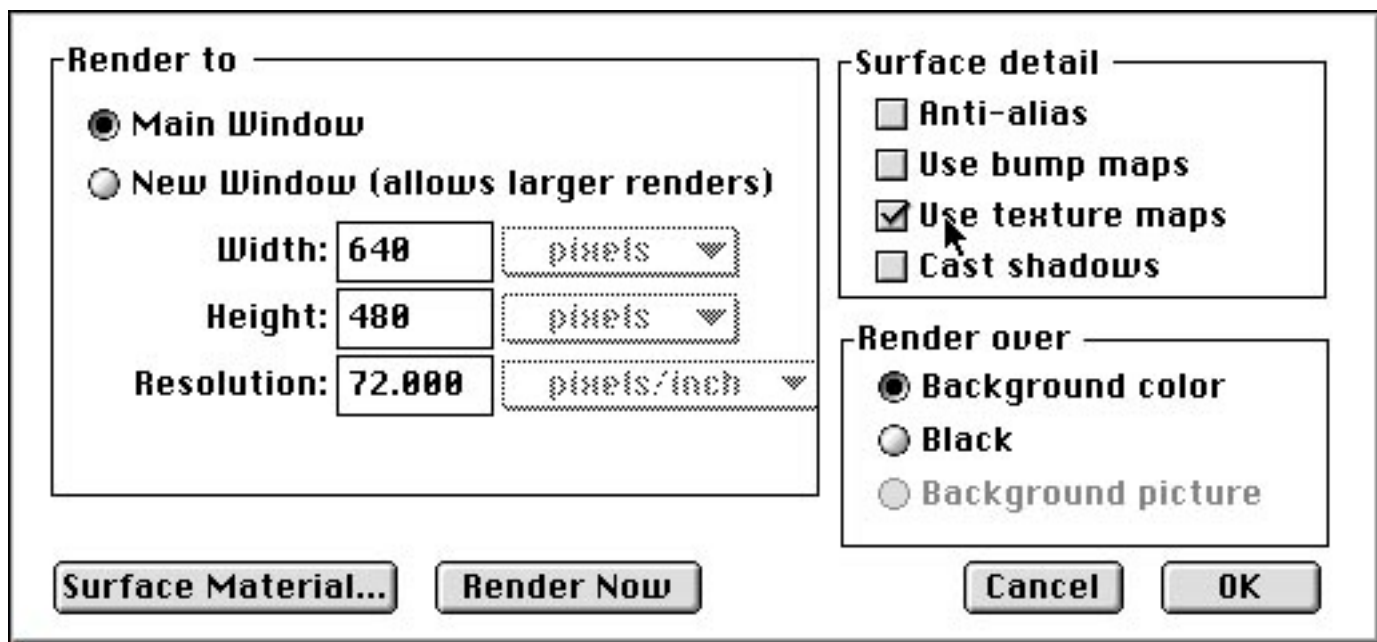
I import the model into Poser.



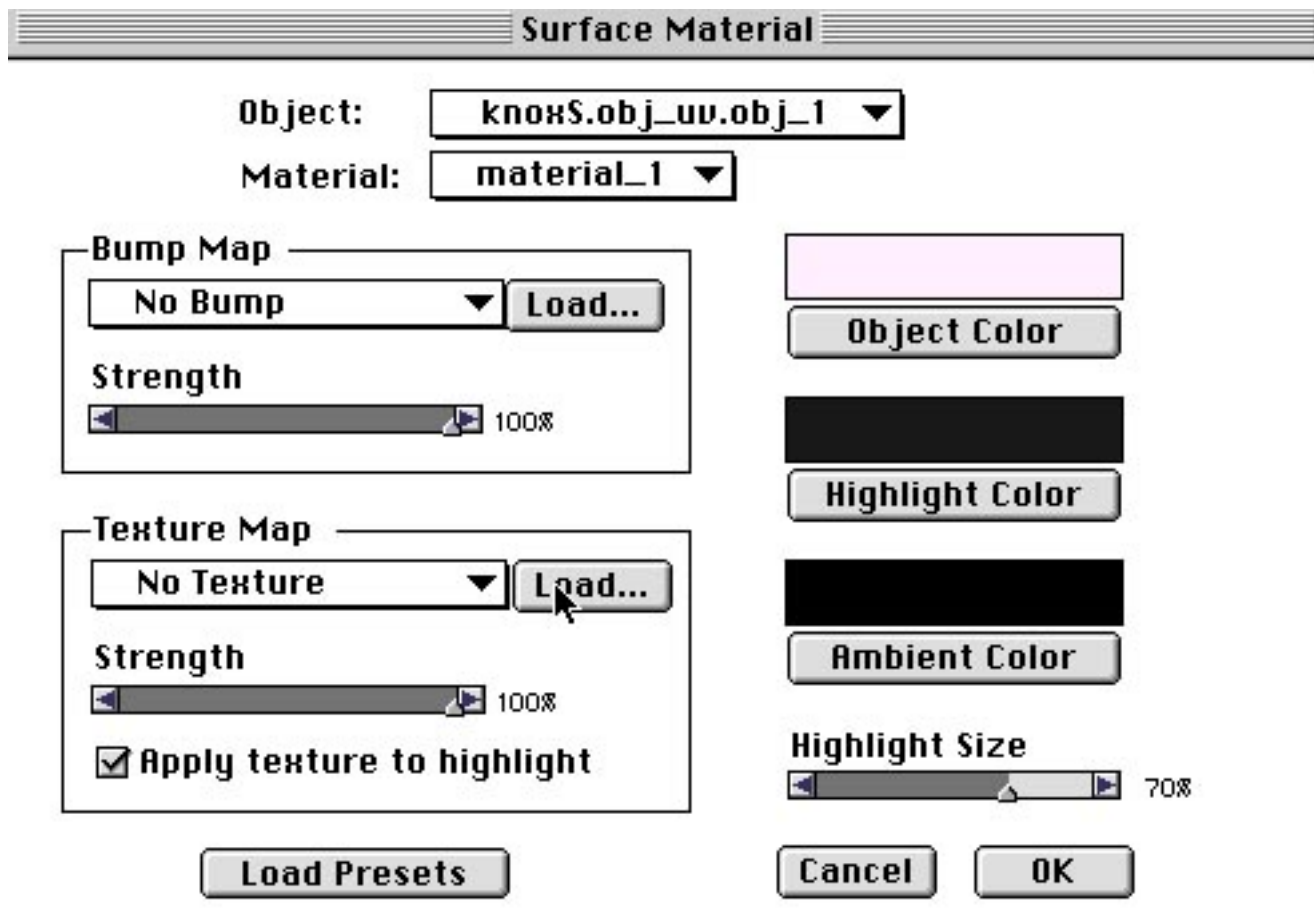
The default settings (above) seem to work fine.



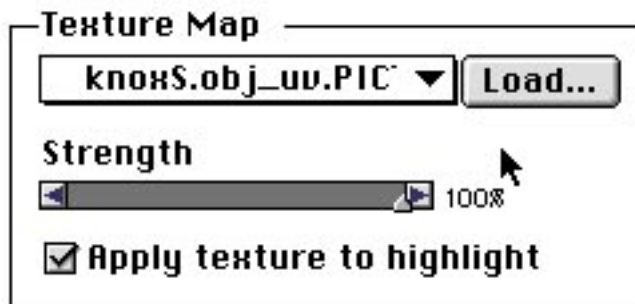
Now I use 'Render Options' to make sure the texture map will be applied to the model.



Make sure texture maps are checked. Then go to 'Surface Material...'



I set the object colour so it will not obscure the map colours. Imported models often start off with dark/strong colours which interact with the colours in the map I created. I now load the texture map file which UVMapper created, and over which I painted.

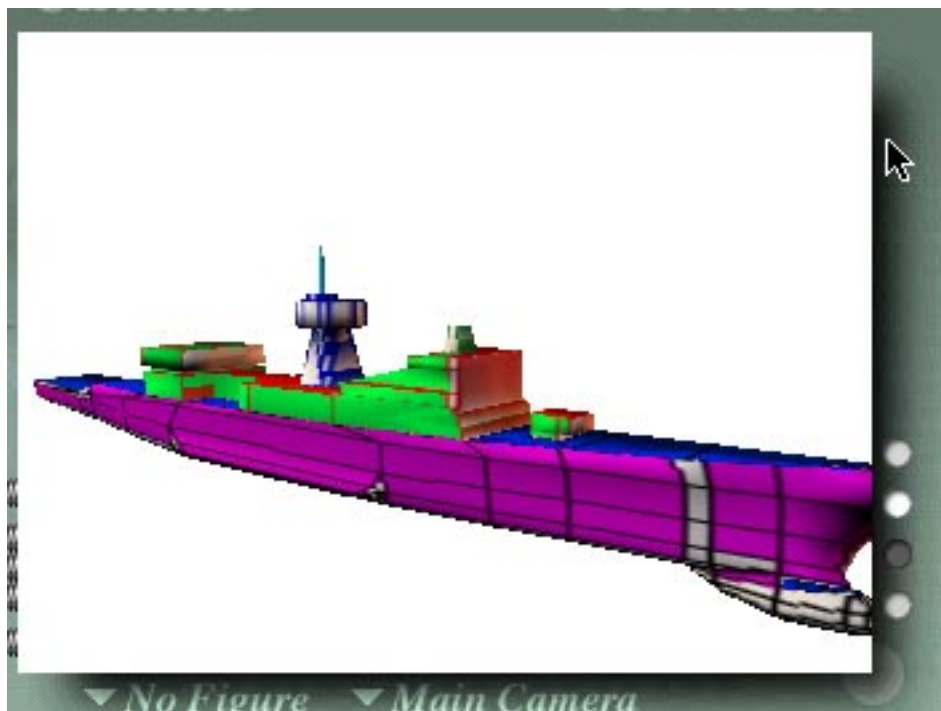


I make sure the map is selected in the menu.

And render...



maybe the other side looks better...



... oh well, back to the old drawing board.

Steve Martin 3/3/2000.

[Top](#)

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