



## VC Retro-Backlighting made easy

Making lightmaps for instruments isn't something that all developers take on, especially when they were modelling back in the day for FS2004, where it was often easier simply to use a cockpit VC\_light effect to illuminate the controls. Making instruments work with realistic night lighting took a lot of extra effort, and so today when we try to update older freeware models, flying at night remains an unrealistic experience.

Rejoice, then, that this is no longer the case! Using ModelConverterX and a little, simple texture knowledge, awesome results can be achieved and those backlit gauges brought to life as per the following image:



*The Alphasim F-8 Crusader virtual cockpit, using my backlighting method.*

So, how's it done? First, get permission to upgrade the model from the original developer! It's not hard, and most are keen to see their older models improved over time.

- 1) Open the VC model in ModelConverterX. The main panel texture will be selectable via the Materials editor, and should have a prefix of \$. Select "Highlight Selected" in MCX so that you know you've got the right texture sheet.
- 2) Apply in the materials settings a lightmap to this VC texture. It should have the same dimensions as the original.

- 3) Open your art package, and colour the new lightmap texture in whatever colour you would like your instruments to glow.
- 4) Set the texture's emissive property to "Blend Multiply"
- 5) Save and re-compile your VC model.

Now, go flying at night and enjoy perfectly back-lit instruments!

If you wish to colour some instruments differently to others, or to create a "glow around the edges effect", it is possible to do so. Simply overlay a copy of your instrument panel texture onto the new coloured texture sheet, and then pick out the instrument areas that you wish to glow a different colour using a paintbrush or similar tool.

Here is the Alphasim F-8 Crusader cockpit layout for instruments that only glow around the edges. Just black out the relevant areas as below ( or fill them with the glow colour you desire ).

