
Subject: Re: Mac 32 bit color depth?

Posted by [Pavel A. Romashkin](#) on Wed, 21 Mar 2001 17:34:23 GMT

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I hope that Thierry answers this one.

I for one can say that yes, on the Mac you seem to only have a 32 bit color depth as your true color option, unlike PCs where you can choose between 24 and 32 bit.

I have had different information for what the fourth bit is used for. It may be used for transparency calculations, this is what all new hot 3D game accelerators do (I may be wrong in the exact terms). Photoshop help says the following:

"In most cases, Lab, RGB, grayscale, and CMYK images contain 8 bits of data per color channel. This translates to a 24-bit Lab bit depth (8 bits x 3 $\frac{1}{2}$ channels); a 24-bit RGB bit depth (8 bits x 3 $\frac{1}{2}$ channels); an 8-bit grayscale bit depth (8 $\frac{1}{2}$ bits x 1 $\frac{1}{2}$ channel); and a 32-bit CMYK bit depth (8 bits x 4 channels). Photoshop can also read and import Lab, RGB, CMYK, and grayscale images that contain 16 bits of data per color channel."

I am not sure how does Photoshop use the four available screen bytes, as all I can imagine the monitor can do is RGB. Maybe Photoshop calculates the approximate CMYK and does not use the other byte. But TV and TVRD do not work properly on a 32 bit screen, and I think it is because a blank fourth byte is being read by TVRD.

Hope this helps.

Pavel

Wayne Landsman wrote:

>

> I have a simple program that tries to reset the default value of

> !P.COLOR for the current (Mac, Win or X) device using the following

> code:

>

> device, get_visual_depth=depth

> !P.Color = 256L^(depth/8) - 1

>

> I am told that this fails on IDL V5.4 on a Mac since

> device,/get_visual_depth returns a value of 32 (whereas !P.COLOR is

> 256L^24 -1). Can other Mac users verify this? What is the meaning

> of a 32 bit visual depth?

>

> Thanks, --Wayne

>

> Wayne

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