



Gamut

The Colour Management Newsletter

Colour Management Myths

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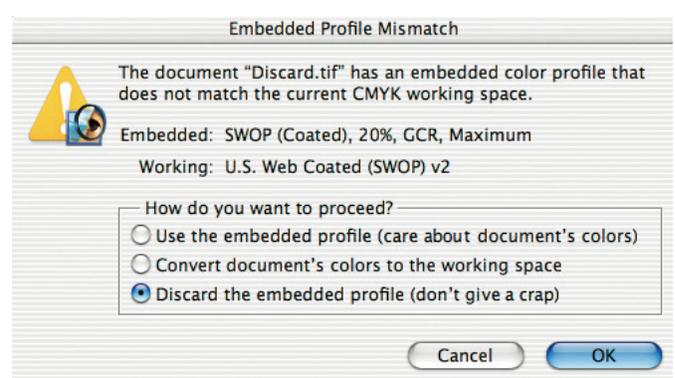
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Debunking

Colour Management Myths

One of the biggest myths in Adobe Photoshop involves colour management. If you choose “Leave as is (don’t color manage)” or “Discard the embedded profile (don’t color manage)” you might assume that you are not using colour management. That myth is propagated by Photoshop’s choice of words - “don’t color manage”. They should have said, “Discard the embedded profile (don’t give a #\$%@)” - but that wouldn’t have gone over very well.



There are a few rules of thumb for colour management.

1. Protect the integrity of the image.

If you receive an image that has a different colour profile than your working space and you choose “Discard the embedded profile (don’t color manage)” you are actually using a profile – possibly the wrong profile. Photoshop needs to use something to render the values of each pixel, so when you say, “Discard the embedded profile (don’t color manage)”, Photoshop will look to your colour settings and use them to render the image. If your RGB working space is different than the images embedded profile you will have problems getting an accurate rendition of the file. You may also degrade the image by reducing the colour gamut and de-valuing the CMYK conversion – a more serious issue.

2. Photoshop always needs a profile.

The important thing to remember is that Photoshop (version 6+) requires a profile or separation table to display an image and will use one even if you select “don’t color manage”.

3. Maintain consistent treatment through colour management.

The danger of not using the embedded profile is that Photoshop can use a different profile than the one originally assigned to the image, influencing the conversion to CMYK. I tried this with an image created in Adobe RGB. In Image One, I selected “use the embedded profile. Both images were converted to CMYK using the same CMYK profile but as you can see the results are different. Image Two was opened with the settings “don’t color manage” and I had sRGB set as my RGB working space; this informed Photoshop to use my color settings to describe the image - sRGB

sRGB to CMYK

Adobe to CMYK



The result? Image One is less saturated than Image Two. Why? Because my settings wrongly told Photoshop to use sRGB when opening the image, a smaller colour space as the source profile to make the conversion to CMYK.

So how can we stop this situation from happening? Embed your profiles with your images when saving in Photoshop. Then instruct anyone opening your images to always "Use the embedded profile"!

