



Tech Info Library

ColorSync 2.0: Tektronix Printer Profile Compatibility (1/96)

Revised: 1/16/96
Security: Everyone

ColorSync 2.0: Tektronix Printer Profile Compatibility (1/96)

Article Created: 16 January 1996

TOPIC -----

With ColorSync 2.0, I cannot access the ColorSync Printer profile, Tek Phaser 540 Plus, using the Filter Module in Adobe Photoshop. The profile does show up if I choose the Acquire command in the File menu in Photoshop.

I called Tektronix and downloaded ColorSync profile (540+ 16x16) from their ftp site to try it. Tektronix has ColorSync profiles for the Tektronix Phaser 140, 220i, 240, 340, and 540. The Tek Phaser 540 Plus printer profile was placed in the ColorSync Profiles folder along with Color LaserWriter 12/600 PS Profile. The Color LaserWriter 12/600 PS Profile does show up in the ColorSync Filter dialog box, however, the Tek Phaser 540 Plus Profile does not. What is wrong?

DISCUSSION -----

The problem is not with the profile or with ColorSync. It is a limitation of how the Plug-ins/Photoshop 3.0 work currently. A workaround is provided below.

We spoke with engineering and they verified what is stated in the ReadMe for the Plug-ins:

To use the Filter Module:

1. ...
2. ...
3. Click the "OK" button to start filtering.

Note: Due to limitations of the Photoshop Filter Module API, the ColorSync Filter Module can only match images from/to the same color space. Therefore, it cannot match an RGB image for a CMYK device, and vice versa.

So in other words, the color space for the profile MUST match the color space of the current image in Photoshop in order for the profiles to show up in the Color Match - ColorSync Filter dialog. Color matching using the Filter plug-in can only be performed on "like" color spaces, for example image = RGB and device profile = RGB. With regard to why the Color LaserWriter 12/600 PS profile shows up in the Filter plug-in and the Tektronix 540P does not, this is because the LaserWriter 12/600 PS profile is defined in the RGB space while the Tektronix profile is defined in CMYK. It is possible to change the color space of the image in Photoshop by selecting a different color space (for example CMYK color) from the Mode menu, however, you will be using Adobe's proprietary color space conversion.

A better workaround would be to use the ColorSync Export-to-TIFF filter which enables you to convert between color spaces accurately by using input and output profiles. Once exported, you can then re-open the TIFF image (which was exported) and directly print it -- since color space conversion of the TIFF image to CMYK has already been performed.

Future versions of Photoshop will most likely become fully ColorSync 2.0 compatible.

Support Information Services

Copyright 1996, Apple Computer, Inc.

Tech Info Library Article Number:19216