
Subject: Re: How to do RGB to CMYK conversion for PS output?

Posted by [Paul Van Delst\[1\]](#) on Thu, 13 Jul 2006 19:55:30 GMT

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Karl Schultz wrote:

> On Thu, 13 Jul 2006 14:31:22 -0400, Paul Van Delst wrote:

>

>

>> Hello there,

>>

>> A colleague produced a colour X-Y plot for a paper and saved it to a regular old PS file.

>> The editor mailed back stating that the file contains RGB colours and could we please

>> create the file in CMYK colours.

>>

>> How does one do this? Using

>> DEVICE,/CMYK

>> produced exactly the same PS file.

>>

>> Doing,

>> TVLCT,r,g,b,/GET

>> CMYK_CONVERT,c,m,y,k,r,g,b,/TO_CMYK

>> produced the appropriate c, m, y, and k arrays, but how does one "load" the CMYK arrays to
>> be used? Doing

>> TVLCT,c,m,y

>> produced exactly what I thought would happen - no black.

>>

>> Any ideas?

>

>

> Yes.

>

> Try:

>

> DEVICE, /CMYK, /COLOR

>

> You need to put the device into color mode when you select CMYK :-).

Yes, the /COLOR switch was included in a previous DEVICE call (to set the other PS stuff)

> Make sure that you do any LOADCT's after the DEVICE call.

Ah. Yes, there were TVLCT calls after the DEVICE call.

> You also should not need to put CMYK values in the color table with

> TVLCT/CMYK_CONVERT. The PS device should do this for you.

>

> For a program like:

>

```

>
> SET_PLOT, 'ps'
> DEVICE, /CMYK, /COLOR
> LOADCT, 5
> n = 50 ; Size of array for Bessel
> ; Make the Bessel function:
> a = BESELJ(SHIFT(DIST(n), n/2, n/2)/2, 0)
> TVSCL, DIST(n)
> nlev = 8 ; Number of contour levels
> ; Make the Contour at normalized Z=.6:
> CONTOUR, a, /OVERPLOT, ZVALUE=.6, /T3D, $
> LEVELS=FINDGEN(nlev)*1.5/nlev-.5, COLOR=1
> DEVICE, /CLOSE
>
>
>
> you'll see an image in the PS file that uses a COLORTAB and
>
> and is rendered with something like:
>
> {COLORTAB currentfile picstr readhexstring pop 0 get
> 4 mul 4 getinterval } bind false 4 colorimage
>
> Things like contour lines will have postscript color commands like
>
> 1.000 1.000 0.000 0.980 setcmykcolor
>
> Hope this helps,

```

Excellent! Yep - we now have a cmyk output file! Thanks very much!

(The reason for the multiple !!!'s is that my colleague is leaving for a conference to China for a couple of weeks and the editor wanted a reply today. So, tell your boss you deserve a raise! :o)

cheers,

paulv

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Paul van Delst Ride lots.
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