
Subject: Re: IDLgrImage and the channel keyword
Posted by [Dick Jackson](#) on Thu, 05 Feb 2015 00:29:50 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Wednesday, 4 February 2015 15:53:14 UTC-8, Jim P wrote:

> On Wednesday, February 4, 2015 at 2:02:30 PM UTC-7, ron Kling wrote:

>> All,

>>

>> Has anyone figured out how to use the channel keyword for IDLgrImage?

>>

>> If you try this

>>

>> file = 'E:\Program Files\Exelis\IDL84\examples\data\rose.jpg'

>> im = read_image(file)

>> xobjview, obj_new('IDLgrImage',im, channel='ff0000'x)

>>

>> What I expect to see is a red channel image, but instead I see cyan which is a combination of green and blue. So it is almost acting like a color subtraction. But if you try other hex combinations they don't work like subtractions either.

>>

>> Any ideas????

>>

>> Ronn Kling

>

> Good question! It doesn't produce what I would expect from the documentation setting just the red channel in an RGB input image:

>

> IDL> a = bytarr(3, 255, 255)

> IDL> a[0, *, *] = 255B

> IDL> xobjview, idlgrimage(a, channel = 'ff0000'x)

> IDL> xobjview, idlgrimage(a, channel = '00ff00'x)

> IDL> xobjview, idlgrimage(a, channel = '0000ff'x)

>

> Compare with

>

> IDL> xobjview, idlgrimage(a, channel = '000101'x)

>

> Is Karl still out here on the internets?

Or perhaps Don J Lindler who, 14 years ago, claimed to have been "able to use IDLgrImage objects with the channel set ('ff0000'x for red, '00ff00'x for green, and '0000ff'x for blue).":

[https://groups.google.com/forum/#!searchin/comp.lang.idl-pvwave/IDLgrImage\\$20channel/comp.lang.idl-pvwave/j9LozjSkkFQ/9B_e5T_DCTzcJ](https://groups.google.com/forum/#!searchin/comp.lang.idl-pvwave/IDLgrImage$20channel/comp.lang.idl-pvwave/j9LozjSkkFQ/9B_e5T_DCTzcJ)

:~)

FWIW, how it looks to me is indeed "subtractive colour" handling... note that if you pass '000000'X

what you get is the white background, not a black image, so perhaps '000001'X means to add a blue subtracting filter only: where B in the RGB image is high, it passes blue (along with full, unfiltered red and green, giving white), and where B is low, only blue is lowered (again, along with full, unfiltered red and green, giving yellow)

Cheers,
-Dick

Dick Jackson Software Consulting Inc.
Victoria, BC, Canada --- <http://www.d-jackson.com>
