
Subject: Problems using the alpha-channel in the IMAGE object
Posted by [Michael Viskum](#) on Wed, 10 Feb 1999 08:00:00 GMT
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Hi,

Do any of you out there have experience with the alpha-channel of the IDLgrImage object?

I am writing on a routine, where I would like to be able to see some geometrical figures within other figures, i.e. a sphere within an cube. I do this by warping an image object (containing an alpha channel) around an polygon object. But it seems that the BLEND_FUNCTION keyword to the image object has no effect at all on the transparency of the cube, say. Furthermore the alpha value should be a number between 0 and 1. But I can only get it to work with numbers between 0 and 255.

Is this a bug? Or have I missed something?

Below there is a simple routine where the cube is partly transparent. The blue sphere is partly inside the cube. The BLEND_FUNCTION is set to [3,4] meaning that (according to the IDL documentation) you can see through the cube to the extent of the alpha values. But changing the BLEND_FUNCTION doesn't have any effect! I use IDL5.2 (win95).

Thanks,

Michael Viskum

PRO transparency

```
owindow=obj_new('IDLgrWindow',dimensions=[400,400])
oview=obj_new('IDLgrView',
VIEWPLANE_RECT=[-2,-2,4,4],ZCLIP=[4,-4],EYE=5)
omodel=obj_new('IDLgrModel')
oLightDir = OBJ_NEW('IDLgrLight', loc=[2,2,2], type=1)
oLightAmb = OBJ_NEW('IDLgrLight', type=0, intensity=1)

cube=[[0.5,-0.5,0.5],[0.5,-0.5,-0.5],[-0.5,-0.5,-0.5],[-0.5, -0.5,0.5], $
[0.5,0.5,0.5],[0.5,0.5,-0.5],[-0.5,0.5,-0.5],[-0.5,0.5,0.5]]
```

```
mesh=[4,0,1,2,3, 4,0,1,5,4, 4,0,4,7,3, 4,1,2,6,5, 4,4,5,6,7, 4,2,3,7,6 ]
```

```
image=BYTARR(4,256,256)
```

```
image[0,*]=REPLICATE(255,256,256) ; red channel
```

```
image[1,*]=REPLICATE(0,256,256) ; green channel
```

```
image[2,*]=REPLICATE(0,256,256) ; blue channel
```

```
image[3,*]=REPLICATE(200,256,256) ; alpha channel
```

```
oimage=OBJ_NEW('IDLgrIMAGE',image, INTERLEAVE=0, BLEND_FUNCTION=[3,4])
```

```
opolygon=OBJ_NEW('IDLgrPolygon', cube, STYLE=2, COLOR=[255,255,255],$  
POLYGONS=mesh, TEXTURE_MAP=oimage)
```

```
osphere=OBJ_NEW('orb', RADIUS=0.3, COLOR=[0,0,255])
```

```
osphere->translate,0.7,0,0
```

```
omodel->add,olightdir
```

```
omodel->add,olightamb
```

```
omodel->add,opolygon
```

```
omodel->rotate,[0,1,0],40
```

```
omodel->rotate,[1,0,0],-30
```

```
omodel->rotate,[0,0,1],10
```

```
oview->add,osphere
```

```
oview->add,omodel
```

```
owindow->draw,oview
```

```
END
```

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