
Subject: Re: font angst

Posted by [deutsch](#) on Mon, 06 Sep 1993 22:02:28 GMT

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In article <25vrn2\$f02@skates.gsfc.nasa.gov>, ian@denali.gsfc.nasa.gov (Ian Sprod) writes:

> I am having problems using the 'charthick' keyword with the XYOUTS command.
> The results look terrible - fonts become deformed and are not suitable for
> presentation.
>
> For example try :
>
> IDL> xyouts,0.1,0.2,size=1.4,'!3Note overshoot on MMMM',/norm,charthick=2
>
> I need thick fonts to reduce flicker when images are put on VHS videotape for
> presentations.
>
> Any ideas/solutions out there?

If you are unhappy with the vector-drawn fonts, the solution is to move to either hardware fonts or bit-mapped fonts. Many devices have hardware fonts which one can invoke for better quality fonts, although the fonts are often not transportable to other devices.

To switch to hardware fonts use:

```
IDL> !p.font=0
```

where

```
IDL> !p.font=-1
```

will get you back to vector-drawn fonts.

To set the desired font, use the device command. For example:

```
IDL> set_plot,'ps'
```

```
IDL> !p.font=0
```

```
IDL> device,/helv,/bold
```

All Postscript fonts are listed and discussed in the IDL manuals.

Another example:

```
IDL> set_plot,'x'
```

```
IDL> !p.font=0
```

```
IDL> device,font='terminal-bold'
```

You can find out which fonts are available under your implementation of X Windows with the system program 'xlsfonts' (not IDL). e.g.:

```
% xlsfonts
```

I suggest running this program in a window with a very large scroll buffer.

So, here is an expansion on your above example which runs under OpenWindows 3.0 on a SPARCstation: You may get 'Requested font does not exist' elsewhere

```
!p.font=-1
```

```
xyouts,0.1,0.2,'!3Note overshoot on MMMM',/norm,charthick=2
```

```

!p.font=0
device,font='times-bold'
xyouts,0.1,0.3,'!3Note overshoot on MMMM',/norm
device,font='terminal-bold'
xyouts,0.1,0.4,'!3Note overshoot on MMMM',/norm
device,font='helvetica-bold'
xyouts,0.1,0.5,'!3Note overshoot on MMMM',/norm
device,font='12x24romankana'
xyouts,0.1,0.6,'!3Note overshoot on MMMM',/norm
device,font='8x16romankana'
xyouts,0.1,0.7,'!3Note overshoot on MMMM',/norm
device,font='-adobe-helvetica-bold-r-normal--14-140-75-75-p-82-iso8859-1'
xyouts,0.1,0.8,'!3Note overshoot on MMMM',/norm

```

The major problems with this is a) there are a grillion fonts to sift through if you're picky and b) these fonts are only available on X Windows and worse often only on that particular platform! i.e. if you find a nice font under OpenWindows 3.0, chances are slim that you'll find the exact same font under DECwindows/Motif or others. If you stick with the adobe "iso" fonts, you'll have the best chances for portability (e.g. the last one in the above example.)

Let me call your attention to perhaps the best ones, the adobe "iso" fonts:

```

-adobe-helvetica-bold-r-normal--10-100-75-75-p-60-iso8859-1
-adobe-helvetica-bold-r-normal--12-120-75-75-p-70-iso8859-1
-adobe-helvetica-bold-r-normal--14-140-75-75-p-82-iso8859-1
-adobe-helvetica-bold-r-normal--18-180-75-75-p-103-iso8859-1
-adobe-helvetica-bold-r-normal--24-240-75-75-p-138-iso8859-1
-adobe-helvetica-bold-r-normal--8-80-75-75-p-50-iso8859

```

The distinguishing numbers are ^^ here. This is essentially point-size of each font. You cannot use the charsize= keyword with these hardware fonts (you can with PostScript hardware fonts, though)

The above is a pretty good solution for most purposes under X windows. You did not specify what device you are using, so I'll hope you are using this. If you are using an IVAS, IIS, SunView, or some other implementation, this won't help you..

The answer then may be to use bit-mapped fonts. This is basically a make-your-own solution. I have some software which I used to create and use bit-mapped fonts which were larger and fatter than any available X fonts. If you're not happy with the X fonts or need bigger fonts, I can send you this bit-mapping solution.

cheers,
Eric

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