
Subject: Re: Postscript for different paper sizes
Posted by [hahn](#) on Wed, 24 Jan 1996 08:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

pit@asterix.kis.uni-freiburg.de (Peter Suetterlin) wrote:

> In article <4do2gb\$94@cpc3.uea.ac.uk>,
> f055@uea.ac.uk (T.Osborn) writes:
>>
>> When outputting plots to the PS device, does the PS file contain any
>> settings for the paper size?

There is no way to set a paper size in PostScript. You can request a specific paper size and you can query the size of the print area when the printer is directly attached to the computer. The application program (IDL in this case) is responsible for generating the necessary instructions to fit the plot onto the page. A PostScript printer is not allowed to scale or rotate the page on its own to make it fit! This is left to the device driver.

>> If so, what is the default? Letter?

Here is what is contained in IDL Help:

Feature Value

File idl.ps
Mode Portrait, non-encapsulated, no color
Horizontal offset 3/4 in.
Vertical offset 5 in.
Width 7 in.
Height 5 in.
Scale factor 1.0
Font size 12 points
Font Helvetica
Bits / Image Pixel 4

Table 3.12 Default PostScript Driver Settings

>> If so, how can I change it to A4 or A3 etc.?

> I'm not shure whether special procedures for this exist, but you can
> always set the dimensions you like using the device procedure:

> `set_plot,'ps'`
> `device, xsize=28,ysize=41,xoffset=0.8,yoffset=0.5`

> would give you about an A3 Plotting range.

Hmmm well, it may work, but...

Older versions of IDL contained a procedure called phaser.pro to correctly setup for a Tektronix Phaser printer. Actually you have a lot of parameters to define, esp. when you want to generate both portrait and landscape output.

I adapted the old Phaser.pro for our Tek Phaser IIIpxi which can handle both A3 and A4 and the similar US formats. The essence of my phaser3.pro is:

```
; $Id: phaser.pro,v 1.2 1993/04/02 19:43:31 Ha THD $
```

```
pro phaser3, medium=medium, landscape=landscape, portrait=portrait, $  
    filename=filename
```

[comments deleted to save bandwidth]

```
; MODIFICATION HISTORY:
```

```
;     Created 22-OCT-1991 by Mark Rivers.  
;     Adapted 22-Nov-1993 by Norbert Hahn, THD.  
;     Update 14OCTv-1994 by Norbert Hahn, THD: /isolatin1 added  
;-
```

```
short_side = 28.55  
small_offset=(29.7-short_side)/2.0  
long_side = 40.75  
big_offset=(42.0-long_side)/2.0
```

```
if n_elements(medium) ne 0 then begin  
    c_size = STRUPCASE(STRCOMPRESS(medium,/REMOVE_ALL))  
endif else begin  
    c_size = 'A3P'  
endelse
```

```
if n_elements(filename) ne 0 then begin  
    fn = filename  
endif else begin  
    fn = 'idl.ps'  
endelse
```

```
set_plot, 'ps'
```

```
if c_size eq 'A4P' then begin  
    short_side = 19.76  
    small_offset=(21.0-short_side)/2.0  
    long_side = 28.58  
    big_offset=(29.7-long_side)/2.0
```

```
endif
if c_size eq 'A4F' then begin
    short_side = 20.0
    small_offset=(21.0-short_side)/2.0
    long_side = 27.0
    big_offset=(29.7-long_side)/2.0
endif

if n_elements(portrait) ne 0 then begin
    device, bits=8, /color, xsize=short_side, ysize=long_side, $
        xoffset=small_offset, yoffset=big_offset, $
        /portrait, /isolatin1, filename=fn
endif else begin
    device, bits=8, /color, xsize=long_side, ysize=short_side, $
        xoffset=small_offset, yoffset=long_side+big_offset, $
        /landscape, /isolatin1, filename=fn
endelse

end
```

> Peter

> ~~~~~
~~~~~  
> Peter "Pit" Suetterlin http://www.kis.uni-freiburg.de/~ps  
> Kiepenheuer Institut fuer Sonnenphysik  
> Tel.: +49 761 3198-210 ps@kis.uni-freiburg.de  
> -- \* -- \* ...-- \* -- \* ...-- \* -- \* .... \* -- \* ...-- \* --  
> Come and see the stars! http://www.kis.uni-freiburg.de/~ps/SFB  
> Sternfreunde Breisgau e.V.  
> Tel.: +49 761 73571 or 278588  
> \_\_\_\_\_

Norbert Hahn  
University of Darmstadt  
Germany

---