NAME

hpgl2gif, hpgl2ppm, hpgl2bmp, hpgl2png, hpgl2tiff, hpgl2pdf, hpgl2cps – convert HPGL plot file to GIF, PPM, BMP, PNG or TIFF image, PDF or colour PostScript file

SYNOPSIS

hpgl2gif [**−p** colour,...]   [**−b** colour] [**−h** height] [**−w** width] [**−G**] [**−t**] [**−f**[vfont]] [**−r**] [**−m**] [**−A** | **−B** | **−A3** | **−A4**] [hpglfile] > giffile

hpgl2ppm [options] [hpglfile] > ppmfile

hpgl2bmp [options] [hpglfile] > bmpfile

hpgl2png [options] [hpglfile] > pngfile

hpgl2tiff [options] [hpglfile] > tifffile

hpgl2pdf [options] [hpglfile] > pdffile

hpgl2cps [options] [hpglfile] > psfile

DESCRIPTION

Each of these programs interprets the HPGL instructions stored in the *hpglfile*, or the standard input if no file is specified, and generates output in the appropriate format. The output is on the standard output, which should be redirected to a file.

The programs act as a front end to various filters, mostly in the *emuhpgl*(1) suite and the *netpbm* package, to carry the HPGL though the necessary sequence of conversions to the desired final format. The *emuhpgl*(1) programs emulate only a small subset of the full HPGL, which is adequate for handling output from programs like *analysis*(1) and *layout*(1).

The output graphics are in an aspect ratio equivalent to what would be produced by an HP plotter on A-size (8.5×11″) paper.

Options

−p *colour,...*

Sets colours for various pens, up to 8 in all. Each *colour* can be a name without spaces, as in the file **/usr/neuro/lib/rgb.txt**, or hexadecimal values as #FFAA99. The default is to use the colours specified in the **SCRPENS** environment variable. You can also use **−p bw** or **−p wb** for a faster rendering of a simple black on white or white on black bitmap image.

−b *colour*

Sets the image background colour (default is white).

−h *height*

Sets the image height in pixels (default is 400).

−w *width*

Sets the image width in pixels (default is 520). If only one of **−h** or **−w** is given, the other is set proportionally. For the *hpgl2pdf* and *hpgl2cps* commands, the height and width are specified in decipoints, rather than pixels, and the default size is 7920×6120, which corresponds to a US A-size sheet of letter paper in landscape orientation. You can use **−w 8420 −h 5950** for A4 landscape.

−G Causes a cleaner, but slower rendering, using the GhostScript (*gs*(1)) PostScript emulator. This also causes lines to be rendered somewhat thicker than the default width of a single pixel. The *hpgl2pdf* and *hpgl2cps* commands ignore this option, as the former always uses *gs*(1) to render the PDF, and the latter doesn't render the PostScript. *hpgl2cps* produces a tweaked version of the output of *hpgl2psc*, in which the pens select colours rather than simple shades of gray.

−−help

Causes the program to output a summary of command usage and options.

Emuhpgl Options

The following options will be passed directly to the initial HPGL conversion program, which is hpgl2ras, hpgl2xpm or hpgl2psc.

−t Causes text to be suppressed.

−f*[vfont]*
> Causes text to be rendered as a series of line segments, using the specified *vfont* to select a variable Hershey font, or by default, a font approximating the default font on HP plotters.

−r   Causes the image to be reduced to 72% of its linear size, and rotated so that it appears in portrait orientation on the upper part of a letter sized page. This option only has an effect on the *hpgl2pdf* and *hpgl2cps* commands.

−m   Merges together multiple unconnected line segments into a single path, rather than stroking each one separately. This option only has an effect on the *hpgl2cps* command, and possibly on *hpgl2pdf* as well, depending on how GhostScript renders the PS into a PDF.

−A, **−B**, **−A3**,
> Adjust the coordinate system and aspect ratio to correspond to the plotter's defaults for that page size. The default page size can also be changed by setting the environment variable **HPGLPAGE** to one of the above page sizes. If you use one of these, you will probably also want to adjust the rendered image size using **−h** and **−w** options, to get the right proportions for the chosen page size.

FILES
> /usr/neuro/lib/rgb.txt   X11 colour database

SEE ALSO
> layout(1), analysis(1), emuhpgl(1) (for hpgl2ras, hpgl2xpm and hpgl2psc), ras2xbm(1), xpmtoppm(1), xbmtopbm(1), ppmtogif(1), ppmtobmp(1), pnmtopng(1), pnmtotiff(1), gs(1)