DESKJET

COLLABORATORS

	TITLE : DESKJET		
ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY		August 13, 2022	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

DESKJET

1.1 Contents

HP Deskjet 670C/680C/690C driver
by Peter Hutchison
15/6/02 40.31

Introduction

Requirements

Features

Installation

Customisation

Preferences

History
        Author

1.2 intro

Introduction

This is my second driver to be released . This is a colour printer driver for
the 6xxC series of Hewlett Packard Deskjet printers.

 This driver appeared because an Amiga user in Florida, USA had a new printer
and couldn't use its full features as existing drivers would either do upto
300 dpi (Deskjet 550C) or only did black and white (HPDJ600).

  So, since I had SAS/C, RKM:Devices and got some information about PCL, HP's
printer language, and Commodore's Laserjet source code (which shares the same

language) I created my first printer driver which does all of the required
features i.e. 600 dpi and colour. Here it is.

1.3 reqs

Requirements

Computer: Any Amiga.
Memory: 4Mb or more
Workbench: WB 1.3 or better (upto 3.1)
Printer: HP Deskjet 600C, 610C, 660C, 670C, 680C, 690C.

The HP Deskjet 710C and 720C are incompatible and will not
produce any output via PCL. These depend on the host processor
(e.g. a PC) to interpret and produce the required output rather
than the printer.

Printer Enhancement packages, such as TurboPrint or Studio should
not be used with this driver.

If using AmigaOS 3.5 or 3.9, please use 3.5 printer drivers supplied
on OS CD to take advantage of 24 bit colour printing.

1.4 feat

Features

Colour: CMYK (Colour AND Black) dual cartridges
        Photo cartridges are NOT supported. Sorry.

Resolution: 75 to 600 dpi.

Graphics: Upto 600 x 300 colour, 600 x 600 b/w

Aspect: Portrait and Landscape

Output: B&W and Colour Text,
         B&W, greyscale and colour graphics

Typefaces:
  ESC(B = Courier
  ESC(R = CG Times
  ESC(K = Letter Gothic
  ESC(A = Universal

Modes:
  0 = Uncompressed
  1 = Run Length Encoded compression

 Uses character symbol sets fonts for other typefaces.

*NEW - Optimised for Speed and Versions for 000, 020 and 040 processors.

Compiled with SAS C 6.58

Densities

0 75 x 75
1 75 x 75
2 150 x 150
3 150 x 150
4 300 x 300
5 300 x 300
6 600 x 300
7 600 x 600

NB: 600x300 may produce crushed output in some cases.
US LEGAL supports 14in paper, use 10in for A4 and others.

Make sure you select a lower density before printing from
a Word Processor (usually defaults to 7).

1.5   instal

                  Installation

Run the Install_Driver and follow instructions, select the processor type
(00, 020 and 040) and Printer model closest to your
printer from the list given.

If installing a new printer, run the Preferences to select the correct
driver and set it up. See
                  Prefs
                   .

For installation to work it requires the Installer command in the C: directory.
Available from Aminet, the OS CD or with some commercial software.

It it says it cannot open the printer.device, then that is because the current
printer.prefs is pointing to a deleted printer driver. Press cancel if this
message appears, and remember to save your new prefs when asked.

1.6   prefs

Preferences

1. Printer

   Printer Type - select appropiate printer from list
   Printer Port - usually Parallel
   Printer Pitch - Pica, Elite of Fine (choose one that suits you)
   Print Spacing - 6 or 8 lpi (I use 6)
   Print Quality - Use Letter for max quality

```
    Paper Type    - Use Single for paper such as A4
    Paper Format  - Use DIN A4 for standard single sheet A4 (don't use Wide)
    Paper Length  - Only set this if using a CUSTOM page length (see Paper Format).
    Margins       - Use 2 and 80 characters
```

2. PrinterGfx

```
    Dithering     - Floyd Steinburg for best quality
    Scaling       - Integer for line gfx or text.
                    Use Fraction for shaded pics.
    Image         - Positive (Neg is rarely used)
    Aspect        - Horizontal
    Shade         - Color (NB: Use BW if using Multiview with Text)
    Threshold     - Around 5 (use a smaller figure if too dark)
    Density       - Use whatever you fancy (use a small figure for speed
                    and less ink)
    Color Correction - Don't set, use all 4096 (12 bit) colours
    Limits        - Set to ignore
    Smoothing     - Used to smooth out lines esp. in graphic dumps of text
    Centre Picture - Tick this if you want centralised pics
```

3. Other features

```
    Gamma Control - Determined via Threshold in PrinterGfx for color output.
```

Further information is in your Workbench Users Guide (Ch 9) or see my web page for info on preferences.

If you are experiencing problems with this driver send me email (see below). You can download updates from Aminet, my web page or Amiga Format CDs.

1.7 **custom**

Customisation

If you wish you can customize your driver to your language for text based printing. The Driver defaults to ESC(1E for UK character set (ESC=1B). Use a binary editor (e.g. FileX) to change the above init string (4 chars) to another character set.
e.g.
ESC(8U = HP Roman 8
ESC(0N = Latin 1
ESC(1G = German (ISO 21)
ESC(1F = French (ISO 69)
ESC(0I = Italian (ISO 15)
ESC(2S = Spanish (ISO 17)
ESC(0S = Swedish (ISO 11)
ESC(1U = HP Legal
ESC(9T = Turkish
ESC(2N = Latin 2
ESC(5N = Latin 5

1.8 hist

```
History

Beta 1

11/10/97 Provided macros.i and init.asm as-is. No modifications required.
11/10/97 Started on printertag.asm. Modified HP_Laserjet file
         for Deskjet and colour!
12/10/97 Completed Cmd table in data.c, modified HP_LJ to HP_DJ.
12/10/97 Updated dospecial.c for Deskjet
13/10/97 Create 'makefile' script to make 'smakefile' for SMake.
         Successfully completed first compiled text only beta driver.
Beta 2
24/10/97 Added Horiz Aspect (Landscape) setting (via Prefs).
         Added Colour Text facility.
         Changed init strings to full length commands (was
         causing odd chars to appear on every page).
Beta 3
30/10/97 Beta 2 kept Guruing. Fixed by remaking it driver with source
         files in right order.
         Fixed a bug in the Aspect Esc command, missing 'l'.
Beta 4
2/11/97  Modified Render.c for b&w gfx printing. Tested using CMD and PPaint
         okay. Created a 1.9Mb file!
Beta 5
8/11/97  Changed LPP value, pointing to wrong place in cmd string.
         Changed HORIZ_ASPECT to VERT_ASPECT for Landscape mode.


Beta 6
13/11/97 Change density 6 to use 600 x 300 (max for colour)

15/11/97 Modified render.c and transfer.c for color graphics. First attempt
         failed wil Guru. Examined output from HP550C color dump, requires
         more commands for Color output eg Ec*b#M, Ec*r#U, Ec*r#S, Ec*b#W
         and Ecb#V (4 per row).

18/11/97 Started modifying render.c for correct color output.

23/11/97 Completed combined gfx section. Testing failed on b&w output.
         Crashes 1/4 way in Colour.
26/11/97 Completly rewrote transfer program and in C (rather than asm)
         Rewrote render program.
         Compiled and tested, run, output still not quite right though.
Beta 7
03/12/97 Previous version printer 0M on every page due to missing '*' in
         start up string.
         Colour output was messed up but image ok. Mainly a yellow colour.
         Amended and extended init string.
         Changed order of colour buffers to KCMY but kept order of transfer
         to KYMC but to correct buffers.
V1.0
12/12/97 Final version. Completed and output a-ok!

v1.1
15/12/97 Missed out some commands in init string, changed scoptions and
```

            turned on Optimised for time. Recompiled ok

v1.2
28/12/97 Removed extra commands from v1.1 in transfer.c,
         Added some comments for init string in render.c
v1.3
04/01/98
         DoSpecial – Set the top margin to 0 rather than 2 to remove the
         3 blank lines problem.
         Density – For density 6, I have doubled the MaxYDots for
         600 x 300 density.
v1.4
08/01/98 DoSpecial – reinserted the Plain paper and GFx depletion commands.
         Density – set up Multiply Dimensions to 2xheight for density 6.
v1.5
07/02/98 Replaced 600x300 density by 600x600
         Updated Extended Char set for special/foreign chars
v1.6
14/03/98 Updated Normal Char Set string in data.c (added bold off, black)
         Added Version string.
v1.7
4/4/98   Removed '0u' from init string. Reset margin to 0.

v1.8
13/5/98 Changed topmargin in initForm from 002 to 000.
        Included densities in document and added further setup info.
v1.9
20/5/98 Changed init string. Swapped around the Lines/inch and Underline off ←
   commands
        to see if it prevents the u/l problem in some text editors.
v1.10
20/6/98 Added W_TRACTOR facility in density.c (OK)

v1.11
27/6/98 Changed default char set from ANSI to UK char set.

v1.12
11/7/98 Init string positions incorrect causing problems. One char out.

v1.13
9/9/98   Fixed FORM_LEN for Margins in DoSpecial for SLPP and removed page eject
         instruction in Render (case 4) as it doesn't work in Final Writer!
v1.14
20/9/98 Increased Timeout from 30 to 60 seconds in printertag.asm.
        Readded page eject to Render() but deleted the W_TRACTOR feature from
        SetDensity().
v1.15
1/10/98 Removed ConvFunc routine as DJ does not require this. Added if statement
        for SLRM to ensure left margin >=0.
        Removed Plain Paper command from init string.
        Added 600 x 300 density for density 6.
v1.16
1/2/99   Dospecial.c – Reduced init length string (was too long).

v1.17
26/4/99 Data.c – Changed first 4 typesfaces to use available typefaces instead
        of char sets.

v1.18
8/6/99   Data.c – Fixed command table. Wasn't interpreting text style commands
          properly.

27/7/99 Added HP 610C to install script.

v1.19
24/9/99 DoSpecial.c, Render.c – Added support for Paper Format to auto set page
          length using US Letter, US Legal, DIN A4 etc.

v40.20   Changed version string to follow OS versions. Is now 40.20 instead of 1.20
          Added ESC@ to init printer for text/graphics.

19/12/99
40.21   Fixed small bug with print quality setting

5/1/99
40.22   Fixed major bug with graphics printing routine. Setting density size was
          in wrong place.

13/3/01
40.23   Added supported for HP_Prefs incl. Gamma Control and better
          Word Processing support with long page lengths.
          Added 040 version

21/3/01
40.24   Fixed ColourCorrection bug causing crashes.

28/03/01
40.25   Removed HP_Prefs from driver, causes driver to hang when reading prefs in ←
      v40
          or earlier printer.devices.

16/09/01
40.26   Changed top margin from 0 to 1.

09/12/01
40.27   Halved MaxYDots for 600x300 density settings for it to fit on one page.

2/6/02
40.30   Render.c rewritten. Compression routines added to increase output speed.
          AmigaDOS script replaced by an Installer script.

15/6/02
40.31   Fixed memory leak problem. Forgot to free allocated memory after dumping ←
      data
          to printer.

1.9 author

Author

This driver is Giftware, you are not obliged to send anything but if you
want to contribute to further driver development for this printer and others
then send me money (£5 UK Pounds) or other gift to me at:

```
Email: pjhutch@blizzard.u-net.com
Web:   http://www.blizzard.u-net.com
```