LaserWriter and HP Emulation: Switching Character Pitch

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TOPIC -----------------------------------------------------------


I'm using a Personal LaserWriter NT, in RS-232 mode, set to HP Emulation.
It won't toggle into 12cpi using PCL escape sequences.


Sending codes from a BASIC program:

   CHR$ 27,38,107,50,83      for 16cpi
   CHR$ 27,38,107,48,83      for 10cpi
   CHR$ 27,38,107,52,83      for 12cpi and this one does not work.


All other settings work, but 12cpi can't be set.  The command is just
ignored.


DISCUSSION ------------------------------------------------------


Hewlett Packard has provided more than one set of codes to switch character
pitch in their different levels of PCL.  The emulator used in our
LaserWriter models was originally designed by Adobe as a LaserJet+
emulator.  As such, it doesn't support some more recent command additions.
Specifically, the sequences ESC&k0S and ESC&k2S are interpreted as
requesting standard and compressed font pitch, respectively.  Values other
than 0 or 2 are ignored.  This is why you saw that the value of 4 produced
no change in output.

However, other code sequences do exist to switch character pitch.  The
sequence ESC(snH does this for the primary font, where n is the desired
number of characters per inch.  Note that a real LaserJet will pick a
built-in font that is as close as possible to the requested size, but may
very well not have the right one available.  The emulator uses PostScript
to obtain its different character sizes, and is therefore able to provide
precisely scaled characters at any size.

Examples:

ESC(s10H    sets 10 characters per inch.
ESC(s12H    sets 12 characters per inch.
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ESC(s16.6H  sets 16.6 characters per inch.
ESC(s2.2H   sets 2.2 characters per inch.*
ESC(s24H    sets 24 characters per inch.*


  *On a real LaserJet+, these would produce output far from that requested
   since the font in that pitch wouldn't exist unless downloaded.
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