

The *Fancy Font*TM System

Pfont Version 2.0

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Change Summary

- Word wrap/fill mode added (see \w and \x). *Fancy Font* now will adjust the number of words on a print line so as to "pack" the line as fully as possible without overflowing the margins. Enables much more natural form of text input than in previous *Fancy Font* versions.
- High resolution version of *Fancy Font* and new fonts to take advantage of approximately 50,000 dots/square inch resolution of Epson FX printer. (This is a completely separate version of *Fancy Font*.)
- Adjustable indentation and "margins" (see \> and \<). These commands allow users to indicate that lines are to be indented from the left and/or right margins. This is very useful for changing left and right margins for lists, quotations, etc. Combinations of indentation and horizontal positioning can be used to create "outdented" lists (such as this list).
- Specification of units. All horizontal and vertical positioning commands can now be specified in your choice of inches, centimeters, dots, or a user defined unit.
- Mixed *Fancy Font* and native printer fonts (see \ff and \fn commands). These fonts styles may be mixed within a single document, but not within the same print line. Also ability to change draft modes within a document (see \d).
- Command name and syntax changes. Absolute and relative vertical motion commands were combined under the \v command, similarly, \h can now be used for either absolute or relative horizontal motion.
- Horizontal and vertical location marking (see \m, \n, \h, \v). Vertical and horizontal locations can be marked and subsequently returned to. This allows easy and accurate alignment of text.
- Reverse vertical paper motion. With the FX80 printer only, *Fancy Font* will move the paper both backward and forward to allow flexibility of vertical positioning.
- Negative Margins. Each character can be specified to have a negative

New and Modified Embedded Commands

a Former `\a` renamed to `\h` and somewhat modified. The new `\a` is the former `\d`. Thus, `\a<3 digits>` now specifies a character via its decimal ASCII number.

b `\b`
Temporarily "breaks" both justify and word wrap. An implicit `\b` is forced by all vertical positioning commands and blank line or line beginning with tab or space. Also called paragraph break.

d Former `\d` changed to `\a`. New `\d<digit>` indicates a change in draft mode. This works in conjunction with the RD parameter. Only horizontal draft modes are affected by `\d`, the RD parameter must be used to select a vertical draft mode. For MX printing, the `<digit>` must be 0 (normal printing) or 1 (horizontal drafting similar to +RD 2 - 60 dots per inch). For FX printing, if +RD 0,1,2 or 3 is selected, the `<digit>` must be 0 (best quality - 240 dpi), 1 (good quality, 240 dpi but adjacent dots not printed), 2 (MX quality - 120 dpi) or 3 (120 dpi, adjacent dots not printed). If +RD 4,5 or 6 is selected, the `<digit>` must be 0 (120 dpi), 1 (120 dpi, adjacent dots not printed) or 2 (fastest, 60 dpi).

Note: The last `\d` command on a print line will determine the draft mode for the entire line. It is safest to place `\b\d` at the beginning of a line for which the draft mode is to be changed. `\d` causes an implicit break with word wrap.

f `\f<digit>` or `\fp` or `\ff` or `\fn`
`\f<digit>` selects font number `<digit>`, e.g. `\f3` selects font 3 as the current font. MSDOS ONLY - `<digit>` may be 0-9,a,b,c,d,e for `\ff` to allow a maximum of 15 Fancy font fonts (0-9 only for native fonts).

`\fp` returns to the previous font selection (i.e., the numbered font in effect before the previous `\f` command). Font 0 is considered the previous font if there have been no previous font changes.

`\ff` indicates that the high-quality, fancy fonts are to be used. `\fn` selects that fonts native to the printer are to be used (formerly called Epson fonts). Both fancy and native fonts can now be used within the same document. However, the following restrictions apply: 1) Each printed line must be printed entirely with fancy fonts or native printer fonts, and 2) the `\ff` or `\fn` commands must appear at the beginning of a print line. If either of these commands is issued at other than the beginning of the line, the entire line will be printed in the last type of fonts specified and horizontal and vertical formatting

will not work properly.

h `\h<+ or - option><value><unit>` or `\hm<digit>`
 General horizontal motion, forward or backward, absolute or relative, or absolute to horizontal mark. General format:

`\h<optional + or -><number><unit>` or `\hm<digit>`.

Example, `\hm4`, `\h+3.2i` `\h-2d` `\h6c`

This command ends center and right align regions. Justification begins to the right of the rightmost horizontal position command. It is possible to position horizontally outside of indented margins except for past right indented margin when in word wrap mode. In other cases a warning message may be displayed.

The old `\h` command has been removed, use `\ild`.

i `\i<+ or -><value><unit>`
 Relative horizontal motion, forward or backward, relative only. Missing + or - implies +. Maximum value 255 dots forward or backward. This command does not end regions or affect justification and is thus distinguished from `\h` command. Use `\ild` for old `\h` command.

l `\l<+ or - option><value><unit>`
 Set the interline spacing, absolute or relative positive or negative. This is an embedded command to modify the SP parameter. The line on which the `\l` command appears will reflect the new spacing (i.e. will be preceded by the requested white space). `\l` causes an implicit break when used with word wrap. The default interline spacing is 3 dots (.045 inches).

m `\m<digit>`
 Horizontal Mark. Mark the horizontal position at which the next printable character will appear. Used in conjunction with `\hm` to position the print head horizontally on a line. Maximum of 10 marks (0-9) used in any order, as often as desired. These take into account any word wrap and justification that occur. `\m` is useful for lining up special symbols, columns etc. (e.g. `\m2` `\hm2`)

n `\n<digit>`
 Vertical Mark. Mark the current vertical position from the top of the page. The current position is actually the top of the next line to be printed. Only useful for FX80 printers and with the RV parameter ON. This allows `\vm` to return the paper to a previously marked print position. Up to 10 (<digit> is between 0 and 9) vertical marks can be used in any order, as often as desired. (e.g. `\n3` `\vm3`)

q `\q<value><unit>`

Conditional page skip. Skip a page (i.e. \p) if the indicated amount of vertical space does not remain on the current page. (e.g. \q4.5i) This command causes an implicit break regardless of whether a page is acutally skipped.

r \r<string><TAB or \h or newline>
Right Align. Same as before, but can now right align to a tab stop (similar to regions for centering). Useful for aligning columns of numbers.

v \v<+ or - option><value><unit> or \vm<digit>
Vertical Positioning. Now can be absolute or relative. This command replaces both the old \v and \w commands and follows the general absolute or relative, unit syntax (e.g. \v+3i). Can be used in conjunction with vertical marks (e.g. \vm2) to position at a previously set mark. Vertical distance (relative) is always measured from the bottom of the inkable area of the line last printed to the top of the inkable area of the line to be printed next. Be careful to use + or - for relative motion, for example: \v+.75i to leave 3/4" extra space instead of the old \v without the '+'. (Notice that n is used to set the vertical mark, and m is used in conjunction with \v to return to the mark). The \v command causes an implicit break when used with word wrap.

w \w
Word wrap on. While on, adjust input words so that as many fit within the current line width/margins/indentation, as possible. If there are too many words on a line, move excess words to the next line. If not enough words on the current line, move words into the current line from succeeding lines.

\b and all implicit breaks temporarily override this feature. Words are distinguished by the space character. Thus, words moved between lines are always ended by a space, e.g. in "end of line. And then ...", "line." is considered to be one word (including the period). If a line cannot be split at a space, then as many characters as possible will be printed, the line split, and a warning message displayed.

x \x
Word wrap Off (the default setting). This causes Pfont to behave exactly as the original Pfont 1.x version, printing one line for each line of input.

\:
Reverse field, i.e. white printing on black background. This doesn't work very well. It works better for larger, bolder fonts than for smaller, narrow fonts. If a native printer font is selected for an Epson printer, \: will toggle double printing; if on, lines will be overstruck.

- \-**
Backup previous character width (also Control-H). The width of the most recent printable character is remembered and this command causes the print head to backup by this amount. Useful for overstriking, can be combined with `\i` and `\h` for finer control. (Notice that '-' is the 'minus' sign.)
- _**
Continuous underline. Similar to `\u`, however spaces, tabs (`\t`) and forward relative horizontal motion (`\i+...`) is all underlined. `_` is turned off by a subsequent `_` or `\u`. Likewise, `_` will turn off `\u`.
- >**
`\><+ or - option><value><unit>`
Indent from the LEFT margin (notice direction of arrow). Cause current, and all subsequent print lines to be indented by the indicated relative or absolute amount (relative to previous setting of indentation) from the left margin. This affects justification and word wrap. The indentation can be violated by `\h` command for "outdented" titles, etc. (Examples of command, `\>3i` `\>-.25i`). `\>` causes an implicit break when used with word wrap. Any tabs to the left of the left indent go directly to the left indent setting, regardless of tab stops.
- <**
`\<<+ or - option><value><unit>`
Indent from RIGHT margin. Similar to `\>`, but right indent cannot be violated by `\h` except if word wrap off (in which case a warning will be issued). Causes an implicit break when used with word wrap.
- !**
`\!<anything except newline><newline>`
Comment command. Treat all text, commands, etc. until the next newline character as comments. Commands following the `\!` are not processed, nor is text printed.

NOTES: `\j` will now justify accurately for Epson fonts. justification will begin after all leading blanks

. ! ? at end of sentence and immediately preceding new line will leave 2 spaces.

Parameters

A few parameters have been added or removed, as identified below. As with embedded commands, there are now measured parameters. These require that the unit of measurement be specified. Units are i-inches, c-centimeters, d-printer specific horizontal or vertical dots as appropriate to individual parameter. The 'u' unit cannot be used for parameters. (Example: `+pl 11i` must be used instead of `+pl 11` to indicate a page length of 11 inches). Units will default to i (inches) and

a warning message displayed if no unit is specified.

- EP** Epson Fonts. This parameter has been removed. The new embedded command `\fn` will perform the same function (turning on native printer fonts), and can be issued in a `+IS` initialization string to initially force native printer fonts to be selected. If no fonts are specified using the `+FO` parameter, then `\fn` will automatically be in effect.
- RV** Reverse Paper motion enable/disable. If on, Pfont will allow embedded commands to move the paper backwards vertically through the printer. This only works with FX80 printers. Additionally, if fonts are used such that "extra dots" would appear between print lines, this space is removed automatically by rolling the paper backwards if RV is ON. Default value, ON for FX80 printers, else OFF.
- UU** User Defined Units. The definition of the 'u' unit for embedded commands. If one value, this value specifies both the horizontal and vertical dots per unit for the 'u' unit; if two values, the first is the printer specific dots per unit horizontal, the second is the printer specific dots per unit vertical. A dot is a specific print unit, e.g. MX 120 dots/inch horizontal; FX 240 dots/inch horizontal. Note: The CP/M version is restricted - it allows only integers for the values, MSDOS versions of *Fancy Font* allow real numbers. Note, for example, that `+UU 120 72` is the definition of dots/inch for MX printers, and `+UU 4.724 2.835` could be used to define units of millimeters. In this case, `\h+3u` would advance the print head 3 millimeters.
- HL,FL** Header/Footer line. One or Two strings may be specified for each of HL and FL. If one string, this is used for all pages. Two strings, the first for all odd page-numbered pages, the second for all even page-numbered pages. For example, `+HL "Odd Header" "Even Header"`.
- NC** Number of Copies. Requires an Integer value to specify the number of copies of a document to print; default setting is 1 copy. Preferable to "loop:" for multiple copies since each copy will be guaranteed to appear on a new page etc. as if job were completely restarted. For example, `+NC 5` would print 5 copies.

Interactive Commands

- Control-D** Cause subsequent lines to be printed using a different draft mode. You will be prompted for a single digit with which you indicate the desired horizontal draft mode (see description of \d embedded command).
- Control-E** Pause after current page has finished printing. If +PP, this will pause one last time and then will disable subsequent pausing. Paper out will not be detected for a paused page.

Printer Specific Versions

There are 2 different Fancy Font programs, 1 for the Epson MX, RX and FX lines of printers (as well as the Gemini 10X etc.), the other designed specifically to take advantage of the Epson FX and RX lines of printers. The FX/RX version will NOT work with the MX printer, whereas the first version will work with all of these printers but will not take advantage of the increased resolution of the FX and RX printers.

Additionally, the font files for each version are different and are not interchangeable (a utility program, 'Fontconv' has been developed, however, to convert user developed MX fonts for use with the FX version of Fancy Font).

The installation dependent profile (Fancfont.Pro) allows users to specify the type of printer they are using to attempt to tailor the program to their printer. Specifying xx100 (where xx is MX, RX or FX) will allow the full 13.6 inch width of the printer to be used. Specifying FX80 will cause the reverse paper motion to default to ON (since this is the only printer with which reverse paper motion is possible); also, specifying FX80 will cause the initial left margin to be set at .75 inch rather than 1 inch due to the difficulty in printing at the true left edge of the paper with FX80 printers.

Specification of FX or MX only affects the above features. One version of Fancy Font is designed to work with MX resolution (120dpi x 216dpi), the other with FX resolution (240dpi x 216dpi). When using the FX version, 7 modes of drafting are available (+RD 0 .. +RD 6). +RD 2 simulates MX resolution with the FX version of Fancy Font.

Fonts

Each character can now have negative left and right margins. That is, you can define characters, using Efont, that cause the print head to move forward less than the true ink width of a character. To use this feature, set the left and/or right margin of a character to be negative, using the Efont margin command. This

feature allows a form of kerning and is particularly useful for foreign language accents and slanted fonts.

This new feature forced the modification of all fonts; old fonts will not work with the new versions of Pfont and Efont. The 'Fontconv' utility converts old font formats into new formats.

Incompatible Input Files

It is likely that you will have to modify existing *Fancy Font* input (".ff") and parameter (".ffi") files to be compatible with the changes in embedded commands and parameters. The changes can be performed with a good text editor. At least the following changes should be made:

1. All measured commands and parameters require units (i, c, d, u). Embedded commands will default to dots with a warning message; parameters will default to inches with a warning message.
2. \h => \h1d
3. \a => \h
4. \v => \v+
5. \w => \v
6. \d => \a