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G↓System Requirements

G¶Working with Files

G↑Basic Operations

H†¶ - Some Useful Printer Control

H†¶ - Additional Sources of Printer

GINTRDUCTION

H¶¶This section highlights the product features, discussing

H↓what

H¶ it can and cannot do when used with an Epson or IBM

H Ethics Printer. General suggestions are included for

Housing

H†¶ PC-Font to enhance and expand your printing

HApplication

H†s.

H†¶The Epson Printer can print only 96 of the 256 possible

H ASCII

H¶ characters. The IBM Graphics Printer prints 196

H↑charac

Hitters from the same group. PC-Font is a utility program

H†¶which enables your Epson or IBM Graphics Printer to print

H₁ of the 256 possible characters (the remaining thirteen

Hitar

Here used for printer control). These new characters include

Httblock graphic, engineering and scientific, foreign language,

and other special characters. Collectively, these new

H↑charac

Filters are referred to as the extended character set, or

H† simply

G↕extended characters

HtPC-Font works by examining each character to be printed.

Standard characters are passed directly to the printer and

Printed in text mode. Extended characters are printed using

H↑the printer's graphics mode. Contiguous extended characters

Hi there sent as a single print image which improves performance,

H†e.g. for horizontal lines. The program is compiled to

H↓¶furth

After enhance operating speed.

HtPC-Font allows you to easily control the size, style, and

Hiden

Intensity (darkness) of your printed material. There are 26

H†di

11 Different font combinations for Epson Printers and 13 font

H†mbinations for IBM Printers.

H[↑]PC-Font also allows you to control line spacing and whether

Here not the printer will skip over perforations. Let's

H¶lexamine

H¶ how you can use these features to expand the

Htprinting

H¶ applications and enhance the professionalism of

H†your

H¶ printed output.

G¶¶The Extended Character Set

G␣¶Graphic Characters:

H†¶ The IBM PC character set contains three

H† graphic fonts (figure #1) composed of single, double, and

H↓sol

Hid lines. Other extended characters form corners and

Ht¶arro

How to facilitate the drawing of borders, organizational

Harts, flow diagrams, etc.

H¶¶Would you like to draw ©solid horizontal linesÇ instead of

How making do with broken underscore characters? Or how

H† about solid vertical lines, which would visually delineate

Multiple columns, or conversely, direct your readers to a

H↑par

Htticular area? Presently, the only option is to imitate

Horizontal lines with asterisks or colons.

H¶¶Although the Personal Computer makes these characters

H†availab

File, Epson Printers cannot print any of the 49 graphic

H characters. The IBM Graphics Printer prints most, but in

Hitting so translates the 29 double line font characters into

Single line characters. PC-Font allows both printers to

Htprin

Hit all 49 block graphic characters

What twice the density

Harkness) of the standard IBM Graphics Printer characters.

H¶¶These fonts can be used in a variety of ways to enhance the

Visual effectiveness of your printed output.

G#Engineering/Scientific & Foreign language Characters:

H†¶ The

H¹ PC also supports 30 engineering and scientific

H⇅characters

H1 (figure #2) and a group of 42 foreign language

Characters (figure #3). Epson Printers cannot print any of

H†These characters; the IBM Printer can print all of them.

Font gives Epson Printers the ability to print all the

Characters in both groups.

G↕ Special Characters:

H†¶ There are twenty-five special characters

H†¶including the "bullet" (used to highlight a thought),

H↓assorte

Head arrows to show four directions of movement or flow,

H† fractions, playing card suits, etc. (figure #4) Again,

H␣ Printers cannot print these characters; the IBM

H¹ prints only ten. PC-Font makes these 25 characters

H† available to both printers as part of the extended character

H↑set.

H¶¶To sumarize, PC-Font expands the Epson Printer character set

Height by 151% and the IBM Printer character set by 23%.

H†¶The extended character set is reprinted in Appendix B. The

H Advanced Operations Section contains information on how to

Hitler these characters from your editor or word processor.

G¶An Assortment of Fonts

H†Both the Epson and IBM Printers are capable of producing 15

H† distinct fonts by varying the size and density of

H characters.

H†¶ Epson Printers can also print most combinations

Hof size and density in either a standard or italic style,

Hinc

Increasing the total number of font options to 28.

H¶¶If you use an editor to create documents, changing fonts

Hilly requires searching through the printer manual for a

H†ombination of esoteric printer control characters to

H⇄trigger

H¶ the change. Next the document must be edited and

H†the

H† characters embedded in the text. Using a word processor

H† generally make the job somewhat easier because several

Here control characters are replaced with a single

H†h-like word or intuitive abbreviation. However, most

Most processors do not support all the font combinations.

HttPC-Font allows you to

G↑easily

H⇅ select the popular fonts (13

H↓for

H†¶ the IBM, 25 for the Epson) on a document basis.

H† Changing

Having fonts within a document is also possible. Font

Htvari

Hypotheticals are described below.

G↑Font Density:

H↑¶ Increasing font density can dramatically

H†¶ast various portions of your existing documents (figure

Ex 5). Typical matrix printer output can be transformed into

G↑correspondence quality memos, letters, and documents

H†. If

H†you

H†¶ photocopy the original, a higher font density improves

Hi! The quality of the copies.

H†Block graphic characters are printed automatically at double

H†the normal density. The remaining extended characters can

Must be printed at the standard density. Text characters

H↑can

H† be printed on the same line as block graphic characters

H†in

H†¶ emphasized density, but not in double strike or

H†correspond

Hence density.

H ↕ ¶
FH ↕ ¶

FH ↕ ¶

FH ↕ ¶

Changing font size opens up a wide range of new applications (figure #6). The special SCondensed font provides 13.2 characters per inch at approximately 14 lines per inch, which allows you to conveniently place a diskette directory on a small enough piece of paper to store inside the diskette slipcover.

H¶¶The FH¶¶compressed fonts

Hi allow up to 136 characters on 8½" x 11" paper

For 233 characters on 14½" x 11" paper. This can be useful

For large spreadsheet output. The compressed fonts also use

H†18 lines per inch instead of the normal six to cut paper

H↓↑costs

H†¶ (a potential 33% savings).

H†¶The FH†double wide fonts

H₂O are useful for

H†overhead transparencies, title pages, chapter or section

Hthead

Hillings, etc.

H†Block graphic characters are printed in the standard size to

H↑p preserve vertical alignment. Changing font size within a

Hilin

Here will also cause mis-alignment of block graphic

H⇄character

H†s. The remaining extended characters can only be

Printed in the standard size (with a maximum of 136

H⇄character

Hts per line).

H Epson Printers can add flair to documents by mixing italics 5

With the other font size and density options (figure #7).

Extended characters can only be printed in the standard

H↑style

G♯♯ Skipping Over Perforations

Word processors by their nature offer formatting options to

Specify the number of lines per page. However, editors,

Hearings, and other programs generally produce a

H⇆continuo

Hence stream of data which leaves no white space and

H†l̄pri

Hints over the page perforations. Skipping over

H₂O perforation

H¹s improves both the readability and

H†professionalis

Hi!m of your output. PC-Font allows you to

Hteasily

H⇄ turn on the skip over perforation feature in Epson or

H† IBM Graphic Printers.

↕ Line Spacing

Line spacing can be decreased to reduce paper costs or

H ↕ expand

Helped to improve the legibility of a document. Double or

H Triple spacing a rough draft leaves white space for changes

Hand corrections. PC-Font provides four line spacing options.

GSYSTEM REQUIREMENTS

H¶¶This section covers the hardware and software necessary to

Hint files using PC-Font.

H¶¶To use PC-Font you need:

H†¶ IBM PC, PC/XT, PCjr, or PC compatible with a minimum of

H ↕ ¶

96kb memory

H⇅ 1 One diskette drive

H†¶ Any monitor capable of displaying 80 columns:

H†¶ One of the following printers:

H†¶ - Epson MX (with Graftrax), RX, or FX Printer

H†¶ DOS Version 1.1 or higher.

H†PC-Font will print files produced by a variety of programs

Hira

Hanging from editors and word processors to spreadsheets and

Header files. The term file is used to describe output from any

Header source. The only requirement is that the file

G must be

H↑↓stored

H†¶ in ASCII format. The following sections contain

How to use PC-Font with files created from an

H↓assort

Hi! Iment of programs.

H†¶ Nearly all editors, e.g. the IBM Professional Editor, store

Files in ASCII format. Other editors, e.g. the IBM

H⇅Personal

H¶ Editor, require an optional parameter (in this

H†insta

Hence the option is called "notabs") to be appended to

H†the

H⇩ usual SAVE or FILE procedure in order to store the file

Hi in ASCII format.

G↓¶Word Processors

H ASCII format is not as common among word processing

Ht programs.

H¶ For example, EasyWriter(tm) files are stored in a

Hformat close enough to ASCII to be printed by PC-Font.

H† (You

H¶ must insert a form feed (ASCII 12) as the first

H⇄characte

Header of the first line of text.) However, this method

Prohibits using the word processor's text formatting

H†capabili

Hitties.

Many word processors, e.g. PeachText (tm), allow you to

H†"prin

H⇆t" a document back to a diskette file (in ASCII format)

H¶instead of to the printer. This method preserves the

H↑intende

Head document structure by translating any formatting

Commands used by the word processor, e.g. headers, footers,

H↑page breaks, etc. into printer control characters. The new

File is called a "print image" file and contains both text

Hid printer characters.

HPC-Font can make the intermediate step of creating a print

Him

Image file worth the effort. Now you can enhance your

Hints with block graphics and diagrams or any of the

Htothe

Here extended characters. Remember,

G↓fall

H¶ the printer

H⇄Options

Hi are now available to enhance your documents. Tips

H¶ using print image files are covered later on in this

H†secti

Hilton, and the Advanced Operations Section contains some

Popular printer options.

Hi! BASIC source code can easily be printed. Simply SAVE the

Hil

File with the ASCII format option, e.g. SAVE "myfile.bas",A

H¶(The quotation marks are required.)

G↑↑Spreadsheets

Output from most spreadsheets, e.g. Lotus 1-2-3(tm) and

H↓↑Visic

H↑↑alc(tm) can be routed back to a diskette file instead

Ht being printed. PC-Font options can then be used to

Hi! Increase the font density, add headings, or reduce the font

Size to fit larger spreadsheets on a page.

G↑Print Image Files

H¶¶Although the term print image suggests an exact diskette

H†dupl

Indicate of what is printed, experience points out

H†inconsist

Htancies. Each word processor creates print image

Hil

Hiles in a different way, with unique variations from the

Httru

Here print image. Following are some general observations

H†w hi

Which may be useful.

G↓Format Commands:

H⇅ Place format commands on the same line as

Hite

Next, instead of using a separate line. The following two

Examples illustrate this concept with PeachText (tm)

H⇅ commands:

H⇅ Separate

Single

H⇅ lines

lines

H†¶ \font3\

H¶ Title

\font3\Title\font1\

H†¶ \font1\

H†¶The commands enclosed between the "\ " marks print the title

Hi! In a higher font density. Both methods produce the same

Hilfe

Hi!ct when printed from the word processor. However, when

Printed back to a diskette, i.e. print image, the first

Hid uses two additional lines in the file while the

H↑second

Hit method uses no additional lines. If you were setting

H¶conditional page breaks at 66 lines per page, the print

H↑image

H₁ may contain 68, depending on the sophistication of the

Hi word processor. Placing format commands in line with the

It preserves the intended page structure.

G↑ Headers & Footers:

H↓¶ The page length may have to be decreased

How many the number of lines used for headers and footers. For

Implement, assume a 66 line page with two lines of header text

Hand three lines of footer text. When printing to a

H⌘diskette,

H¶ it may be necessary to specify a 61 line page to

Introduce the correct format.

G⌘ Underlining:

H†¶ Some word processors underline by printing a

Hilin

H†e containing underlined text twice. The second line

Hprints the first with the word processor keeping track

H†¶ where to place underscore characters. However, when

H↑print

Hitler back to a diskette the command to overprint

Ht generally

H₁ results in the underscore characters being printed

Hit on the line below the text, instead of on the same line.

H¶¶There are two alternatives. The first is to let the printer

H↓↑keep track of underlined text, instead of the word

Htprocessor.

H†¶ A beneficial side effect is that the printer

Ituces solid underlining rather than the broken line

H₂O effect

H₂ resulting from underscores. The underline command is

H†The ASCII sequence "27,45,1" to begin underlining and

H†"27,45,

H¶¶128" to end underlining, without the quotation marks.

H†(ASCII sequences are discussed in the Advanced Operations

Htition.)

H¶¶The second alternative is to emphasize the appropriate text

Using a higher font density rather than underlining it.

Hi processors refer to this as bolding. This feature, like

Underlining, can be controlled by the word processor or the

HPrinter. (The Advanced Operations Section contains the

Htprint

Header control codes to change font density.)

GBASIC OPERATIONS

H¶¶This section covers how to start, suspend, and stop the

H↑print

Editing of a document. Also covered are how to use command

Header parameters to override the defaults for an entire

Hint.

G➦ Setting Document Defaults Using Command Line Parameters

H\PC-Font is started from the command line (the DOS prompt) by

Hitting "PC-FONT" (without the quotes), the name of the file

How to be printed, and any additional parameters. A description

If the command, the optional parameters, and examples are

Hidden below.

G:\PC-FONT filespec [1x] [2x] [3x] [4x] [5x] [6x]

G↓PC-FONT:

H⇄ invokes the program from the default

H†

driv

Here. The default drive can be overridden by

H† specifying an explicit drive.

G↑filespec:

H↑ entered in the format "d:nnnnnnnn.eee"

H↑here:

H1 - is an optional drive designation used when

H†¶ the

H¶ file to be printed is not on the default

Hrive.

H₁ - is the file name, maximum of eight

H† characters.

H¶ - is the file extension, maximum of three

Hitters.

G↑Note:

H¶ the filespec must be separated from the

H ↕ ¶

word

H†¶ "PC-FONT" by exactly one space.

G¶Parameter conventions:

H¶ Brackets are not part of the parameters, but

Indicate that each parameter is optional.

H¶ Quotation marks are not part of the parameters.

H⇅ Parameters can be entered in UPPER or lower

H¶ Parameters can be separated by spaces, commas,

Hr slashes.

H¶ Parameters can be entered in any order, e.g.

H†¶ par

Parameter number two can precede parameter

H ↕ ¶

num

H†ber one.

H¶ Parameters which are not specified or are

H†¶

invali

Hint assume defaults. Parameter defaults

Hi In the following pages are represented in

UPPERCASE and denoted by an asterisk "*" on

H† th

Here left hand side of the parameter.

H†¶ Embedded commands (discussed in the Advanced

H ↕ ¶

Ope

Hierations Section) will OVERRIDE command

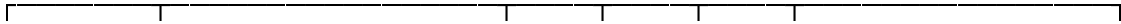
H†

line

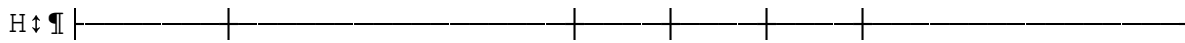
H₁ parameters.

G↑1x:

H₁ sets the default font size and density, where x can be:



H₁ | 1x | Font Size | CPI | CPL | LPI | Font Density |



H†¶ | A | Condensed | 10.0 | 132 | 14 | Double strike |

H† | B | Compressed | 17.2 | 132 | 8 | Standard |

H†¶ | C | Compressed | 17.2 | 132 | 8 | Double strike |

H† | * D | STANDARD

| 10.0 | 80 | 6 | STANDARD

|

H† | E | Standard | 10.0 | 80 | 6 | Double strike |

H†¶ | H | Compressed-Wide | 8.5 | 66 | 6 | Standard |

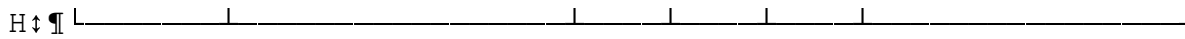
H†¶ | I | Compressed-Wide | 8.5 | 66 | 6 | Double strike |

H† | J | Double width | 5.0 | 40 | 6 | Standard |

H† | K | Double width | 5.0 | 40 | 6 | Double strike |

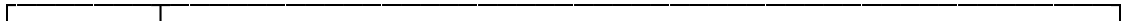
H†¶ | L | Double width | 5.0 | 40 | 6 | Emphasized |

H†¶ | M | Double width | 5.0 | 40 | 6 | Correspondence |



G↓12x:

H₁ sets the default font style, where x can be:



H \updownarrow \mathbb{I} |-----|

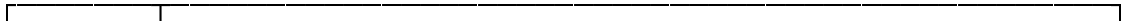
H⇄I | I | Italics

|

H ↕ | _____ |

G↓13x:

H₁ sets the line spacing, where x can be:



H \updownarrow I |-----|

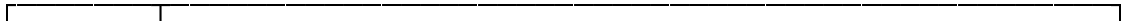
H ↕ | _____ |

G↑4x:

H¶ determines whether the printer will skip over

H†¶ perforatio

Hints, where x can be:



H \updownarrow I |-----|

H†¶ | * N | DON'T SKIP OVER PERFORATIONS

|

H ↕ | _____ |

H⇅ Choose the "N" option when the file already contains

H⇅¶

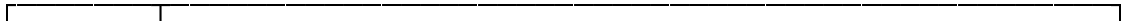
formatt

Printing characters, e.g. when the file has been printed

H⇄back to a diskette file from a word processor.

G↓15x:

$H \uparrow \mathbb{1}$ determines the character set where x can be:



H \updownarrow I |-----|

H ↕ | _____ |

H†¶ The "E" option selects all characters from the 244 extended

8 character set. Both Epson and IBM Printers can use this

H ↕ ¶

opti

H†on.

H†¶ The "S" option prints all characters from the printers

H†

stand

Hard character set. This is useful if the file contains

Hi!no extended characters but other PC-Font options are

H†¶ desired

G↑16x:

H\ defines an alternate escape character which will be

H†¶ tre

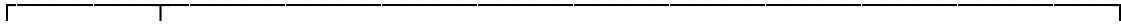
Translated as ASCII 27. This can be used to change printer

H ↕ ¶

opt

Options within a file, (covered in the Advanced Operations

H₂Tection).



H↑ | 6x | Alternate Escape Character (ASCII 27) |

H \updownarrow \mathbb{I} |-----|

H†¶ | x | x = any character except the numbers 1-5. (The |

H†¶ | | ^ is recommended.) The default is the stan- |

H†¶|

|

dard escape character, ASCII 27.

|

H ↕ | _____ |

Ht¶¶Following are some examples of using command line parameters:

G:\PC-FONT myfile.txt

H↓↑: Looks for the program and the data file on

H: the default drive. All defaults are taken.

G:\A:PC-FONT b:myfile.prn

H↑↑: Looks for the program on the "A" drive

Hand the data file on the "B" drive. All defaults are taken.

G:\PC-FONT myfile.dir 1a

H[†]¶: Prints the file using condensed size,

H† 1 e.

H†g. for diskette directories.

G:\PC-FONT myfile.ovh 1m 2i

H⇄: Prints the file using correspondence

H†density, double wide size, and italics style, e.g. for

H†

over

Hthead transparencies.

G:\PC-FONT myfile.asc 5^ 1b 4y

H↑↓: Prints the file using the

H ↕ ¶

compress

Hired font, skips over perforations, and defines the

H†

ca

Here `^` as an alternate escape character. Notice that

H†¶ the

Hi! parameters may be specified in any order.

Go to Batch Files

H¶¶If you repeatedly use the same command line parameters,

Hoplaci

Putting them in a batch file can cut down the number of

H†keyst

Hitrokes necessary to start PC-Font. The file should

Hit in a single line along with the commonly used options.

H¶¶For instance, the line containing "PC-FONT %1 1g 4y"

H⇅ (entered

H⇆ without quotation marks) in a file named PCF.BAT

Ht Twou

Should allow you to print a file using emphasized density and

H¶also skip over perforations. From the command line you

H↓I would

Ht type typing "PCF filespec" (entered without quotation

Hmarks). The "%1" takes on the name of filespec, i.e. the

H†fi

File you wish to be printed.

G↑ Printing Files

H↓ After starting PC-Font, the print screen will appear

H†displayi

Hit the options which were selected using the command

Headerline parameters (figure #8). If you omitted any of the

H↑param

Parameters, the defaults assumed by the program will be

H↑↓shown

H†¶If the printer has not been turned on, you can do so at this

Hi!time. After pressing any key, PC-Font loads the extended

H⇕char

H⇆acter set into memory and begins printing your file.

HA line count is provided in the lower right hand corner.

H†Lin

Files containing block graphic characters are sent to the

H†pri

Hinter as

H¶ separate lines with no interval spacing.

However, to reflect the actual number of lines in the file

H†th

Here line counter is only incremented once.

H†PC-Font can recover from minor errors, e.g. accidentally

Hirem

Removing a diskette which contains the file being printed.

Whether errors are more severe, e.g. turning off the printer

H causes all printer options to be lost. In either case, an

↳ Appropriate message describing the error is displayed on

Hline

H↑¶ 24 (the second line from the bottom) of your screen.

Appendix A contains additional information for each message.

G↑ How to Suspend Printing

H⇆¶If you wish to temporarily suspend the printing of a file,

H†ho

Hold down the [Ctrl] key and press the [Num Lock] key. To

Hires

Hi! I'm printing, press any key.

G↑How to Stop Printing

H† Should you wish to cancel the file being printed, simply

Holds the [ESC] key. PC-Font will

G↓ immediately

Halt at the

Head of the line being printed and return you to the DOS

HtIprompt

H¶¶This section describes some additional techniques which can

It usually enhance reports and printouts. While the previous

Section discussed how to print an entire document using

Hand line parameters. This section describes how to

H↕change

H⇅ fonts and other printer options within a document.

Also included are suggestions on how to enter the extended

H¶aracter set characters.

G↓↑Entering the Extended Character Set Characters

H↓¶The ASCII character set contains 256 characters. Each

H↑charac

Filter is represented by a number ranging from 0 to 255.

H¶¶For example, the standard alphanumeric characters fall

H↓ within

Here is the ASCII range of 32-127. The block graphic,

Hiring, scientific, and foreign language characters are

Assigned to ASCII numbers ranging from 127 to 254. The

H†¶remai

Having special characters have ASCII numbers larger than

H₁ 27 or smaller than 32.

H↑↑ Recall that PC-Font prints 243 of these ASCII characters.

H†Th

The remaining thirteen are used to control an assortment of

Printer options, which are covered in the following section.

H↓¶How are 256 different characters entered from the Personal

Hi! Computer's 83 key keyboard? As it turns out, the hardware

Hjal

Allows every character except ASCII 0 to be entered by

Holdin

Hold down the [Alt] key and typing the ASCII number

H↑corres

Responding to the desired character on the numeric

Ht keypad.

H†¶ This procedure is called keypad character entry.

H†¶Most editors, e.g. the IBM Personal Editor and IBM

Final Editor, allow entry of extended characters in

H†th

His manner. However, some word processors have disabled

H†lthi

His valuable function. For example, PeachText(tm) allows

Hike

H† Typad character entry but WordStar(tm) does not.

H†¶Two additional points about entering extended characters.

First, frequent use requires remembering a character's

H↑corres

Responding ASCII number. Appendix B is a handy cross

Hirefe

Interface designed to facilitate looking up an extended

H⇄chara

Character's ASCII number.

Second, each extended character can require four or five

Htrokes. If your editor or word processor has a macro

Initialization feature (macros allow you to assign a series of

Hike

Hit strokes and/or commands to be executed by typing a one or

Hit two key sequence) consider assigning the commonly used

H↑charac

Characters in the extended character set to a macro.

H⇅Keyboard

Head enhancers, e.g. Prokey(tm), provide an alternate

Hints of generating extended character set characters if

H†your

H\ editor or word processor doesn't contain a macro

H⇄definit

Htion feature.

G➦ Changing Fonts & Other Printer Options Within a Document

Hi! In all, there are roughly 50 commands for both the Epson and

H↑ IBM Graphic Printers. These commands can change font size,

H↑tyle, or density, skip to a new page, set the form length,

H↑change line spacing, and backspace (in order to overprint

Historical characters), to name just a few. As you may have

Missed, PC-Font's command line parameters are translated

Hint

How printer control codes and sent to the printer before

H†l̄pri

Hunting your file. Unless overridden, the

Go to entire document

H¶is

H¶ printed according to the parameters specified on the

Hind line.

H¶¶However, printer control codes can also be embedded within

H†th

Use text to emphasize words, lines, or paragraphs. Some

Har control codes are listed in Appendix C; additional

Sources of printer information are listed in Appendix D.

¶ In essence, printer control codes are sequences of ASCII

H⇕char

Characters which the printer recognizes as commands instead

If as text. A control code sequence consists of one to

Hthree

H† characters and

G↓are not printed

H†¶. Most control code

Hence, sentences begin with an ASCII 27, otherwise known as the

H⇅"esc

Htape" character.

H†¶If your editor or word processor does not allow you to enter

Hit an escape character from the keyboard or keypad, you can

H↓stl

H¶l create printer control codes by using the alternate

H↑esc

Htape character feature, which is covered in the next

H↕sectio

H†In.

H⇆Editors generally allow you to enter control codes, one at a

Hit time, directly into the text. In contrast, each word

H↓process

HP has a unique set of printer commands which are

Hitrans

Translated into printer control code sequences when the

Content is actually printed. These commands can still be

Hid (assuming the document will be converted to a print

H↑imag

Here file). Any functions not supported by your word

H↑proces

H↑sor can be entered directly as a printer control code

H↑equence and processed by PC-Font.

G➦ Defining an Alternate Escape Character

H¶¶This section is only applicable for editors or word

Htprocessor

Hits that will not allow you to enter the escape

H↑charac

Hexiter (ASCII 27) from the keyboard or keypad.

H¶¶You can still have access to various font options by

H⇅defining

H† an alternate escape character to PC-Font. This

Hallo

How do you have PC-Font treat a

G↕second character

H† as an

H↑esc

Htape character. Having two logical escape characters

H†insure

Has compatibility with any printer control codes

H⇄automati

Historically generated by your word processors format

H↑comman

H†ds.

H¶¶While editing the document to be printed simply type in the

Character you wish to have treated as the escape character

H†wh

Herever the escape character would normally be entered.

H†¶For

For example, suppose the carot " \wedge " is chosen to be used as

H\ alternate escape character. A word being printed in the

H*italics* font would have been preceded by the escape

H⇄characte

Here and the number 5, e.g. "ε5". (The "ε" is used

Hthere

H\ for example only to represent the escape character,

H¶I 27, which cannot be printed.) Instead, it would now

H† preceded by a carot and the number 5, e.g. "⁵".

H†¶When the document is to be printed PC-Font must be informed

If the change. Parameter number six is used to define the

Hjal

Alternate escape character. In the above example, you would

H↑↑type the name of the file to be printed, a 6^ to define the

H\lternate escape character, and any other options would be

Filtered as command line parameters. (Refer to the Basic

H†Oper

References for a complete explanation of command line

H↑paramet

H†ers.)

G↑APPENDIX A:

H ↕ 1 |

1 2 3 ||

1 2 3

|

H† \mathbb{I} |

† † † |

† † †

|

G†¶ FIGURE #1: Block Graphic FontsFH†¶
FH†¶

FH†¶
FH†¶FH†¶
FH†¶FH†¶
FH†¶FH†¶
FH†¶FH†¶
FH†¶

α	β	Γ	Π	Σ	σ	μ	τ	Φ	Θ	δ	∞	φ	ε	\cap	\equiv	\pm	\geq	\leq	[]	\div	\approx	\circ	.	.	$\sqrt{\quad}$	n	2
----------	---------	----------	-------	----------	----------	-------	--------	--------	----------	----------	----------	-----------	---------------	--------	----------	-------	--------	--------	---	---	--------	-----------	---------	---	---	----------------	-----	-----

G↑¶
FH↑¶

FIGURE #2: Engineering & Scientific CharactersFH↑¶

H ↕ ¶
FH ↕ ¶

FH↑¶

FH↑¶FH↑¶FH↑¶¶

FH↑¶FH↑¶¶

FH↑¶FH↑¶¶

FH↑¶FH↑¶¶

FH↑¶FH↑¶¶

FH↑¶FH↑¶¶

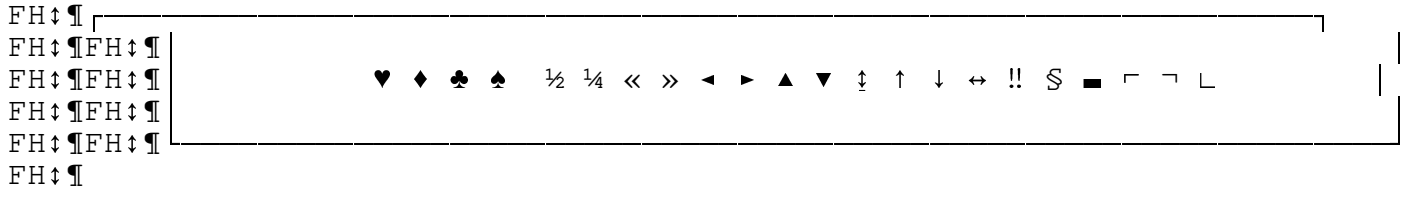
FH↑¶FH↑¶¶

FH↑¶

Ä ä Å å Æ â à á ª æ Ç ç É é ê ë è í î ï ì

Ñ ñ ò ô Ö ö ó ° Ü ü ú û ù ŷ ç £ ¥ ₣ f ç i

G† FIGURE #3: Foreign language CharactersFH†
FH†



G↑¶ FIGURE #4: Special CharactersFH↑¶

H ↕ ¶
FH ↕ ¶

FH↓¶
FH↓¶FH↓¶FH↓¶

FH↓¶ Standard density.
FH↓¶ FH↓¶FG↓¶Double strike density.FH↓¶
FH↓¶ FH↓¶

H†¶Emphasized density.FH†¶
FH†¶ FH†¶

G↓¶Correspondence density.FH↓¶
FH↓¶

G↑FIGURE #5: Font Density OptionsFH↑
FH↑

FH↑ SCondensed size.TH↑
FH↑ FH↑Compressed size.FH↑
FH↑ FH↑Standard size.
FH↑ FH↑FHCompressed/Double wide size.FH↑
FH↑ FH↑FH↑Double wide size.FH↑
FH↑

G↑FIGURE #6: Font Size OptionsFH↑
FH↑

FH↑ Standard Style
FH↑ FH↑4Italics Style5
FH↑ FH↑(Note: The IBM Graphics printer cannot
FH↑ FH↑ print the italics font)
FH↑

G↑¶FIGURE #7: Font Style OptionsFH↑¶
FH↑¶

H ↕ ¶
FH ↕ ¶

G↑¶ FIGURE #8: PC-Font print screen.FH↑¶
FH↑¶

H ↕ ¶
FH ↕ ¶

H ↕ FH ↕ FH ↕ I

G↓APPENDIX B:

G↑ Messages

G␣␣Cannot find the data file [filespec]:

H†¶ Check to make sure the

H: filename and extension are spelled properly. Also, check

Httha

Hit the file resides on the default drive or that the

H⇅ default

Hit drive is overridden by specifying a drive in the

H⇅files

H\pec, e.g. B:myfile.txt.

G␣Diskette drive door is open: Close the door and press any

H↑key

Go to continue:

H†¶ also, check that the diskette containing

H†the

H† file has been inserted in the diskette drive.

G↑↓Device fault:

H¶ a hardware error indication was returned by

H†the

H⇄ printer adapter.

G: Device I/O error:

H† an error occurred on a device I/O

H†operation

H†¶. DOS cannot recover from the error.

G↕⌘Device timeout:

H¶ the program did not receive information from

H†the printer within a predetermined amount of time.

G⌘Device unavailable:

Ht the file is being sent to a non existant

Hardware device. Either the hardware to support the device is not

Homework

Hiing (such as printer adapters for a second or third

H↑print

Here) or the device has been disabled.

G++ Out of memory:

H¶ verify that the system being used has a

H†Iminimu

Limit of 96kb memory. Remember that print spoolers, RAM

H†dis

Hicks, and resident programs decrease the amount of

H†available

H† memory.

G␣Printer was turned off while printing:

H¶ the printer is reset

After a power off, Any printer options in effect have been

Hello

list, e.g. font size, style, density, etc. The program

H↓will

H¶ not continue.

G␣Re-insert the diskette with file [filespec]:

H⇄ the diskette

Holding the data file has been removed from the diskette

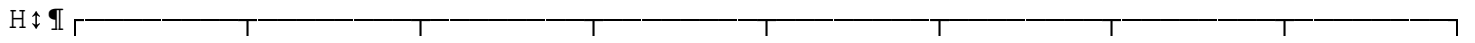
Hrive.

G↓APPENDIX C:

G¼ The Extended Character set

H# ASCII value

H ↕ ¶ || ¶ = Character



H† | 000 NUL | 016 ▶ | 032 | 048 0 | 064 @ | 080 P | 096 ` | 112 p |

H† | 001 ☺ | 017 ◀ | 033 ! | 049 1 | 065 A | 081 Q | 097 a | 113 q |

H† | 002 ☹ | 018 DC2 | 034 " | 050 2 | 066 B | 082 R | 098 b | 114 r |

H† | 003 ♥ | 019 !! | 035 # | 051 3 | 067 C | 083 S | 099 c | 115 s |

H† | 004 ♦ | 020 DC4 | 036 \$ | 052 4 | 068 D | 084 T | 100 d | 116 t |

H† | 005 ♣ | 021 § | 037 % | 053 5 | 069 E | 085 U | 101 e | 117 u |

H† | 006 ♠ | 022 ■ | 038 & | 054 6 | 070 F | 086 V | 102 f | 118 v |

H† | 007 | 023 ‡ | 039 ' | 055 7 | 071 G | 087 W | 103 g | 119 w |

H†|008 BKSP|024 † |040 (|056 8 |072 H |088 X |104 h |120 x |

H† | 009 HTAB | 025 ↓ | 041) | 057 9 | 073 I | 089 Y | 105 i | 121 y |

H†|010 LF |026 EOD |042 * |058 : |074 J |090 z |106 j |122 z |

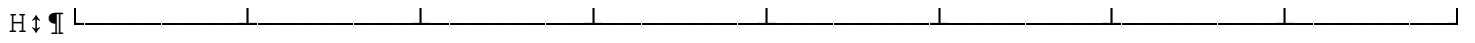
H†|011 VTAB|027 ESC |043 + |059 ; |075 K |091 [|107 k |123 { |

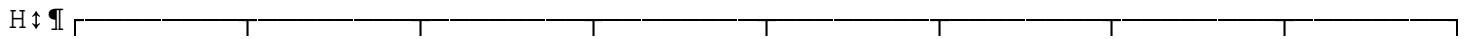
H†|012 FF |028 L |044 , |060 < |076 L |092 \ |108 l |124 | |

H†|013 CR |029 ↔ |045 - |061 = |077 M |093] |109 m |125 } |

H† | 014 SO | 030 ▲ | 046 . | 062 > | 078 N | 094 ^ | 110 n | 126 ~ |

H†|015 SI |031 ▼ |047 / |063 ? |079 ○ |095 _ |111 ○ |127 |





H† | 128 Ç | 144 É | 160 á | 176 ⋮ | 192 L | 208 丄 | 224 α | 240 ≡ |

H† | 129 ü | 145 æ | 161 í | 177 ☒ | 193 ⊥ | 209 ̄ | 225 ß | 241 ± |

H† | 130 é | 146 Æ | 162 ó | 178 **Æ** | 194 T | 210 π | 226 Γ | 242 ≥ |

H† | 131 â | 147 ô | 163 ú | 179 | | 195 † | 211 ℒ | 227 π | 243 ≤ |

H† | 132 ä | 148 ö | 164 ñ | 180 † | 196 – | 212 ‡ | 228 Σ | 244 † |

H† | 133 à | 149 ò | 165 Ñ | 181 † | 197 † | 213 F | 229 σ | 245 J |

H† | 134 å | 150 û | 166 ª | 182 ¶ | 198 † | 214 ¶ | 230 µ | 246 ÷ |

H† | 135 ç | 151 ù | 167 ° | 183 7 | 199 † | 215 ‡ | 231 τ | 247 ≈ |

H† | 136 ê | 152 ÿ | 168 ċ | 184 7 | 200 ℔ | 216 † | 232 Φ | 248 ° |

H† | 137 ë | 153 Ö | 169 ƒ | 185 † | 201 ƒ | 217 † | 233 ̸ | 249 · |

H† | 138 è | 154 ù | 170 ¬ | 186 || | 202 ≡ | 218 √ | 234 | 250 · |

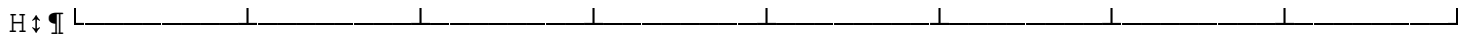
H† | 139 ï | 155 ç | 171 ½ | 187 7 | 203 7 | 219 ■ | 235 δ | 251 √ |

H† | 140 î | 156 £ | 172 ¼ | 188 Ɔ | 204 † | 220 ■ | 236 ∞ | 252 ⁿ |

H† | 141 ì | 157 ¥ | 173 ; | 189 † | 205 = | 221 █ | 237 φ | 253 ² |

H† | 142 Ä | 158 Pₜ | 174 « | 190 † | 206 ‡ | 222 █ | 238 ε | 254 ▪ |

H† | 143 Å | 159 f | 175 » | 191 7 | 207 ± | 223 ■ | 239 n | 255 |



H↑|BKSP backspace | ESC escape control | NUL null line |

H⇆|CR carriage return | FF form feed | SI shift in |

H↑|DC2 device control 2 | HTAB horizontal tab | SO shift out |

H↑¶|DC4 device control 4 | LF line feed | VTAB vertical tab |

H⇄|EOD end of data

|

|

|

H ↕ I

G↑APPENDIX D:

G¶ Useful Printer Control Codes

H†¶The options in the left hand column can be used to accent or

H⇅highlight words, sentences, paragraphs, etc. within a

Hint by embedding the corresponding one to four

H⇄character

H†s in the right hand columns. Any characters which

Hexadecimal characters that do not have a corresponding keyboard key can be entered via

Hotkeypad character entry technique, which is discussed in the

Advanced Operations Section. (Check to be sure your editor

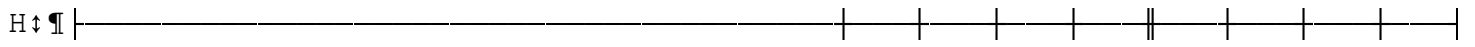
His word processor supports this method.)

H† | Category

| ASCII Number || Character |

H₁ | ε = escape char (ASCII 27)

| 1 2 3 4 || 1 2 3 4 |



H[†] | Change Font Size:

CPL* | | | | || | | | |

H†¶ | Superscript on

80 | 27 | 83 | 128 | || ε | S | Ç | |

H† | Subscript on

80 | 27 | 83 | 1 | || ε | S | | |

H†¶ | Subscript/Superscript off

| 27 | 84 | | || ε | T | | |

H†¶ | Compressed-Wide off

| 18 | 27 | 87 | 128 || DC2 | | W | Ç |

H†¶ | Double wide on

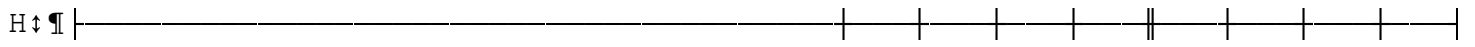
40 | 27 | 87 | 1 | || ε | W | | |

H†¶ | Double wide off

| 27 | 87 | 128 | || ε | W | Ç | |

H† | *CPL=characters per line

| | | | || | | | |



H[†] | Change Font Style:

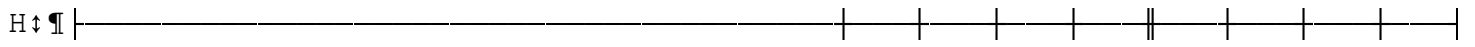
| | | | || | | | |

H†¶ | Italic characters on

| 27 | 52 | | || ε | 4 | | |

H†¶| Italic characters off

| 27| 53| | || ε| 5| | |



H⇅ | Change Font Density:



H†¶ | Double strike on

| 27 | 71 | | || ε | G | | |

H†¶ | Double strike off

| 27 | 72 | | || ε | H | | |

H†¶ | Emphasized on

| 27 | 69 | | || ε | E | | |

H†¶ | Emphasized off

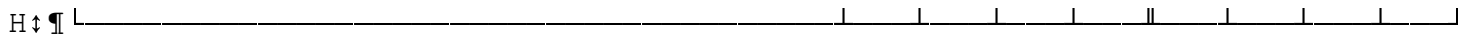
| 27 | 70 | | || ε | F | | |

H†¶ | Correspondence on

| 27 | 71 | 27 | 69 || ε | G | ε | E |

H†¶ | Correspondence of

| 27 | 72 | 27 | 70 || ε | H | ε | F |



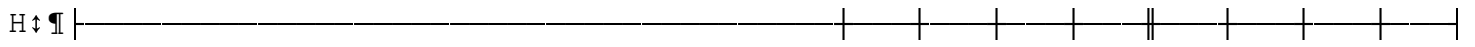
H ↕ ¶ ————— | ————— || ————— |

H† | Category

| ASCII Number || Character |

H\1 | ε = escape char (ASCII 27)

| 1 2 3 4 || 1 2 3 4 |



H†¶ | Forms Control:

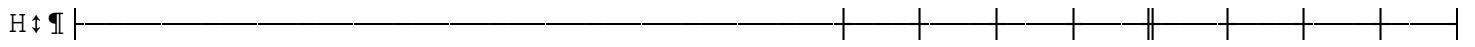
| | | | || | | | |

H†¶ | Skip over Perforations on

| 27 | 78 | | || ε | N | | |

H†¶ | Skip over Perforations off

| 27 | 79 | | || ε | 0 | | |



H↑¶ | Line Spacing:

LPI* | | | | || | | | |

H↑| Line feed

| 10| | | || LF| | | |

H†¶ | Single spacing

8.0 | 27 | 51 | 27 | || ε | 3 | ε | |

H†¶ | Double spacing

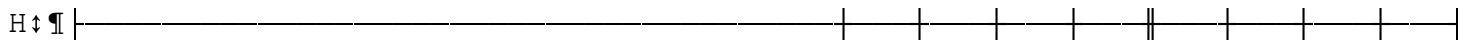
3.0 | 27 | 51 | 72 | || ε | 3 | H | |

H†¶| Triple spacing

1.5 | 27| 51|108| || ε| 3| 1| |

H† | *LPI=lines per inch

| | | | || | | | |



H†¶ | Miscellaneous:

| | | | || | | | |

H†¶ | Underlining on

| 27 | 45 | 1 | || ε | - | | |

H†¶ | Underlining off

| 27 | 45 | 128 | || ε | - | Ç | |

H†¶ | Columnar printing on

| 27 | 85 | 1 | || ε | U | | |

H†| (unidirectional)

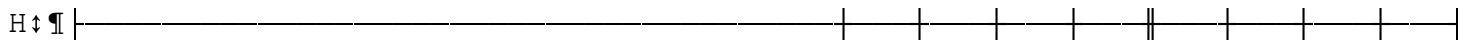
| | | | || | | | |

H†¶ | Columnar printing off

| 27 | 85 | 128 | || ε | U | Ç | |

H† | (bidirectional)

| | | | || | | | |



H†¶ | Epson printers only:

| | | | || | | | |

H†¶ | Single sheet paper (disables

| 27 | 56 | | || ε | 8 | | |

H[†] | the paper-out sensor)

| | | | || | | | |

H†¶ | Continuous form paper (enables

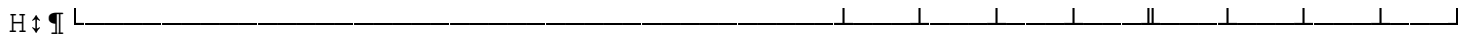
| 27 | 57 | | || ε | 9 | | |

H[†] | the paper-out sensor)

| | | | || | | | |

H†¶ | Reset all printer defaults

| 27 | 64 | | || ε | @ | | |



H†¶* This listing contains only the most popular printer

H⇄Options

H†¶. For a complete description of user definable

H⇅feature

His, refer to the Epson Printer Manual, the IBM Guide

H¹ Operations, or the IBM Technical Reference Manual.

G↓APPENDIX E:

G¶ Additional Sources of Information

HITMX Printer Manual with Graftrax Plus(tm) by David A. Lien,

Htpson America, Inc. P 8294003-1

H†¶IBM Guide to Operations, First Edition (Revised April,

H†¶1982),

H† IBM part no. 6025000, pages of printer option

H⇅insert.

H†¶Softalk "The Printed Word", by John Dickinson, September

H†¶, pages 121, 124-126.

HPC Tech Journal "Epson Technical Comparison" by Arthur A.

H†Gle

Hickler, September-October 1983, pages 130-134.

G↓APPENDIX F:

G⇄ Diskette Contents

G:\PC-FONT EXE

H† Compiled BASIC executable code

G↓PC-FONT PRN

H†¶ User's guide, for printing on an Epson

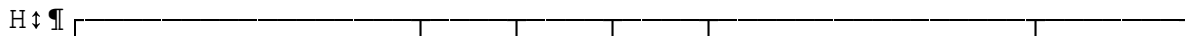
H†¶

or IBM Graphics printer using PC-Font.

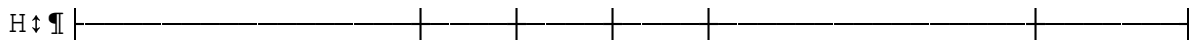
G† PC-FONT QUICK REFERENCE CARD

G↑ COMMAND LINE PARAMETERS

H†¶(The "*" denotes default values.)



H⇅ | FONT SIZE | CPI | CPL | LPI | FONT Density | SPECIFY |



H†¶ | Condensed

|10.0| 80|14.0| Double strike | 1A |

H†¶ | Compressed

| 17.2 | 132 | 8.0 | Standard

| 1B |

H†¶ | Compressed | 17.2 | 132 | 8.0 | Double strike | 1C |

H† | *STANDARD

| 10.0 | 80 | 6.0 | STANDARD

| 1D |

H† | Standard

|10.0| 80| 6.0| Double strike | 1E |

H†¶ | Standard

|10.0| 80| 6.0| Emphasized

| 1F |

H†¶ | Compressed-Wide | 8.5 | 66 | 6.0 | Standard | 1H |


H†¶ | Compressed-Wide | 8.5 | 66 | 6.0 | Double strike | 1I |

H†¶ | Double width | 5.0 | 40 | 6.0 | Standard | 1J |

H†¶ | Double width | 5.0 | 40 | 6.0 | Double strike | 1K |

H†¶ | Double width | 5.0 | 40 | 6.0 | Emphasized | 1L |


H†¶ | Double width | 5.0 | 40 | 6.0 | Correspondence | 1M |

H ↕ 

H ↕ ¶ | FONT STYLE

| SPECIFY |

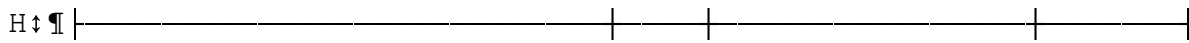
H ↕ | _____ |

H ↑ 

H ↕ ¶ | LINE SPACING

| LPI |

| SPECIFY |



H† | Double


| 3.0 |

| 3D |

H₂O | Triple

| 1.5 |

| 3T |

H ↕ 

H†¶ | SKIP OVER PERFORATION

| SPECIFY |

H ↕ | _____ |

H ↕ | _____ |

H↑¶ | ALTERNATE ESCAPE CHARACTER

| SPECIFY |

H†|x = any character except the numbers 1-5. (The | 6x |

H†¶ | ^ is recommended.) The default is the stan- | |

H[†] | dard escape character, ASCII 27. | |

H ↕ | _____ |

H†s j l
→