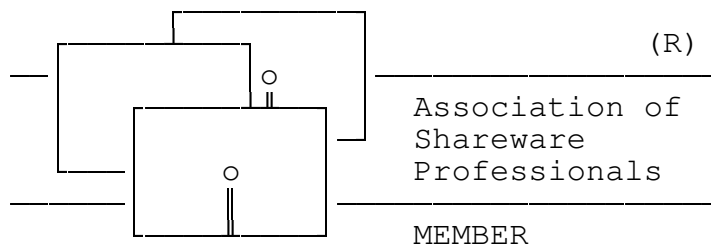


BOOKLET-SCREEN

Laser Printer Utility

version 1.4

Users Guide



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Table of Contents

The Shareware Concept.....3

Support.....4

Introduction.....5

Operation.....5

Screens.....6

 Registration.....6

 Main7

 Configuration.....8

 Options.....10

 Restart.....13

Margins.....14

Recovering from Printer Errors.....15

Paper Curl.....15

Font Selection.....16

Revision History..... (?)

The Shareware Concept

Shareware distribution gives users a chance to try software before buying it. If you try a Shareware program and continue using it, you are expected to register. Individual programs differ on details -- some request registration while others require it, some specify a maximum trial period. With registration, you get anything from the simple right to continue using the software to an updated program with printed manual.

Copyright laws apply to both Shareware and commercial software, and the copyright holder retains all rights, with a few specific exceptions as stated below. Shareware authors are accomplished programmers, just like commercial authors, and the programs are of comparable quality. (In both cases, there are good programs and bad ones!) The main difference is in the method of distribution. The author specifically grants the right to copy and distribute the software, either to all and sundry or to a specific group. For example, some authors require written permission before a commercial disk vendor may copy their Shareware.

Shareware is a distribution method, not a type of software. You should find software that suits your needs and pocketbook, whether it's commercial or Shareware. The Shareware system makes fitting your needs easier, because you can try before you buy. And because the overhead is low, prices are low also. Shareware has the ultimate money-back guarantee -- if you don't use the product, you don't pay for it.

Disclaimer

The fact that BOOKLETS will print on both sides of the paper does not imply that this is accepted practice for your particular printer. Sympathetic Software is not responsible for damage resulting from ignoring manufacturers recommendations. That said, we have yet to hear of any difficulties worse than paper jams when using this utility. Also, one printer manufacturer who warns against printing on the reverse side of the paper provides for a "cleaning paper" to be used on cartridge changes. The recommended procedure is, in fact, printing on the reverse side of this sheet.

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BOOKLETS is a "shareware program" and is provided at no charge to the user for evaluation. Feel free to share it with your friends, but please do not give it away altered or as part of another system. The essence of "user-supported" software is to provide personal computer users with quality software without high prices, and yet to provide incentive for programmers to continue to develop new products. If you find this program useful and find that you are using BOOKLETS and continue to use BOOKLETS after a reasonable trial period, you must make a

registration payment of \$20 to SYMPATHETIC SOFTWARE. The \$20 registration fee will license one copy for use on any one computer at any one time. You must treat this software just like a book. An example is that this software may be used by any number of people and may be freely moved from one computer location to another, so long as there is no possibility of it being used at one location while it's being used at another. Just as a book cannot be read by two different persons at the same time.

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You are encouraged to pass a copy of BOOKLETS along to your friends for evaluation. Please encourage them to register their copy if they find that they can use it. All registered users will receive a copy of the latest version of the BOOKLETS system. To register your copy of BOOKLETS, send in a completed copy of the enclosed order form.

Support

The current version of BOOKLET is available from the ASP library of PC Magazine's Utility Forum (Library 14). (From CompuServ GO ZNT:UTILFORUM. See the masthead page of PC Magazine for information on accessing this forum.) Problem reports may be made to Sympathetic Software or sent by CompuServ E-Mail to:

Stephen L Billard: 71046,1476

This program is produced by a member of the Association of Shareware Professionals (ASP). ASP wants to make sure that the shareware principle works for you. If you are unable to resolve a shareware-related problem with an ASP member by contacting the member directly, ASP may be able to help. The ASP Ombudsman can help you resolve a dispute or problem with an ASP member, but does not provide technical support for members' products. Please write to the ASP Ombudsman at 545 Grover Road, Muskegon, MI 49442-9427 or send a CompuServ message via CompuServ Mail to ASP Ombudsman 70007,3536. The Ombudsman may be contacted by FAX by sending to the ASP FAX number: (616) 788-2765. In communications with the Ombudsman please include a telephone number and/or FAX if available.

Introduction

BOOKLETS is designed to create PC Booklet sized documents from full page text files on Laser Printers which emulate the Hewlett-Packard LASERS series. Also supported are the DeskJet family by Hewlett-Packard. It prints four pages of the text file on one sheet of paper. The pages are printed "half size" on the right and left halves of both sides of a sheet of paper turned sideways (Landscape orientation.) It supports all the standard sizes of paper (A4, LETTER, LEGAL, and EXECUTIVE)

BOOKLETS will perform transformation on basic LASERS formatting commands. This means that you can use your word processor to print a formatted document to a file and use BOOKLETS to print that file in booklet form. For this to be successful, you must have fonts loaded in your printer for the sizes BOOKLETS will use. These can be from a font cartridge or may be soft fonts which you have loaded ahead of running BOOKLETS. BOOKLETS does not create or load any fonts. You will need fonts which are approximately two thirds the point size of the fonts you use in your document. If you do not have exactly the right font, the LASERS will select the closest match from the ones it has. This match may or may not prove acceptable.

For plain ASCII text BOOKLETS will select the 16.67 character per inch landscape lineprinter font. This font does not exist on either the original LaserJet or the LaserJet+. You will need to use a font cartridge having this font or to load a soft font equivalent before running BOOKLETS.

BOOKLETS transforms only font, line spacing, and cursor positioning commands. It will discard page control commands such as page size, page orientation, and margins. If your document contains these, it may not print correctly.

OPERATION

BOOKLETS is menu driver and screen oriented. On line context sensitive help can be selected by pressing the F1 function key. If you have a mouse installed, BOOKLETS will enable it for use. For keyboard use, ESC will always cancel out the active window. TAB will move the cursor from field to field and ENTER will select the selected item. The up and down arrow keys will move you through the file list or directory list. Most selections have a highlighted character which allows the short cut key of ALT-char for quick selection.

The BOOKLETS dialog windows consist of a combination of push-buttons, check-boxes and radio-buttons. Push-buttons look like the OK and Cancel items on the Registration Window. For this document, push buttons will be brackets surrounding the name of the selection. The actual appearance will depend of the type of monitor you are using. Clicking on a button or selecting it with TAB or the short cut key then pressing ENTER will cause the button's action to happen. When you have selected the file list or directory list, you can move through its list with the arrow keys. Pressing ENTER will select the file (or directory).

Radio-buttons are represented by a pair of parenthesis. Check boxes are a pair of brackets. Related sets of radio-buttons or check-boxes may be grouped together with a group name for the group. See the example below.

This is a radio-button group
() radio item 1
() radio item 2

This is a check-box group
[] check item 1
[] check item 2

In the above examples, the text above the parenthesis and brackets is the group name. The text to the right of them is the item name. If there is a highlighted character in the group name, you can use it to short cut to the group.

Radio-button items are mutually exclusive choices. Selecting one will deselect the others in the group. The selected item is indicated by a dot within the parenthesis. Check boxes are non exclusive choices. Any number in a group may be selected. These are indicated by an X in the box.

Sometimes the hot key characters in one group are the same as those of another group. To hot key to one of these, first hot key to the group, then the item.

BOOKLETS Screens:

Registration Window:

```
[■]====Enter Registration====  
  
Your Name  
  
Registration Key  
  
[ OK ] [ Cancel ]
```

BOOKLETS will start each session with the registration screen active until you enter your registration information. If you have not yet registered, you should click on Cancel or press escape to close this window. Your registration letter from Sympathetic Software will supply you with the information on filling in this screen.

Main Window:

```
==[■]=====BOOKLETS version 1.2=====
                    Copyright 1990, 1991
                    Sympathetic Software

File name: *.*

Directory: C:\BOOKLETS

Files                Directories
booklets.pcl        ↑ ..\                ↑ [ Print ] [Options ]
booklets.exe        █ [A:]                █
readme.lst          █ [B:]                █
register.frm        █ [D:]                █ [Restart] [Configure]
                    █                    █ [ Quit ]
                    ↓                    ↓

=====Unregistered evaluation copy=====
```

From the main window you select the file to be printed. You can do this either by typing the name in the File name selection or by browsing through the Directories and Files lists. When you have the name of the file you wish to print showing in the File name selection you can print it by pushing the Print button. (You push a button by clicking on it with the mouse or selecting it and pressing ENTER.) You can restart printing of a file from the Restart button.

From this window you can also configure your copy of BOOKLETS by pressing the Configure button. You can set options for printing the document via the Options button. Finally, pressing Quit will cause BOOKLET to close the window and return you to DOS.

Configure window:

```

[ ]=====Select Configuration=====
Paper feed                                Paper size
(♦) Simplex                               ( ) A4
( ) Inverted                              (♦) Letter
( ) Multi-Purpose Tray                     ( ) Legal
( ) Duplex                                ( ) Executive
( ) DeskJet

second side Handling                       Top margin      2.0
( ) None                                  Bottom margin   2.0
(♦) Wait for enter                        Left indent     4.0
( ) Manual feed first page               Right indent    4.0
[ ] Announce second side

default Paper source                       Ring binder margin 5.0
( ) Upper tray                            Gutter          2.0
(♦) Lower tray                             Left auto skip   0.00
( ) MP tray                                Top auto skip    0.00

      [ OK ]           [ Save ]           [Cancel]

```

This Paper feed radio-button group sets the page printing order appropriate for your printer's paper feed technique.

SIMPLEX is the default mode. The printed first sides are placed face down back into the paper feed tray for second side printing.

INVERTED is used if your printer stacks the output face up instead of face down. Otherwise, it functions the same as SIMPLEX.

MP is used for the Hewlett-Packard LaserJet IIP and IIIP printers. The printed output is placed face up in these printers' Multi-Purpose Tray for second side printing. (The paper for the first side may be fed from either the MP tray or the lower cassette.) NOTE: If you have selected LC ONLY from the IIP front panel MP will not be able to function. For most applications, selecting LC TRAY will provide the same paper source as LC ONLY but allows software switching of trays. ALSO NOTE: if you are using the front output tray in conjunction with the MP tray, these printers function like the DeskJet series. Select DeskJet.

DeskJet is used for the Hewlett-Packard DeskJet series printers. These stack face up, but feed differently so that INVERTED does not produce a proper output order.

DUPLEX is used with printers such as the HP LaserJet IID which are capable of printing on both sides of the page on their own.

Second side handling controls what happens between printing the first side and the second side. Specifying Wait for enter will cause

BOOKLETS to wait for the Enter key before printing the second side. Manual feed first page causes BOOKLETS to select manual feed for the first sheet printed on the second side. (This is specially useful if your printer is on a network. The printer stops waiting for a manual feed while you reload the paper for the second side. Just put the top sheet in the manual feed when you are ready.) If None is selected, the printing of the second side is continuous with the first.

Check the Announce second side check-box and BOOKLETS will sound a tone when it has completed printing the first side of the document. This is useful for printers with a small buffer. When the printer has a large buffer, The tone will come way before the printer is finished.

Default paper source specifies the paper source for BOOKLET. MP is for the LaserJet IIP and IIIP Multi-purpose tray. If you have only one tray, Lower and Upper will be equivalent.

Use the Paper size radio-button group to configure the size paper you use in your printer. The sizes are as follows:

A4	= 210 x 297 mm
LETTER	= 8.5 x 11 inch
LEGAL	= 8.5 x 14 inch
EXEC	= 7.5 x 10.5 inch

You can change the margins of your printed documents by entering new values for Top margin, Bottom margin, Left indent, and Right indent in the fields of those names.

The amount of non printable margin varies with the printer model. The LaserJet IIP is quite happy with a top margin of 1 line. The LaserJet II will lose a line unless the top margin is 2 lines. See below for a further discussion of margins. Your margins must be at least as large as your printer's auto skip regions for proper printing.

The Ring binder margin field allows you to specify a special margin at the top of the logical pages when you have selected Ring binder order for printing. This margin allows for the punched holes a ring binder requires.

The Gutter is the space around the fold. Setting the Gutter adds columns to the right of even pages and to the left of odd pages. The number in this field allows extra space for binding the booklet. See MARGINS below for further detail.

Auto skip is the amount of space that the printer automatically skips over at the top and left edges of the paper. This area is a "forced" margin unique to the printer. LaserJet printers have an auto skip left margin of three characters. They have no top auto skip.

You determine Left auto skip by multiplying the printers left unprintable area in inches (this is on the short edge of the paper since BOOKLETS prints in landscape orientation) by 16.67. (The font BOOKLETS uses is 16.67 characters per inch.)

You will need a Top auto skip if the printer automatically skips lines before it starts printing. The Hewlett-Packard DeskJet printers do this. Compute the top auto skip by multiplying the distance it skips (in inches) by 6.

DeskJet Plus printers have a half inch left margin and a quarter inch top margin. For them you would use a left auto skip of 8.34 and a top auto skip of 1.5.

Note: you must set your margins to be at least as large as the auto skip values.

If you push the Save button, the configuration you have selected will become the defaults for BOOKLETS. The values for your custom options are kept in a file called BOOKLET.INI which will be found in the same directory as the BOOKLETS program. The command line version, BOOKLET uses this same file, so you the defaults you save will apply to both programs.

Options window:

```

[■]=====Select Options=====
[ ] Header      &U@C&F.D - &FD{MMM D, YYYY}
[ ] Footer      &O@CPage &P of &#
Output LPT1          Sheets per folio 256
Marks                Lines per page    66
[ ] Staple marks
[ ] Cut marks       Pages per side
                    ( ) 1
[ ] Ring binder    (◆) 2
                    [ ] Single sided

[ OK ] [ Save ] [Cancel]

```

BOOKLETS will print a header at the top of each logical page if Header is checked. The default header shown to the right will print the file name and date centered and with a line under them. You can substitute your own customized header for the default. A full description appears below on page 11.

If Footer is checked BOOKLETS will print a footer the bottom of the document. The default Footer shown will print the page number at the bottom of each page.

When Staple marks is checked, staple marks are printed in between each logical page. These marks can be used for alignment of a stapler.

When Cut marks is checked, cut marks are printed in between each logical page. These marks can be used for alignment of a paper cutter.

When Ring binder is checked, the pages are printed in sequential order so that they can be read conveniently if the sheets of paper are left un folded and placed in a ring binder. When the option is not checked, the pages are printed in booklet order such that they will be in sequential order once the sheets of paper are folded in half.

The Output field allows output to be sent to disk file or to a specific printer on a port. Enter the name of the file or the designate for the output device. E.g enter LPT2 to print on the second printer port.

If a booklet contains too many pages, it will be difficult to fold. The resulting booklet will be too thick. The Sheets per folio field allows you to set the number of sheets of paper for each folding. Thus, the booklet could consist of several folios each with up to this number of sheets of paper. The default is 255 sheets. This is also the maximum value. Booklets with more sheets will be printed as multiple folios.

A normal LETTER size document has 66 lines per page. A4 documents can have up to 70 lines. You should select the number for Lines per page that is appropriate to the document you are printing.

BOOKLETS uses this number to compute line spacing. If you set the number too large, the lines will overprint each other. On A4 paper, 70 lines plus the header and footer works.

The Pages per side radio-buttons and check box let you control how the document will be printed. There can be one or two logical pages per side of paper, and the printing can go on both sides of the sheet or be single sided (if you check Single side.) One logical page per side gives you a "full up" page, with headers and footers if you have chosen them.

If you push the Save button, the options you have selected will become the defaults for BOOKLETS.

HEADING DESCRIPTIONS

Headers and Footers (headings) are printed based on the heading definition associated with each. You can place any text you wish on a heading. The only constraint is that it must be less than 128 characters total. In addition to simple text, you may include things like the page number or file name by using the tokens defined below. The heading can be highlighted by over bars and under bars and with LaserJet shading and pattern fills (assuming your printer supports this feature.)

The text and tokens be centered or set flush to the right margin. (By default they are left flush.) A header or footer can be made up of a combination of left flush, centered and right flush text. Any text preceded by @C is centered and any text preceded by @R is set right flush. You may have only one each of the tokens @C and @R in a heading.

Enter the header and footer descriptions in the text boxes to the right of the header and footer picks on the Select Options screen.

The following tokens substitutions are defined for customizing your heading:

- &P inserts the page number
- &# inserts total number of pages
- &F.E inserts the name of the file being printed
- &F inserts the name of the file without the extension
- &FD inserts the file date
- &FT inserts the file time
- &CD inserts the computer's date
- &CT inserts the computer's time
- &U inserts a line under the header or footer
- &O inserts a line over the header or footer
- &Snum inserts a Shading pattern on top of the header or footer. num is a number defining the pattern. Refer to your printer manual for Rectangular Area Shading Fill.
- &Bnum inserts a Cross-Hatch pattern on top of the header of footer. num is a digit Refer to your printer manual for Rectangular Area Cross-hatch Fill.
- && inserts an ampersand character
- &@ inserts an at sign
- &{ inserts a brace

&CT and &FT may optionally be followed by a time format description. This description is enclosed in braces ("{" and "}"). Use H where you want hours, MM for minutes and SS for seconds. Use HH for 24 hour notation. For example, {H:MM:SS} gives the time as 4:45:17 pm. This is the default format. {HHMM} gives 1645.

&FD and &CD may also have a format description string following. Again, these are enclosed in braces. D gives the date, M the month, and YY the year. DD insures the date is two digits. Likewise MM insures the month is two digits. MMM will print the name of the month. YYYY will give a 4 digit year. Examples of date format: {dd-mm-yy} gives 02-10-91. {mmm d, yyyy} gives October 2, 1991.

Sample Headings

&U@X&F.E - &FD{MMM D, YYYY} gives a header with the full file name and date (separated by a hyphen) centered with a line underneath. This header will look as follows:

BOOKLET.PCL - September 26, 1991

&O@C- &P - gives a footer with the page number between two hyphens. This is centered and has a line over it. This footer looks as follows:

- 5 -

&o&u&s5&f@r&dt{m/d/y} will create a shaded bar with solid lines at the top and bottom. On that bar, to the left will be the file name (without the extension). The date the booklet was printed will be flush to the right. Try this one if your printer supports Rectangular Area Fills. It makes an attractive header bar.

@rPage &p of &# will place a page indicator at the bottom right corner of each page of your booklet. For example: Page 5 of 10.

Restarting printing

[■] Restart

Begin on () Page (◆) Sheet

End on

[] Print only second side

[OK] [Cancel]

This window is used when recovering from printer failures during previous runs of BOOKLETS. That is, if you have a paper jam on the third

sheet, you can rerun BOOKLETS setting Begin on to 3 and it will not reprint the first two sheets. End on is the last sheet to be printed.

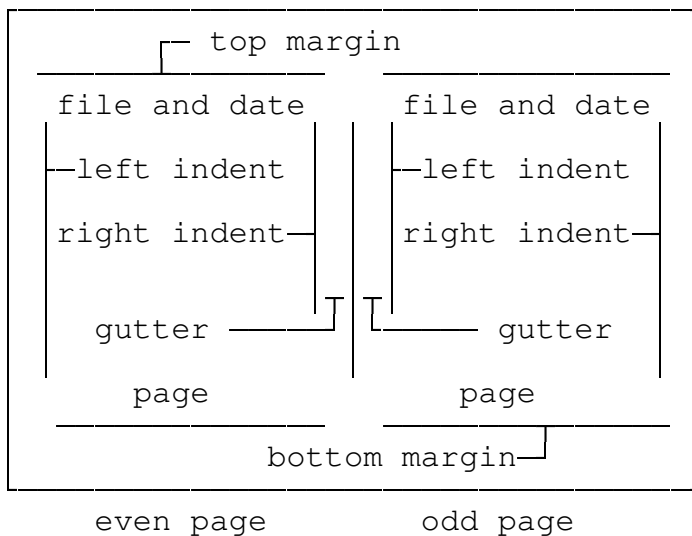
If you select the Page radio-button, Begin on and End on refer to page numbers. BOOKLETS will reprint starting with the sheet which has the page number from the Begin on field. It ends printing when it has printed the sheet containing the End on page number.

Check the Print only second side check-box when you wish to reprint using previously printed first sides.

See RECOVERING FROM PRINTER ERRORS below for a discussion of printer error recovery.

MARGINS

Illustration on left indent, right indent, top and bottom margins, and gutters.



Laser printers have an unprintable area of about three columns around the edges of the paper. A left indent of three (on a LaserJet) is required to prevent loss of characters on the left edge of the paper. Likewise, a right indent of three is also needed. If your printer clips characters at the end of the right side of the paper it is because the unprintable region is larger than three columns. To correct this you will need to adjust the left and right indents. A similar situation exists with the top and bottom margins. If you get character clipping from your print out, increase the these margins.

With mono-spaced 12 point fonts you can compute the characters which can be printed across the logical page. The formula for this is:

$$C = \text{Truncate}((L * 16.67 - 1)/2) - \text{RightIndent} - \text{LeftIndent} - \text{Gutter}$$

L is the long dimension of the page
C is the characters per line on the logical page

For example on 8.5x11 inch paper (LETTER) with a three column left indent and no gutter, the formula is:

$$C = \text{Truncate}((11 * 16.67 - 1)/2) - 3$$

which gives 88 characters per logical page. Remember that the left indent must be at least three characters because of the unprintable left margin.

RECOVERING FROM PRINTER ERRORS

BOOKLETS will detect and recover from temporary print interruptions such as Out of Paper or Printer Not Ready. It will display a message when it has detected such a condition and will erase the message and resume printing once you have corrected the problem. It may display an error number rather than a text message. These are traps for errors for which I do not know the meaning. Should one of these occur, you will be given the option of Retrying or Aborting the printing. The state of the printer may be lost due to the error. If so, continuing will not produce correct output.

One cause of print interruption is paper jams. Recovery from these may take some effort on your part. Generally Laser printers will reprint pages involved in paper jams. If you let it do so during the second side printing of your document, you may find that the back sides may not be printed on the appropriate front side. If the original page is undamaged, you should re feed it. Otherwise, you can feed a blank page for the reprint and use Restart to reprint the damaged page.

It may be simplest to abort printing when the jam occurs. You then reset the printer and start again using Restart. You can reprint the sheet involved with the jam then you can resume printing of the second sides. Note: When you restart printing of the second sides, BOOKLETS assumes you have already placed the first sides into the paper feed tray ready for printing. It does not prompt you for this.

If you find it necessary to stop BOOKLETS from printing at any time, just press the ESC key. BOOKLETS will stop and offer you the chance to continue or abort the printing.

PAPER CURL

Most problems with jamming are caused by paper curl. The heat of the printing tends to cause paper to warp. There are two things you can do to minimize this problem. The first is to use good quality laser printer paper stock. The second is to manually take the curl out of the paper. Since good quality paper costs up to three times ordinary copier paper, the second option is often chosen.

Take the output from the first pass printing. Hold it face up by the short sides. Find a sharp edge, such as the edge of a desk. Draw

the paper across the edge as if you were polishing shoes with it. This will introduce a curl opposite the one caused by the printer.

FONT SELECTION

When BOOKLETS prints a document containing font selection codes, it converts those codes by scaling the pitch and point size parts of the code. These are scaled such that the effect is for fonts to be specified with all the same type face characteristics as the original, but with the size of the type face about two thirds the original.

If the printer you are using is a LaserJet III and you have selected a scaleable type face, then the printout will be a page of text which is an image of the original but two thirds the size. When the selected type face is not scaleable, the printer will use a font selection matching algorithm. Hewlett-Packard printers use a priority selection scheme which considers, in order of priority, orientation, symbol set, pitch (if the font is not proportional), font point size, type face style, and stroke weight. For a full treatment of this algorithm, see your printer's reference manual.

The effect of this algorithm is for the printer to use a font it believes is the "closest" to what was requested. For BOOKLETS, in most cases this means it will use the 16.67 character per inch lineprinter font. Even when there is a small font with the right type face for the printer to select, the results may not be what you would expect. The selection algorithm may result in a font which does not work well for the reduced document. This will often be the case when you have used proportional fonts and proportional spacing in your document. The result may be words overlapping each other.

There is not much BOOKLETS can do about problems of font selection. You can experiment with different fonts to find the most pleasing result.

Other difficulties you may have with format transformations are that centering and tab spacing may not scale proportionally. This is due to differences between the scaled font size and the actual font used by the printer. If you use spaces to do your formatting and stick to one font size, the output will generally look correct.

Also, often the small fonts selected by the font scaling do not have bold or italic type faces. If this is the case, you will lose these accents. Underline is always present (except for the DeskJet series printers), so you can substitute it.