

QUESTIONS

Q1. How do I do super or sub-script printing with AppleWriter and the Apple DMP. I can do it with 3EZ Pieces, but not AppleWriter. To see how 3EZ Pieces did the trick I printed a superscript to disk, then used the system monitor to see what code 3EZ Pieces used. I discovered that 3EZ Pieces internally calculates the position on the line where the sub/superscript goes, then uses a combination of reverse line feeding (ESC-r), changing the distance between line (ESC-T nn), and the graphics code of placing the succeeding printing nnnn dot position from the left margin (ESC-F nnnn). Similar contrortions are involved to get the printing back to normal. The problem with using Applewriter /// is that the ESC-F nnnn code for practical purposes cannot be embedded in a document because 1) figuring out what the nnnn should be is a heck of a lot of work and 2) if any changes are made to the document, the nnnn has be recalculated. Is it possible to do this in any version of Applewriter. -- Robert Howe

A1. (part 1) The short answer is not very well. In theory, it can be done using Control V and the appropriate escape codes, but the keystrokes that it takes to give the commands are counted by AppleWriter as part of the line. This means you will get a short line unless you lengthen just the line containing the commands. To get it to superscript you would have to give the commands that tell Applewriter to go into command mode (Control V) and then tell the printer to reverse the platten feed direction, that a line feed is only one-half the normal line feed, move that one-half line up and exit the command mode. Then you would input the superscripted characters and then reverse the process change the platten feed direction back to forward, go back down the half line and continue printing normally. See your printer manual and the Applewriter manual (pages 50 and 101). You still would have to deal with the shortened line of text, because all the control codes are counted in the line length (although not printed). Personally, I would use Word Juggler or 3EZPieces, which both have super- and sub-script commands built in.

A1 (part 2) In answer to a "WISH LIST" response from Robert Howe (one of our Sacramento members) concerning the placement of sub and superscripts using a dot matrix printer, the following is gleaned from the Apple Writer /// Operating Manual and is only printed here for the benefit of those who do not possess or cannot obtain this reference. One caution, though, concerns the type of printer. The coding cited in the manual is for the Qume and this may vary depending on the type DMP used by various operators. Usually, the printer manual will have some reference to codification of the numeric and ASCII entries necessary to perform these unique functions.

"SUPERSCRIPTS and SUBSCRIPTS: In some documents it is necessary to refer to footnotes or a bibliography using characters that are above or below the normal printed line. To accomplish this, refer to your printer manual for the instruction sequences that permit this and enter them using the "[V] Accept Control Characters" feature.

On the Qume printer, for example, a superscript is preceded by a reverse half line feed (ESCAPE SHIFT-D) and followed by a normal half line feed (ESCAPE SHIFT-U). For a subscript, the order is simply reversed. Because these characters are not printed, although they occupy spaces in the formatted line, they should be used in LEFT JUSTIFIED TEXT rather than FILL JUSTIFIED for best results. (See the "Printing the Text File" section of the manual for a full explanation of the printing options.)

NOTE; The platen release lever on the printer must be engaged when printing super/subscripts. This provides tension between the paper and the roller so that the paper can be moved backwards.

FOOTNOTE ENTRY PROCEDURES : Many text editing tasks require the inclusion of footnotes. There is an entry procedure for footnotes that will automatically move and print footnote text at the bottom of the page when the document is printed. Any text which is preceded by an open parenthesis and a less-than character [(and <] and ended with a greater-than character and a close parenthesis [> and)] will be printed at the bottom of the page. Here is an example using the QUME SPRINT 5 COMMANDS for super/subscripts:

```
[V] ESCAPE SHIFT-D [V] 3 [V] ESCAPE SHIFT-U [V] reported . . . .
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The manual text then shows the printed example which for brevity's sake has not been duplicated here and then refers to what may be the meatiest kernel of this instruction in that the Appendix 'B' SPECIAL GLOSSARY FILE refers to just the exception mentioned earlier regarding printer variety and codification and this is printed in its entirety from the manual.

APPENDIX "B" - SPECIAL GLOSSARY FILE: Many printers have special features which can be enabled by sending a special character or sequence of characters to the printer. As discussed in the "Superscripts and Subscripts" section of the manual, the Qume Sprint 5 printer uses the sequences ESC SHIFT-U and ESC SHIFT-D for subscripting and superscripting text. Apple Writer's Glossary definitions feature can be used to embed these command characters into your text file easily.

Your Apple Writer /// master diskette contains a glossary text file named SPECIAL which has 2 terms defining the command characters necessary for sub- and superscripting. If the file SPECIAL is [L]oaded using [Q]5 (Load {G}lossary file), you can type [G] UP ARROW to embed the reverse half-line feed instruction and [G] DOWN ARROW to embed the forward line-feed. For example, if you wanted the number 3 to appear in superscript position in your printed text you would enter:

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[G] UP ARROW 3 [G] DOWN ARROW
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To print characters in subscript position, just reverse the procedure:

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[G] DOWN ARROW 3 [G] UP ARROW
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If your printer uses different special characters than those above, or if you want to use other features of the printer, you can CREATE your own glossary file as described in the glossary section. You can also use the glossary to do overstrikes, simply by embedding [H] between the two characters to be printed.

Be careful not to embed too many special characters on a single line, as Apple Writer /// counts them as well as the regular characters when figuring out where to end the line when the margin is reached. Since the printer takes the special characters without printing them, a shorter line is printed.

NOTE: For those reader-members lacking documentation (ie, APPLE WRITER /// OPERATING MANUAL) Apple, Incorporated or Sun Data would be the natural supplier if any copies of this text are obtainable.

You will note that in the accompanying printed example, my Apple DMP did as I

directed in using the example by placing the footnote at the bottom of Page 1. I haven't tried the super or subscript command sequences yet but if the footnote sequence coding works then I'm sure the other does as well.

- Ed Suttles

3. Wild and ?

A1 (part 3) Probably the easiest way would be to just have the printer stop when it comes time for the sub/ superscript and manually change the platen. I know this can be done in Version 2 using .IN.

If anyone else has methods please let us know.

- Bill Stone