

Dot Writer Manual - DOTPRINT Section
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Read This First

This section is an overview of the Dot Writer package. Please read this section before you go on. The information here is important to the understanding of the program.

You Dot Writer package contains two diskettes which are formatted in 35 track, single density, TRSDOS format. This allows maximum transportability. Model III users will have to CONVERT the diskettes to Model III format. Please read the TRSDOS manual for information on the CONVERT utility.

ALWAYS make backups of the supplied diskettes and then store the supplied diskettes in a safe place. NEVER use the original diskettes as program diskettes. If you damage an original diskette, or if the original diskette becomes damaged, simply return the original diskette for a replacement. YOU MUST RETURN THE DAMAGED DISKETTE AND YOU MUST SUPPLY A SELF ADDRESSED, STAMPED, RETURN ENVELOPE. IF THE DISKETTE CANNOT BE REUSED, INCLUDE ANOTHER DISKETTE OR \$1.60 FOR A REPLACEMENT. WE WILL NOT REPLACE COPIES, ONLY THE ORIGINALS.

The original diskettes do not contain an operating system. If you cannot transfer the programs to a system diskette yourself, we will do it for you. YOU MUST RETURN THE ORIGINAL, THE DISKETTE THAT YOU WANT THE PROGRAMS ON AND THE OPERATING SYSTEM. ALSO AN SASE FOR RETURN. WE CAN CREATE 80 TRACK MASTERS BUT WE MUST CHARGE \$7.00 EACH.

The DOTWRITER program contains 3 main parts. The first is TINY GEAP, which is in three parts that are interactive. This program is used to create the graphics or letters. It is very simple to use and you'll be amazed at the appearance of the print out.

The second part is the DOTPRINT module. This is also a three part, interactive program. DOTPRINT reads and formats the text file that you create with your word processor or ASCII editor. DOTPRINT is responsible for the tremendous printing power that you receive.

The final part is the TYPE STYLE files. These files are the supplied lettersets that you can use in print outs or as roots for your own creations. There are 14 fonts and each of these files, as well as the TGEAP and DOTPRINT files are listed in the next section.

File Names

The following list contains the names, functions and on line requirements of all of the files on your supplied diskettes.

TGEAP1/EPS or TGEAP1/ITO - EPSON and C.Itoh versions respectively, load the machine language routine called TGEAP2/EPS or TGEAP2/ITO. Also loads and runs TGEAP3/EPS or /ITO.

TGEAP2/EPS or TGEAP2/ITO - the machine language drivers for the TINY GEAP program.

TGEAP3/EPS or TGEAP3/ITO - the BASIC and machine driver for the character creation programs.

The three programs above are the character creation programs that allow you to create hi-res letters or graphics. All three are needed if you plan to create characters. ONLY one version is needed at a time and that depends on the printer you use. The TGEAP1/EPS, TGEAP2/EPS, and TGEAP3/EPS programs are for the EPSON and EPSON compatible printers. The files with the /ITO extensions are for the C.ITOH Prowriter, NEC, PHC and other compatible printers. This extension rule is true throughout the filenames. Files without extensions or with extensions other than /EPS or /ITO are printer independant.

DOTPRINT/EPS - loads the machine driver WPML/EPS and loads and runs the BASIC driver WP/EPS.

There are /ITO versions of these programs also and they are needed to do the printing of text files. Once DOTPRINT/EPS or /ITO is run, it will automatically load the WP/EPS (/ITO) and WPML/EPS (/ITO) programs. Then, the programs can be removed from the disk drive to make way for more files. It is advisable though, that you keep them on line if you can.

WPML/EPS or /ITO - the machine language driver for the DOTPRINT programs.

WP/EPS or /ITO - This is the main printing program and is both BASIC and machine.

TCONINX - is part of the TABLE OF CONTENTS and INDEX creation routine and must be on line if an IX or TC command is to be processed as part of a print file.

TCIN/BAS - same as above - must be on line for TC or IX.

SSORT/CIN - a machine language sort routine that is used to sort the index. Must be on line as above.

Note that the above programs, TCONINX, TCIN/BAS and SSORT/CIN do not have /ITO or /EPS extensions because they are printer independant. They will work regardless of the printer type and need to be on line only if you are processing TC or IX commands.

TEST/EPS or TEST/ITO - These are the test print programs for the respective printers. They are only used to test the program for bugs and need not be on line after the initial test. Both test files also require that the PL letterset be on line.

Note that the following files are TYPE STYLES and need to be on line only if they are to be printed. If they are not used in the text, they are not needed.

MB2	B3	TR
BO	MC	PL
OE	SE	GR
MB	FF	SPL
MP	MID	

INTRODUCTION TO DOTPRINT

DOTPRINT is designed to print the contents of a text file created by a word processor such as NEWSRIPT or, a file created by the GEAP program. Using "dot commands", the DOTPRINT program allows you to print the file using fancy fonts. You can use DOTPRINT with our fonts or, you can create your own by using GEAP or TINY GEAP.

If you don't have NEWSRIPT you can still use DOTPRINT. It will work with almost any word processor that creates an ASCII file. You must, however, ignore the commands normally used by your word processor and instead, use the commands in this manual.

The DOTPRINT process is very simple. An ASCII file is created with GEAP or your word processor. "Dot commands" (these are discussed later) are typed in along with your text. After the file is saved, go to BASIC and type: RUN"DOTPRINT" ENTER). Respond to the prompted questions and then enter the name of the file to be printed. The text will be processed and printed by the DOTPRINT program.

The DOTPRINT format for commands follows the NEWSRIPT format. We must, however, warn you that these commands are not always identical to those of NEWSRIPT, so NEWSRIPT users should be alert for some of the subtle differences. Please be sure to refer to the summary of commands to see which NEWSRIPT commands the DOTPRINT module supports and what additional commands are made available.

SYSTEM REQUIREMENTS FOR DOT WRITER

TRS-80 Model I/III 48k Disk (2 drives recommended but not necessary). TRSDOS or a compatible operating system, and one of the following printers:

EPSON printer with GRAFTRAX 80 or,
EPSON 100 with GRAFTRAX Plus or,
EPSON FX series printers.
C.Itoh 8510 Prowriter or PMC-85
NEC 8023A

NOTE: GRAFTRAX upgrades are available through us and can easily be installed by the user.

OPTIONAL: A word processor capable of creating an ASCII file (We recommend and can supply NEWSRIPT, though almost any word processor will do).

NOTE: We also have patches for the MAX80 computer. Other advertised TRS-80 workalikes may support our software.

WARRANTY AND LICENSING AGREEMENT

All programs are sold on an "as is" basis. In using this program, you waive any right for claim to any damages that may be incurred. The end user also agrees that all programs are proprietary and no code shall be disassembled, rewritten into other forms, or included in other computer programs. Any modifications made to our programs automatically become the property of the copyright owner, William K. Mason. Character Fonts or fonts created with the editor are for use in non-commercial applications and programs only. Those wishing commercial license should contact RCM Computers, 221 Hirschfield Dr., Buffalo, NY 14221 for information. There is NO fee.

Our policies are not designed to discourage you from using the programs. They are to discourage misuse and pirating and to protect the interests of the user, the author and RCM Computers. If you have questions regarding the use of the programs, please contact RCM Computers.

The following trademarked names are used in this manual:

TRS-80 Tandy Corporation
Epson and Graftrax Epson America, Inc.
NEWSSCRIPT PROSOFT
C.Itoh TEC
NEC NEC
PMC-85 Personal Micro Computer

INSTRUCTIONS FOR BEGINNERS

Although we have designed this package to operate with TRSDOS, we have also tested it with other systems. We have had little or no trouble with any of the systems tested. If you plan to use a DOS other than TRSDOS we suggest that you follow these simple guidelines:

- 1 ... Transfer the files from the supplied disk to your formatted working disk. Most of the problems we have encountered have been eliminated by changing all files into the non-TRSDOS system. Write protect the original disk before you make a backup.
- 2 ... We do not support any DOS other than TRSDOS but, if you run into a problem, contact us and we will do our best to help you.
- 3 ... If you use a system other than TRSDOS, please let us know how you make out. We have tested our programs under most of the current operating systems but we still appreciate any input from our users.

RUNNING DOTPRINT

To run GEAP or the Expansion Modules, follow the instructions contained in the appropriate manuals. To run DOTPRINT, simply follow the sequence of instructions as follows:

- 1 ... Make a backup of the supplied disks. Follow your DOS instructions for BACKUP. When you have backups of all supplied diskettes, put the masters in a safe place. If at any time you damage or discover your supplied diskettes to be damaged, return them with return postage and envelope for replacements. If the diskette is physically damaged and can't be used, return the damaged diskette and a replacement or send \$1.60 per diskette for replacement. YOU MUST RETURN YOUR ORIGINAL DISKETTE, REGARDLESS OF CONDITION, FOR REPLACEMENT.
- 2 ... MODEL III USERS ONLY - now must CONVERT these programs to Model III format. Follow the CONVERT instructions included with your DOS.
- 3 ... Next, use your newly made backup diskettes to create your working diskette. Place one set of programs on a diskette. If you have the EPSON or EPSON compatible printer, use the files that have the /EPS extension AND ALL FILES that have no extension or have an extension other than /EPS or /ITC. These files are: DOTPRINT/EXT, WP/EXT, WPML/EXT, TGEAP1/EXT, TGEAP2/EXT and TGEAP3/EXT where /EXT is either /EPS for the EPSON printers or /ITC for the Prowriter or non-EPSON printers. There are also a few other files including: TCIN/BAS, TCONINX, SSORT/CIM. These files are not printer dependent and should be included on each main working disk. In addition to these working files, there are several TYPE FONT files.

They are listed elsewhere and are required only if they are to be used.

- 4 ... Since we have two versions of the printer dependent programs (the /ITO or /EPS extensions on the filenames) on each disk, it was necessary to put the extension on the filename in order to identify the program. If you want the working disk to be fully compatible with all possible programs, please RENAME the file DOTPRINT/EPS or DOTPRINT/ITO to DOTPRINT. The dropping of the extension will make it necessary to have only one DOTPRINT on a diskette, but will make the other calling programs fully compatible. ONLY the DOTPRINT program must be renamed. The others maintain their extensions. Follow the RENAME procedure for your DOS. In general, the format is: from DOS READY (or equivalent) type RENAME DOTPRINT/EXT:d to DOTPRINT and hit enter. Note that the /EXT will be either /EPS or /ITO. The lowercase "d" represents the drive number that the diskette is on. REMEMBER, this procedure should be used on working diskettes only, not masters or backups!
- 5 ... Go to BASIC NOTE: Be sure that you select 4 files in whatever fashion your DOS requires. Under TRSDOS answer the prompt "Number of Files ?" with the number "4". If you are using NEWSRIPT you can enter BASIC with four files automatically from the main menu of NEWSRIPT.
- 6 ... Type RUN"DOTPRINT" then press <ENTER>. This loads the machine language routine WPML/CIM and then loads WP.
- 7 ... Enter current page number at the prompt and press <ENTER>. Pressing <ENTER> without entering a number will cause the numbering to start at one.
- 8 ... Enter the number of copies desired at the prompt and press <ENTER>. Pressing <ENTER> without entering a number will produce one copy.
- 9 ... You will also be asked if you want the single sheet option. This Option allows you to print individual sheets with a stop in between.
- 10... Enter I.D. of file to be printed at the prompt and press <ENTER>.

NOTE: We have provided a test program that should be run to check out your system. The file is TEST/EPS or TEST/ITO, depending on the printer. To run the test file, run DOTPRINT as instructed above and answer the filename prompt with the proper TEST/EXT name.

FILE MANAGEMENT

In several places in this manual you will see references to file management. This is because, in order to get the best use of the program and your available disk space, you need only keep on line those files that are necessary for the operation you are undertaking. If you have multiple drives this management becomes less critical however, limited drive space requires more diligent management.

In this section we have filenames listed with a /EXT appended. The /EXT means extension and will be either /EPS for Epson printers or, /ITO for the C.Itoh or compatible printers. Programs that do not have either the EPS or ITO extensions are not printer dependent. To use DOTPRINT the following files are needed:

- 1 ... DOTPRINT/EXT - This is a BASIC loader used to print the LOGO and to load machine language routines as well as the WP/EXT program. Once run, it can be removed from the drive.
- 2 ... WPML/EXT - Translated it stands for Word Processing Machine Language / Core Image. This program may be removed from the drive once it has been loaded (this occurs upon running DOTPRINT/EXT).
- 3 ... WP/EXT - This is a control program and once it is running, it can be removed from the drive for the rest of the printing.
- 4 ... OE, SE, MB, BO, etc. - These are examples of Font Filenames. If you plan to use a particular font, it must of course, be on line in a disk drive.

NOTE: When DOTPRINT/EXT is run, it automatically loads the WP and WPML programs. When you have received your first prompt, you can be sure all three programs have been loaded. At that time, the diskette containing those files may be removed however, if you can, we suggest that you keep all three programs on line at all times. If you choose to remove the programs, be sure that there is a SYSTEM disk in drive 0.

In summary, to use DOTPRINT you need only the ASCII file you wish to print, DOTPRINT/EXT, WPML/EXT, WP/EXT, and the Font Files you plan to use. If you are using double density and NewScript you will find that you can fit NewScript's EDIT, FEDIT, NS/CMD, NSINIT and STARTUP/MIN, along with all of the DOTPRINT required programs and most of the supplied fonts easily on one diskette. This makes for a very convenient processing station.

INTRODUCTION TO DOT COMMANDS

If you are a NewScript user, you will already be familiar with "dot commands". The name "dot command" reflects the format in which the instructions are given to DOTPRINT. This format is as follows: a period or "dot" followed by a two letter instruction, followed by an option. Text placed on the same line as a dot command is ignored, except in special cases.

Example: .ce on

".ce on" is a dot command. For now don't worry about this particular command, just notice the format. A dot, followed by a two letter command, followed by an option.

How does DOTPRINT recognize a dot command? This is very simple. Any line that has a period at the very beginning is considered a command line. Any text following a dot command on the same line is ignored unless the command requires text. Multiple commands may be placed on a command line as long as they are separated by a semicolon (;). The format is: .SK2;LH7;BF OE etc. Some commands must be the last command on a line, such as BF OE. Other commands also require special positioning but such requirements are noted in the command explanation.

The next section will give examples of how "dot commands" are used in text.

DOT PRINT COMMAND LIBRARY

The following letter codes are found after the applicable command.

- D - Command works only with DOTPRINT fonts
- E - Command works only with standard Epson fonts
- C - Command works only with C.Itoh Prowriter fonts
- * - Command that does not cause a control break. (See .BR)

.AD n ADJUST LEFT MARGIN

This is your absolute left-hand margin in tenths of an inch. For example, specifying ".AD 10" would give you a left margin of 1 inch. To set a 0 space margin use ".AD 0" Default value at power up is .AD 5 which equals 5 tenths of an inch.

.AF "name" ALTERNATE FONT SELECTION

This command selects the letterset "name" as the alternate letterset. The regular letterset is selected with the .BF command. The alternate letters may be inserted among the regular letters with the escape code "\/" to begin printing with the alternate letterset, and the escape code "!?" to return to printing with the regular letterset. The alternate letterset must have frame size less than or equal to the frame size of the regular letterset (see also PR). For example:

```
.bf pl
.af mes
testing \/ testing !? testing
```

will be printed as:

```
testing testing testing
```

This command may also be used to specify a letterset for subscripting. For example, if the main letterset is PL and the alternate letterset is selected as .AFPL-2, the alternate PL will be below the PL line. All alternate fonts can be selected in this fashion. Experiment to get the subscripting you like best.

Note: This command must be the last command on a line. Also, if an ALTERNATE font is too large to fit with a main font, they can still be used together. First, select the AF font with the BF command, then select the BF font with the AF command. Then all you have to do is switch the selection process so that you print most of your text in the alternate font and switch to the main font for the special characters.

.AP "filename" APPEND FILE

Append is used to chain text files together. When this command is encountered, the file specified by "filename" will be printed. Control of printing is also passed to this file. Note: This command must be the last command on the last line of a file.

.BF "filename" BEGIN FONT**.BF 1 CHANGE TO STANDARD PRINTER FONT**

This command is used to change from one font to another. The character font specified by "filename" is used. The filename should be one of the supplied fonts or a file created with GEAP or Tiny GEAP. Your own character sets, or high resolution blocks may be printed using this command. If the .BF 1 command is issued, the normal printer font begins. Note: This command must be the last command on a line. Also, with the new version, it is possible to get proportional print in very large lettersets or in alternate lettersets. This is made possible by a special "PROPORTIONALIZING" program we have written. In short, a letterset which fits into memory will always be proportional if desired. Alternate or large lettersets however, do not fit in memory so the proportional information must be available on the disk. Therefore, homemade lettersets may be proportional if they are the primary letterset and are not too large in size. If you try to use a homemade letterset as an alternate or, if your homemade is very large, it will not be in proportional. If you want to proportionalize your own lettersets, please use our Letterset Manipulation Utility which is available through your dealer or RCM Computers. See also PR.

Examples: .BF OE

.BF MYFILE

The first example would specify that all following text be printed using the Old English Character Font. "OE" is the filename that the Old English Character Set is stored under. The second example shows how you could use a font you created while using GEAP or Tiny GEAP.

..... BREAK

The .BR command causes a control break. A control break causes text to be printed starting on the next line. Some commands do not cause control breaks. For example:

This line will be printed as

```
.tr 35,35,92
```

one continuous line.

This line will be printed as one continuous line.

Because .tr does not cause a control break. But:

This line will be

```
.br
```

broken up because of .br

This line will be

broken up because of .br

Any unrecognized command is treated as a Break command by DOTPRINT.

.BM n BOTTOM MARGIN

This command allows you to specify the number of lines you wish to have for your bottom margin. The default value is ".BM 6".

.BT "title" BOTTOM TITLE

This command specifies the title to be printed at the bottom of each page. If this command is not used there will be no bottom title. Otherwise this command works just like the ".TT" command explained later.

Example: .BT- Page \$ -

This example would number the bottom of each page. Note: This command must be the last command on a line.

.CB n,w COLUMN COMMAND

This command is one of the most interesting in the program. It allows users who have printers that reverse (at this time only the C. Itoh) to print in multiple columns. The format of the command is .CB n,w where n = the number of columns and w = optional line length of each column. If you specify .CB 3 for example, the program will automatically separate the line length into three equal columns with 2 spaces between columns. If you specify w, (.CB 3,35) the line length of each column will be equal to w (ie. w=35 would be 3.5 inches wide). If you specify the w value, be sure that you have enough room on the paper for the columns and the spaces between columns.

Here is how the .CB command works. Suppose that you specify a line length of 75 and a left margin of 5. You will have a page of 7.5 inches wide with a right and left margin of 1/2 inch. The .CB 3 command will then divide the line length of 7.5 inches into three equal columns with 2 spaces between the columns. The first column will print and when the end of the page is reached, the printer will back up to the top of the page (or previously specified location) and will print the next column. This will continue until 3 columns have been printed and then the next page will be started in the same sequence.

If you specify a .VT location, the .CB command will back up to the location of .VT on the FIRST PAGE ONLY. Subsequent pages will be printed with the tops of the columns at the top margin. If no .VT is specified, the first page will also start and return to the top margin.

You will note that the lines in each column may not be exactly even. This is a problem that we have not been able to overcome as yet but we are working on it. Even without perfectly lined columns, I'm sure you'll like the look!

.CB -n,w COLUMN COMMAND WITH BORDERS

This is another version of the .CB command. It works exactly as the .CB n,w except that the -n signifies that you want vertical lines dividing the columns. Vertical lines will be drawn BETWEEN columns only, not on the left or right margins. You can also issue a .HL command to draw horizontal borders between the vertical lines.

.CC n CONDITIONAL COLUMN

The .CC n command is exactly like the .CP n command except that it applies to columns. When the computer hits .CC n, it counts the number of lines left on the page. If there are not at least n columns left, it signals the printer to start the next column or move to the next page if the last column has been printed. the value n can be any positive integer.

.CE on,off CENTERING LINES OF TEXT

This command is used to automatically center lines of text. The current line length and left margin is used to determine the line center. The contents on each line followed by a ".CE ON" command will be centered until a ".CE OFF" command is encountered. Note that ".FO ON" will be temporarily turned to off. The CE command cannot be used in top titles. Use the CW command for this purpose.

.CM "comments" COMMENT . . *

This command allows you to put private notes within a document. These notes will not be printed by DOTPRINT. The entire line containing .CM is ignored at print time. Note: This command must be the last command on a line.

ON,OFF CONCATENATION

The format control must be on (.FO on) for this command to have any effect. The default is .CO on. This causes the computer to fit as many words on a given line length as possible. When .FO is ON and .CO is OFF then each line will be printed as typed, except spaces will be added between words to fill up the entire line length. Let's look at how this can work for you: First, look at how it works.

```
.foen;.coon
```

```
Chapter 1 Page 1
```

```
Will be printed as:
```

```
Chapter 1 Page 1
```

But if we turn the CO off, each space becomes a signal to expand the print so,

```
.foen;.cooff
```

```
Chapter 1 Page 1
```

```
Will print as:
```

```
Chapter           1           Page
```

This may not seem of much use but let's look at hard spaces before we make any judgements. A hardspace is, in fact, a space that MUST be printed as a character. A normal space can be printed in different sizes and can even be dropped but a hardspace MUST be printed ALWAYS the same size. Most lettersets contain a hardspace in the 127 (ASCII value) location. This character is not accessible from the keyboard in any direct manner but we have created an easy way to use it. We use a normal keyboard character for the hardspace but TRANslate the character to a 127 with the TR command. We'll use the # character for the hardspace in this example.

```
.TR 35,35,92
```

```
.cooff
```

```
Chapter#1 Page#1
```

```
Will now print as:
```

```
Chapter 1
```

```
Page 1
```

You can now see the benefit to using the CO command. Note that the only division is where the normal space occurs, not where the hardspace is. This is great for Tables of Contents, keeping names unbroken on a line and much more!

.CP n CONDITIONAL PAGE EJECT

When encountered, this command automatically starts a new page if the number of lines left on the page is less than "n". This is used to keep things, such as category headings, from being printed relatively alone at the bottom of a page.

.CW on,off CENTERING using paper WIDTH . . 0

This command is similar to the ".CE" command except that the center of the paper is used instead of the center of the line. The CW command should be used to center top titles, not CE.

.DA on,off DARK PRINTING . . 0**.DA 0,1,2,3 DARK PRINTING . . E,C**

The ".DA on" command is the equivalent of double strike printing; except it is designed for use with the DOTPRINT fonts. You should note that for some fonts such as Microprint and Minicubes the ".DA off" will give better resolution. The following chart is for use with the standard printer fonts.

	Epson	C. Itoh
".DA 0"	standard	standard
".DA 1"	emphasized	bold
".DA 2"	overstrike	N. A.
".DA 3"	double emphasized	N. A.

In addition, ".DA on" used with the standard print on the C.Itoh makes the print thicker in the vertical direction.

.DS DOUBLE SPACING

This command will automatically double space your text at print time.

.EM on,off EMPHASIZED PRINT . . 0

When used with the DOTPRINT fonts this command controls emphasized printing. Emphasized printing is slightly wider than regular print. Using combinations of ".EM" and ".DA" you can control the darkness of the print. For example:

```
.bf TR
.em off; .da off
testing
.em on
testing
.em off; .da on
testing
.em on; .da on
```

testing
will be printed as:

testing
testing
testing
testing

.EN END OF FILE

When the computer encounters an END command while processing an imbedded file (see the ".IN" command), it immediately returns to the main file. If the computer is processing the main file then ".EN" is the last command it will process. An ".EN" command should be put at the end of every SCRIPSIT or PENCIL file. With other word processors the .EN command is optional but we recommend always using it. Otherwise the computer may print a string of "garbage" at the end of your nice neat file.

ES "symbol" ALTER ESCAPE CODE

This command changes the symbol for the escape code. The default symbol is "!". You may want to print the "/" or other control symbols and thus need to change the escape code symbol to something else. Example:

```
.es #
test #test#% test
```

will be printed as:

```
test test test
```

The SECOND symbol in the escape code sequence is, however, always the same. Assuming the escape code symbol is "#", then the escape sequences are:

- / . . . Begin alternate font.
- ? . . . End alternate font and resume .bf font.
- & . . . Begin underlining non-blank characters.
- \$. . . Begin underlining blank and non-blank characters.
- % . . . End underlining.
- (. . . Begin double width mode.
-) . . . End double width mode.

These sequences can be intermixed. For example:

```
.bfpl
.afmes
testing /testing!$ testing (testing!%
testing !? testing!) testing.
```

will be printed as:

```
testing testing testing testing
testing testing testing.
```

.FO ON,OFF FORMATTING CONTROL

The ".FO ON" command will automatically format your text based on the line length that you have set. For example if you typed lines of text as follows:

I don't care what
people say, Dot Writer fonts are
here to stay.

They would appear exactly that way if the format was off, and they would appear as below with the format on.

I don't care what people say, Dot Writer fonts are here to stay.

.FM n FOOTING MARGIN

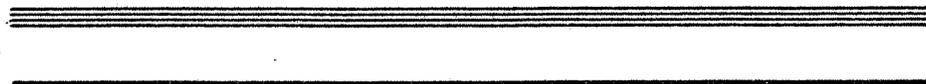
The ".FM" command sets the footing space to the integer "n". When the text reaches the bottom margin on any page, the computer will move down "n" spaces before printing the bottom title. The default is ".FM 1".

.HL HORIZONTAL LINE

When the computer encounters a ".HL" command it draws a horizontal line across the page between the left and right margins. The Horizontal Line will run the entire line length. The print head pin(s) that draw the line are determined by the ".UP" command. See the UP command for more details. The length of the line is determined by the ".LL" command. For example:

```
.LL 50
.UP 170
.HL
.UP 56
.HL
```

Would be printed as:



Note: There is one limitation to the HL command - a FONT, tpestyle, or graphic must be loaded with the BF command BEFORE the HL will print. If for example, you want to use HL to print a TOP BORDER line before any text is printed, you must load a letterset first. You need not print anything, but a letterset must be loaded. BF1 (the normal printer font) won't work. It must be a graphic letterset or character.

.HM n HEADING MARGIN

The "heading margin" is the space between the last Top Title line and the first line of the body of the document. One or two blank lines in this position will give a cleaner, more professional look to your printout. The default value is 1.

.HY "symbol" on,off HYPHENATION

This command allows you to define the soft hyphen character and also suppress soft hyphenation. A soft hyphen is printed if it must be used as the last character on a line, and is otherwise discarded as though it never existed. The HY command is defaulted to a non-printable character but is not off. To start a soft hyphen, command ".HY chr on" is the sequence. "chr" can be any keyboard character except the "%" key. Note that HY off will refuse to print the HY character regardless of where it falls on the line. Here is an example of the HY effect.

```
.li 50
```

```
.hy & on
```

```
Now is the time for all good men to come to the aid of
their coun&try. The quick brown fox jum&ped o&ver the la&zy
dog.
```

Will be printed as:

```
Now is the time for all
good men to come to the
aid of their country. The
quick brown fox jumped o-
ver the lazy dog.
```

.IG on,off,1,2 IGNORE

This command is primarily used for "debugging" and preliminary drafts. The ".IG on" command causes the computer to skip over all text and dot commands until it encounters an ".IG off" command. When an ".IG off" is reached, processing continues as usual.

The ".IG 1" command causes the computer to skip over text but not dot commands.

The ".IG 2" command causes the commands ".BF", ".AF" and ".TF" to be ignored but to process all other commands normally, until an ".IG off" command occurs. This command in essence causes the computer to print all text in the standard printer font. Since the standard printer font is faster than the graphics lettersets, this is a good way of obtaining quick preliminary drafts.

"filename" IMBED FILE COMMAND

When DOTPRINT encounters the ".IM" command, the computer will open the file "filename" and begin printing text from that file. When all the text from "filename" has been printed the computer will resume printing from the original file. Note that ".IM" commands cannot be nested. See the section titled "SAMPLE TEXT FILE AND PRINTOUT" for an example of this command.

.IN n INDENT LEFT MARGIN

This command will cause a relative indentation of "n", expressed in tenths of an inch, from the current position of the margin. All indent commands are additive. For example a ".IN 5" and a ".IN 6" given later will cause a total indentation of 11 from the original position. ".IN 0" will always restore the original margin. Also, negative numbers can be used so that IN 5 followed by IN-3 will result in an indent of 2 tenths of an inch.

.IX "phrase" INDEX . . *

This command works exactly like the .TC command except that you are creating an Index instead of a Table of Contents. A disk file with the extension "/TSC" will be created during printing and then afterwards you may create an Index from the DOTPRINT menu. The index will be stored with the extension "/IND". You can print this file with DOTPRINT. Exactly the same restrictions apply to the .IX command as for the .TC command. The .IX command does not cause a control break, which means you can insert .IX commands on a separate line in the middle of a paragraph without affecting the printout.

The INDEX and CONTENTS programs are self prompting and the file default name will be the same as the file you are printing. If you are printing "MYFILE/EXT.PASS:2", the default file name will be MYFILE/TSC. Note that each IX entry must be on a separate line and must be preceded by the .IX command.

.JU on,off,Right RIGHT JUSTIFICATION

With ".JU on" all text will be right justified giving a smooth right hand edge. With ".JU-off" a ragged right border will be printed. Default for this command is ".JU on". With .JU Right all text will be printed flush right with a jagged left hand margin. Short version of this command is .JU R. See an example of this in the sample text file.

.KE KEYBOARD ENTRY

This command requests keyboard input at print time. When the computer encounters ".KE" it pauses until a line is typed in from the keyboard. The line is then processed as if it were read from disk.

.LH n LINE HEIGHT . . 0

To specify spacing between lines, use ".LH n", where "n" is a positive integer and specifies the number of dots to space down before beginning the next line. If "n" is small enough, the lines will overlap. To restore spacing to normal specify ".LH 12", which is the default. The LH command gives varied results depending on the style of type printed. Experiment for the results you like best. We suggest that when you find an LH for a particular font, you make it part of the filename for future reference. I.E., OE becomes OE9.

.LL n LINE LENGTH

This command is used to set the line length. In conjunction with the ".ad" command, it determines your right margin setting. The default is ".LL 70" or 7 inches, from the left margin. On 8 1/2" wide paper, an AD of 5 and a LL of 70 total 7.5 inches leaving 1/2 inches on the left and right margins.

.LS n LOGO SPACE

This command works only on the first page. Also, it must be the very first command in the file if you decide to use this option. You must manually position the first page when using this command. "n" determines the number of lines you wish to reserve for a logo (such as on company stationary). Default for this command is ".LS 0"

.MF n MAGNIFICATION FACTOR . . 0

This command allows you to magnify any character font during printing by a factor of "n". Only positive integers are allowed for "n". There is a maximum value for "n", which is determined by the particular font. If greater than the maximum magnification allowed is specified, a default to no magnification occurs. "Format on" is temporarily disabled while this command is working. NOTE: If there are more characters to be printed than will fit on a line, the excess characters are disregarded. This command is very limited and should be used with care.

.MX 80,100 PAPER WIDTH SETTING . . E

This command allows you to tell the computer what size paper you have in your Epson printer. For 13.6" wide paper you should use ".MX 100" at the beginning of your document. The default is for 8.5" wide paper (.MX 80).

.MX-80 PAPER FEED SETTING . . E

Do not confuse this command with the MX80 command. The purpose of MX-80 is to force the EPSON into 1/72 inch increments. Many printers work in a fashion similar to the Epson. The Gemini 10 for example, is an EPSON workalike but, as of this printing, it is not fully compatible because it cannot increment at more than 1/72 of an inch. Since our program requires micro-spacing, it is necessary to tell the program that the printer can't do it. If the MX

-80 command is encountered, the program will print everything in 1/72 inch spacing and will thereby make it possible to operate workalikes such as the Gemini 10.

.OF n OFFSET COMMAND . . 0

This command causes the first line after the ".OF n" command to be printed with normal length, but all following lines to be indented by "n" tenths of an inch. This continues until the next ".OF" command is encountered. To restore normal printing, use the command ".OF 0" or ".IN 0". For example:

.of 5

Now is the winter of our discontent made glorious summer
by this son of York. To be or not to be. That is the bare
bodkin.

.of 5

Now is the winter of our discontent made glorious summer
by this son of York. To be or not to be. That is the bare
bodkin.

.of 0

Now is the winter of our discontent made glorious summer
by this son of York. To be or not to be. That is the bare
bodkin.

will be printed as:

Now is the winter of our discontent made glorious summer
by this son of York. To be or not to be. That is the
bare bodkin.

Now is the winter of our discontent made glorious summer
by this son of York. To be or not to be. That is the
bare bodkin.

Now is the winter of our discontent made glorious summer
by this son of York. To be or not to be. That is the bare
bodkin.

.FA PAGE EJECT

This command causes the page to be ejected and printing to start on the next page.

.PI 0,1,2,3 PITCH SETTING . . C

This command is used to set the number of dots per line when using the graphics lettersets.

.PI 0 is 640 dots/line

.PI 1 is 768 dots/line

.PI 2 is 1088 dots/line

.PI 3 is 1280 dots/line

The default value is 1088 dots/line. You can print titles with one pitch (the pitch in effect when the .TF command is encountered) and regular text in a different pitch. For example:

.bft

.pi0

testing

.pi1

testing

.pi2

testing

.pi3

testing

would be printed as:

t e s t i n g

t e s t i n g

t e s t i n g

t e s t i n g

.PL n PAGE LENGTH

This command allows you to use paper of different length than the standard 11" paper. "n" is the number of standard print lines that will fit on the paper. For example: ".PL 60" would correspond to 10" paper.

.PN on,off PAGE NUMBERING

This command turns page numbering on and off. The default is ".PN ON". Each page, except the first, will be numbered at the top until a ".PN off" command is encountered. If a ".TT" command is encountered before a ".PN" command then numbering begins on page one. Also, the page number will be printed in the type style that was selected with the TF (title font) command. If no title font has been selected, the page number will print in the BFI, or standard printer font. In this case, special commands such as DArk will not be followed.

.PP n NEW PARAGRAPH

This command when used without "n" creates a new paragraph with an indent of 5 tenths of an inch. You can change the indent to "n" tenths by using the command with the value desired.

`.PR on,off PROPORTIONAL PRINT . . 0`

When using proportional print, it is a good idea to specify some spacing between letters with the ".SD" command. NOTE: If your operating system uses a lot of high memory, and the letterset you are using is a large one (MB2, for example) and you are not using the most up to date lettersets, then some of the letters may come out monospaced even with ".PR on". The supplied lettersets have been proportionalized and will always be proportionally spaced as long as PR is on. Example:

```
.bf tr
.or off
.sd3
testing proportional print
.or on
testing proportional print
```

will be printed as:

```
testing proportional print
testing proportional print
```

NOTE: Proportional print differs from monospace print in the following manner: Monospace letters take up the same room to print regardless of letter size. The "i" takes as much room as the "M". That means that characters can be closer together or farther apart, depending on the type of letter. Proportional print moves letters together so that narrow letters are the exact same distance from the preceding letter and from the following letter. If the SD is set to 4, every letter will be separated from every other letter by exactly 4 dot spaces.

`.PS "symbol" DEFINE PAGE NUMBER SYMBOL`

When the computer encounters this "symbol" it will print the current page number. The default is ".PS \$". Example:

```
.ps #
.tt Manual Page #
```

Will be printed as:

```
Manual Page 2
```

On the second page and the number will increment with each page.

n,n "filename",c "filename" READ COMMAND

This command is used to insert names or phrases from a mailing list into form letters. There are three ways of using it.

- 1 ... `.RD n` where `n` is a positive integer. This allows you to enter "`n`" lines from the keyboard when the command is encountered. The lines are printed as if the formatting were off.
- 2 ... `.RD n "filename"` When this command is first encountered, the mailing list file "`filename`" is opened and the first `n` lines are read from the file and printed 'as is'. Each time afterward when `.RD n "filename"` is encountered, the next `n` lines are read and printed 'as is'. If the end of the form letter is reached and there are still lines to be read from the "`filename`" file, then a page eject is given, and the letter is printed again. This process continues until there are no more lines to be read. NOTE: the form letter cannot contain the `.IM` command.
- 3 ... `.RD c "filename"` where `c` is a non-numeric character such as `#` or `&`. When this command is first encountered, the file "`filename`" is opened, and the first line in that file that begins with "`c`" is searched for. When that line is found, the operator is asked to "ENTER SELECTION CODE". You may enter a pre-designed code for selecting certain names from the list or you may just hit `(ENTER)` to use all the names in the list. Now the computer will find the first line that (1) contains the "`c`" character and (2) contains the SELECTION CODE you entered. The computer will print the contents of the next line and every line after that until another line beginning with the "`c`" character. Then the computer will stop printing from the mailing list and resume printing the letter until another `.RD c "filename"` command is encountered. When the next command is encountered, the computer searches for the next line that meets the above requirements and repeats the above procedure. When the end of the letter is reached the computer will eject the page and print another letter if there are still lines to be read from the file "`filename`".

NOTE: To speed up printing of form letters it is suggested that you place a `.IG 2` command at the end of the form letter. This will cause all subsequent letterset commands (`.BF`, `.TF`, `.AF`) to be ignored. Thus, if you use only one regular font and one alternate font, neither will have to be reloaded each time the form letter is printed.

How To Use RD For Form Letters

The `RD` command is very exciting and it is likely that most users will want to jump right in and use it. While this is not impossible, we suggest that you become familiar with the DOT WRITER package, especially creating and printing text files, before you get into the command. We have included several examples to get you rolling but please try a few normal prints before going for the big guns.

Let's look a little closer at the RD commands. If RD n is specified, all text up to the RD will be formatted and printed. When the RD is reached, a prompt will appear on the screen which will ask for a line of text. The line must be entered from the keyboard EXACTLY as you want it in the text. This will continue for each of the n lines that were specified. IE. in the case if RD 4, you will be prompted for 4 separate line entries. You can use this feature in much the same way as you would a KE command except that a KE must be specified for each line where one RD n command can specify any number of lines. Note that the lines will not be concatenated (joined), so each line will be printed as is - just like the FOOFF command had been issued. If you want to print an address, RD 6 will prompt you for 6 line entries, which can be used for entering name, address, city, state, ZIP, etc. If you specify too many lines, entering .CM will cause the line to be skipped without placing a line space in the text.

Now for the RD n Filename command. When this command is encountered, the file "filename" is opened and the first n lines are read in and printed as if they were entered from the keyboard. You should have prepared a file of addresses or other info before using this command. Once the n lines are read and printed, the rest of the document is finished and the page ejected. The document will now start over but this time, when the RD n filename is encountered, the second group of n lines is printed. This continues until each copy of the form letter is finished. Here is an example of what an address file should look like.

```
RCM Computers
221 Hirschfield Dr.
Buffalo, NY 14221
(716) 634-3026
.cm
.cm
Timothy Pruitt
Director of Data Management
Eastern Computer Products
P.O. Box 193
Weston, NH 03468
.cm
John Smith
30 Manning Dr.
Egbertsville, NY 14226
.cm
.cm
.cm
```

Note that each address is 6 lines long - and that the .CM command was used to fill the 6 line requirement. In the above list, the longest address is 5 lines and I could have used RD 5 filename - however you should always be sure that you have enough lines for your longest address and unless you can count them up before entry, you had best specify 6 lines.

Note that each address group is exactly 6 lines long and that unneeded lines are .CM commands so that they will be skipped. With this file, each RD 6 filename command will take one address. If you used an RD n filename where n < 6, the file would not print correctly. Be sure to create your address file in the format you plan to use.

Suppose that you want to print a variable number of lines from the file. That is the time for RD c filename. The c is any character that will not be part of the address being printed. Create your address file in the same fashion as with the RD n Filename command but set a CODE line as the first line of each address. If we use the & in place of the c, so that the command is RD & filename, then each address must begin with a code line of &. Here is an example:

```
&
RCM Computers
221 Hirschfield Dr.
Buffalo, NY 14221
(716) 634-3026
&
Timothy Pruitt
Director of Data Management
Eastern Computer Products
P.O. Box 193
Weston, NH 03468
&
John Smith
30 Manning Dr.
Egbertsville, NY 14226
&
Inter Office Copy
&
```

Note that each address is a different length but that the addresses have been preceded by the & symbol that I have selected to use as the "c" character in the RD c filename command. In this method, each letter will move to the next & symbol and will print all subsequent lines until the next &. The result is that the entire list will be printed with a variable number of lines in each address.

Note that the record length can vary and the .CM is not used. When the RD & filename command is reached, the program will start at the beginning of the address file, look for the &, then it will print every line AFTER the & until it finds another line beginning with &. At the second &, the RD will end and the rest of the letter will be printed. On the second copy, the next group of lines will print until the next & is reached and so on until the file is complete or the copy request has been filled.

That is really quite simple after all, but the average user will run into trouble if he doesn't learn the basics first!

.RE 0,1,2 REVERSE PRINTING . . 0

This command is similar to REVERSE VIDEO only it works on paper. "RE 1" gives blanks between letters. "RE 2" prints black spaces between letters. Default is "RE 0".

.SD n SPACING BETWEEN LETTERS . . 0

This command allows you to adjust the space between letters. Default is ".SD 0". Due to limitations of disk storage space, some of the letters are packed on disk. One example is the minicubes. If you print them with the default setting, they will print very close together. If you use ".SD 6" and then print them, they will appear more attractive. This option also allows you to spread your text out to take up a given amount of space. There is a maximum SD factor for each letter, and will vary depending on the character font. The maximum is determined by the dot width of the character. After the maximum is exceeded, there is a default to the width of the letter in the current font. If you want more than this, simply use a space character when typing your text.

SK n SKIP LINE[S]

This is a straight forward command. SK means skip and "n" is any integer. ".SK 5" will skip 5 lines.

SK -n BACK SKIP LINE[S] . . 0

This command allows the C.Itoh printer to skip backwards up the page n lines. The line spacing is 6 lines/inch if you are using regular 10 CPI print or 9 lines/inch if you are using a graphics letterset. You can only skip back as far as the top margin. For example ".sk-1000" will skip back to the top margin. See also .VT.

`.ST "message" STOP, display message`

When this command is encountered the computer will stop printing and display your "message" on the CRT display only. It will continue operation when you press the <ENTER> key. This command has many uses. For example:

```
text text text text
.st Message Here
.ap nextfile
```

The computer will print until the ".ST" is hit. Then processing will stop until the <ENTER> key is depressed. In this manner you are given the opportunity to insert the diskette containing the file "nextfile" if necessary.

`.SW n SPACE WIDTH . . 0`

This command applies when proportional print is in effect. It sets the minimum width for blanks. The value "n" is a decimal between 0 and 1, and determines the minimum width for blanks as a fraction of the maximum character width. The default is ".SW .5". For example:

```
.pr on
Note spacing between words.
.sw .8
Note spacing between words.
```

Will be printed:

```
Note spacing between words.
Note spacing between words.
```

"phrase" TABLE OF CONTENTS . . *

Each time this command is encountered, the "phrase" is written to a disk file along with the page number where encountered. The disk file has the same name as the first file printed, with the extension "/TSC". After the text has been printed, the DOTPRINT menu that appears contains a selection to create a table of contents from this file. After selecting "create table of contents", enter the file ID of the "/TSC" file; a new file will be created with the file extension "/TCT". This file may be printed using DOTPRINT.

It is suggested that you create an empty "/TSC" file on a diskette that has lots of free space, because the computer will put the file on the first available drive even though it may run out of room later. NOTE: the .TC command does not cause a control break.

There is one restriction on the .TC and .IX command. Entries cannot be recorded in an imbedded file. If a .TC (or .IX) command is encountered in an imbedded file (that is, a file called with the .IM command), it will be ignored.

There is one further restriction when using some versions of Model I TRSDOS. You cannot use the .TC (or .IX) commands after having used the .IM command. This is because the Model I TRSDOS does not process the BASIC command OPEN"E" correctly.

"filename" TOP/BOTTOM TITLE FONT

This command determines the letterset in which the top and bottom titles will be printed. The default is the printers standard font. Formatting options such as ".DA", ".CW", etc. are those in effect when the ".TF" command is encountered. For example: ".PR on;EM on;TF OE" will cause the top and bottom titles to be printed in proportional, emphasized, Old English print. Note: To center the top and bottom titles centering must be turned on before the ".TF" command is issued.

.TM n TOP MARGIN

This command adjusts the top margin. "n" specifies the number of lines. Default is ".TM 6".

a,b,c TRANSLATE COMMAND . . *

This command is used to substitute one set of characters for another set during printing. For example, you can change all upper case characters in the input file to lower case characters when they are printed. The command is given in the format `.TR a,b,c` where `a` is the smallest ASCII value to be changed, `b` is the largest ASCII value to be changed and `c` is the amount to be added or subtracted to the characters in the range defined by `a` to `b`. For example, the command `.TR 65,90,32` will change all upper case letters to lower case, and `.TR 97,122,-32` will change all lower case to upper case. This can be useful if you are printing with a letterset that contains only upper case characters. Another example: The "hard space" character in NEWSSCRIPT is 127, and the PL letterset (as well as most Dot Writer lettersets) contains a "hard space" in position 127. But the hard space character in Electric Pencil is 176. If you have a Pencil file that contains one or more hard spaces, and you want to print it using the PL letterset, you should use the command `.TR 176,176,-49`. This will translate ASCII characters with a value of 176 to 127.

Here is another example of the use of TR. Suppose you wish to use a hardspace. It can't be printed from the keyboard since it is stored as an ASCII 127. So, use another keyboard character and translate it. The # character is ASCII 35. $127 - 35 = 92$. So in order to translate the # to a hardspace character issue the command `.TR 35,35,92`. Here we have specified a range of 1 character, (35 to 35) and have added 92 to it to make it 127. The result is that the # will now be printed as a hard space.

Note that the `.TR` command does not cause a control break. Thus, you may translate a character in the middle of a sentence and switch back to normal characters in the same sentence. To turn the translation off, use `.TR 0`.

.TT "title" TOP TITLE

This command specifies the title to be printed at the top of each page. If the "title" message contains the symbol "\$" then this symbol will be replaced by the page number. For example, `.TT MANUAL-PAGE$` would cause `MANUAL-PAGE 2` to be printed at the top of page 2.

The default value is `.TT` followed by 60 blanks followed by `"page$"`. The top title will be printed on the first page only if a `.TT` command is received before any text has been printed.

..... UNDERLINE CONTROL

This command specifies which of the 8 print head pins is used for underlining. The bottom pin is pin 1, the next pin is 2, the next is 4, the next is 8 and so on until the top pin, which is 128. More than one pin can be fired at once by adding the pin values. To start or stop underlining you must use an escape code. If the font being underlined is more than eight pins high the number of pins available for underlining is equal to the number of print lines times 8 minus the height of the font in # of pins. For example, if the font we are about to underline uses two print lines (16 pins) but the height of the font is 9 pins high (font PL) then the bottom seven pins (#1,2,3,4,5,6 and 7) of the second print line are available for underlining. Note that the pin called 0 is not used. This is because in bit image mode, there are only 8 bits so the 9th pin, is not available for programming. Also, the pins will fire in an additive fashion. If you set UP to 129, both the number 8 pin (128) and the number 1 pin (1) will fire. The same UP assignment is used for the HL (horizontal line) control. See the diagram below. The escape codes for underlining are:

- !& starts underlining non-blank characters
- !\$ starts underlining blank and non-blank
- !% stops underlining

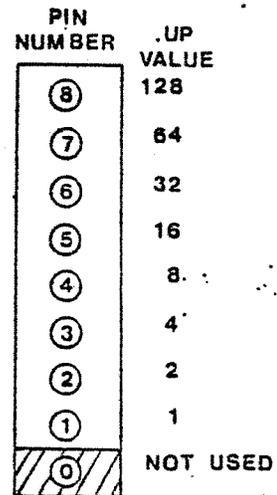
For example:

```
.BF PL
.up 64
testing !$testing testing!% testing
.sk 1
.up 1
testing !&testing testing!% testing
.up 65
.sk 1
testing !$testing testing!% testing
.up 127
```

testing !\$testing testing!% testing
will be printed as:

```
testing testing testing testing
testing testing testing testing
testing testing testing testing
```

PRINT HEAD PIN LAYOUT



testing testing testing testing

The default value is "UP 1".

.VL on,off,1,2,3 VERTICAL LINE . . 0

The commands .VL on or .VL 1 draw a vertical line at the end of the Left hand margin. To insure that the text does not hit the line, you should indent the text with the .IN command. The command .VL 2 draws a vertical line in both the left and right hand margins. The command .VL 3 draws a line in the right hand margin only. The default is text in a box. For example:

. up1; . l h8; . ad23

. l l25; . HL

. VL2

. sk

. i n2

. fooff

testing

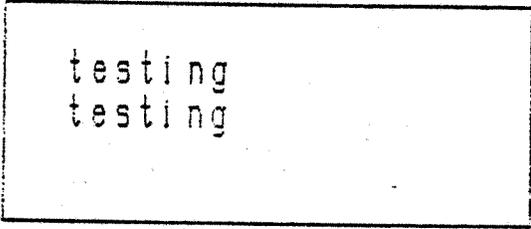
testing

. sk; . i n0

. HL

. foon

. ad3; . l l75; . VLoff; . i n0



Note: The VL command will cause double spacing to occur in response to a SK command. This is because a line feed must be sent to print the margin lines. Avoid using SK n in any text that follows the VL command unless you want it spread out. Also, when boxing text, command HL should precede the VL command.

.VT n Vertical Tab . . C

This command is used to advance or return to a specified line on the paper. The line to be "tabbed" to is determined in one of two ways.

The command `.vt` alone on a line records the current position on the paper. To return to this position use the command `.sk-n`, where `n` is a large number such as 1000.

The command `.vt n`, where `n` is an integer, sets the "tab position" at `n` lines from the top of the paper using 6 lines per inch as a measure. When the command `.sk-1000` is encountered after `.vt n` has been specified the printer will return to the "tab position", whether it has to advance or reverse feed lines to get there. See Appendix D for example.

.WF Catch WIDE PAPER . . C

Same as the `.MX 100` command, but for the C.Itoh printer.

BLOCK GRAPHICS

Block graphics can be used with DOTPRINT, even with GRAFTRAX-PLUS. The "PL" letterset contains the TRS-80 graphics blocks. To print using these block graphics, you must first draw what you want printed with GEAP, then save it to disk with GEAP's "FG" command. For example: suppose the filename of the saved picture is "pic". Then to print it with DOTPRINT use the following sequence:

```
.bf PL
.fo off;pr off;lh 4
.im pic
```

NOTE: You may also want to move the picture toward the center of the paper with the `.IN` command.

APPENDIX A

THE INITIAL PAGE

The top of the initial page is treated differently than the tops of the other pages. The computer determines how to handle the top of the first page by going through the following steps:

- 1 . . . If the first command in the file was ".LS n", then the computer assumes that the paper has been moved by hand "n" spaces from the top. The computer does not print a top title, but starts right in with printing text.
- 2 . . . If any line feeds have been given (by an .SK command, for example) before the first line of text, then the computer does not print a top title, but starts printing text.
- 3 . . . If no line feeds have been given before the first line of text, then the computer checks to see if it has received a top title (by the .TT command). If it has, then the top title is printed and printing of text begins at the top margin.
- 4 . . . If no line feeds have been given and no top title has been given before the first line of text, then the computer spaces down to the top margin and begins printing text. It does not print a top title.

APPENDIX B

USING SCRIPSIT AS AN EDITOR

We have stressed using NEWSRIPT as a text editor throughout this manual and some of you may have come to think that it is the only word processor you can use. Obviously we are aware that many of you have word processors other than NEWSRIPT and they can be used as well. In fact, any program that creates an ASCII file can be used.

If you are a Scripsit user, there are some things you will have to know. The first and most important is always save the document with the comma R prefix. That will create the necessary ASCII file. For those of you who are new to Scripsit, that is done in the following format:

S,R filespec/ext.password:drive

You must also forget normal Scripsit formatting procedure. Your Scripsit file should look just like the example file shown earlier in the manual. Use the ENTER key to force a line end after no more than 255 characters. You can force line ends as often as you like but never less than every 255 characters. It is easiest to simply force a line end at the end of each line. Unlike in normal Scripsit, where the line end comes will have no effect on the way the lines are printed.

It is important to ALWAYS end a file, edited with Scripsit, with the .ST or .EN commands. This is due to the unusual way Scripsit handles files.

APPENDIX C

ERROR MESSAGES

When the computer encounters a suspected error it will be the printer three times (EPSON ONLY) and print an error message on the screen. It will then try to continue printing with a reasonable default value for the error. If there is no reasonable value, it will stop and ask for input from the operator. The error messages are:

LINE WONT FIT AS ENTERED usually occurs with .FO OFF. The computer removes one character from the line and tries again to print the line. The computer keeps removing characters until the line will fit on the paper.

LETTERSET NOT FOUND indicates that the ".BF" or ".AF" command specified a font that the computer couldn't find on any of the diskettes in the drives. The computer defaults to the standard printer font.

FILE NOT FOUND the computer could not find the specified text file. The computer pauses until the operator enters a new name for the text file.

WORD TOO LONG occurs only with the .FO ON command in effect. A word is too long to be printed with the current line length. The computer will print as much of the word as will fit on the line.

USE POSITIVE NUMBER one of the dot commands was followed by a negative number. The computer selects a value of +1.

ERROR! ERROR CODE="number" ... the computer does not recognize the command, and pauses. It prints out the code determined by the BASIC ERR/2+1 command, and pauses. You can look up the error code in your operating system manual.

ILLEGAL DOT COMMAND the computer encountered a line consisting of a single dot with nothing after it. The computer ignores this line.

FILE TOO BIG the computer tried to read a record number greater than 32767 from a letterset. The computer may print out some "garbage" after this message.

LINE LENGTH TOO LONG the .LL command specified a line length greater than 255. The default is .LL 70.

MUST DEFINE REGULAR FONT BEFORE ALTERNATE FONT self-explanatory.

MAGNIFYING FACTOR TOO BIG defaults to no magnification.

- ALTERNATE LETTERSET WON'T FIT WITH "filename" the computer selects the smallest font, "MP", as the alternate font because it fits with all fonts.
- SUBSCRIPT STARTS TOO FAR DOWN ... the computer selects the last line of the regular letterset as the line to start subscripting..
- CAN'T INDENT THAT FAR AND KEEP RIGHT MARGIN defaults to no indentation.
- TOP OR BOTTOM MARGIN TOO BIG .. the sum of the top and bottom margins is bigger than the page length. The computer defaults to one inch for both margins.
- TITLE TOO LONG defaults to no title.
- TOO MANY COLUMNS this message occurs if you specify the column widths and have specified too many columns for the available line length. For example, if you had a line length of 6 inches, a column width of 3 inches and you specified 3 columns, you would receive this error message.

APPENDIX D

SAMPLE TEXT FILE AND PRINTOUT

In this appendix you will find a sample document with an actual printout of that document and a line by line explanation.

```

1 .vt 8;.ad 10;.sd 3;.lh 8;.ll 60;.sk-1000;.bf mb
2 .ef 1q
3 .pr on;.fo off
4 !/Widgets International
5 1005 World Drive
6 New City, New York 14299!
7 .sk 3;.fo on
8 ROM COMPUTERS
9 .br
10 221 Hirschfield Drive
11 .br
12 Williamsville, New York 14221
13 .of pl
14 .lh 5;.up 64;.sk 3
15 Dear Rick,
16 .pp
17 I appreciate the way my order for the GEAP & DOTPRINT
18 package was filled so quickly. It looks like you have a
19 great program. I especially like the flexibility of the
20 !underlining command!%. The reverse printing command is
21 great for highlighting important words.
22 .cw on;.re 2;.sk2;.bf mb
23 - Notice -
24 .re 0;.cw off;.sk1
25 .im notice
26 .sk 1;.up 3;.hl;.pr on
27 .ll 28;.sk1;.vt;.bf pl
28 The horizontal line command is great for separating
29 important information. The negative skip command is great
30 for creating columns.
31 .sk -1000;.ad40;.in 2;.ll 30
32 .vl on

```

The vertical line command will be of great use in the
publishing of our monthly newsletter, of which I have the
honor of being the editor.

.ad 10;.ll 60;.in 0;.vl off;.up 160;.hl;.sk

.pp

All in all I am very pleased with the purchase of your
program.

Please keep me informed of any new font disks or
further updates to this excellent package.

.sk 3

.ap sincere

Widgets International
1005 World Drive
New City, New York 14299

RCM COMPUTERS
221 Hirschfield Drive
Williamsville, New York 14221

Dear Rick:

I appreciate the way my order for the GEAP & DOTPRINT package was filled so quickly. It looks like you have a great program. I especially like the flexibility of the underlining command. The reverse printing command is great for highlighting important words.

Notice

These lines were
stored in a
file named NOTICE

The horizontal line command is great for separating important information. The negative skip command is great for creating columns.

The vertical line command will be of great use in the publishing of our monthly newsletter, of which I have the honor of being the editor.

All in all I am very pleased with the purchase of your program. Please keep me informed of any new font disks or further updates to this excellent package.

Sincerely,

Timothy A. Pruitt
Data Processing Manager

EXPLANATION

- 1 . . "vt8" sets a tab 8 lines from the top of the page. "adl0" adjusts the left hand margin to 10 tenth's of an inch. "sd3" & "lh8" set the number of extra dot widths inserted between each letter and line printed. "ll60" sets the line length to 60 tenth's of an inch. "sk-1000" moves the print head to the vertical tab position previously defined with "vt8". "bfmb" loads the letterset MB. This line is also an example of putting multiple commands on one line. Notice the bf command is the last command on a line.
- 2 . . "af lq" loads LQ as the alternate letterset.
- 3 . . "pr on" turns the proportional print on. "fo off" turns the automatic formatting off so the following lines will be printed exactly as typed, until the formatting is turned back on.
- 4 . . "l/" selects the alternate letterset defined earlier to be used at this time. the rest of lines 4,5 & 6 are text to be printed. "l?" resumes printing in the regular font determined by "bf".
- 7 . . "sk 3" skips down three lines. "fo on" turns the auto format back on.
- 8 . . lines 8,10 & 12 are lines of text but they need to be separated by the "br" command because formatting is on, or else they would be printed on the same line. Your own judgment is required to determine when you should turn the format off or use the "br" command, both work adequately.
- 13 . . "bf pl" selects the letterset PL.
- 14 . . "lh 5" changes line height to 5 dot widths. "up64" defines how the underline will look. "64" will enable pin #7 from the bottom of the head to underline when the underline command is encountered. "sk 3" skip 3 lines.
- 16 . . "pp" starts a new paragraph by skipping a line and indenting 5 spaces.
- 17 to 21 . . text to be printed.
- 22 . . "ow on" starts centering using the width of the paper. "re 2" turns reverse printing on. "sk2" skips two lines. "bf lq" loads letterset LQ.
- 24 . . "re 0" turns reverse printing off. "ow off" turns centering off. "sk1" skips one line. Note:"sk" alone would skip one line.
- 25 . . "im notice" inserts any text stored in a previously created file called NOTICE, then continues with the rest of this document.

- 31 . . ".sk1" skips one line. ".up5" enables the pins 1 & 3 to be used for underlining "double". ".hl" draws a horizontal line using the parameters set up by ".up,.ad,.ll". ".pr on" turns proportional printing on.
- 32 . . ".ll 28" sets the line length to 28 tenth's of an inch. ".vt" sets the place where the command ".sk-1000" will return. ".bf pl" loads the letterset PL.
- 33 . . ".sk-1000" returns to the line defined by the ".vt" command. ".ad40" sets the left margin to 40 tenth's of an inch. ".in 2" indents following text by 2 spaces. ".ll30" sets the line length to 30 tenth's of an inch.
- 34 . . ".vl on" starts a vertical line in the left hand margin set previously and it will continue until ".vt off" is encountered.
- 35 . . ".ad 10,.ll60,.in0" set left margin to 10, line length to 60 and indent to 0. ".vl off" turns the vertical line command off. ".up 160" enables pins 6 & 8 to be used by the underline or horizontal line commands. ".hl" draws a horizontal line.
- 36 . . ".pp" starts a new paragraph.
- 43 . . ".sk3" skips three lines
- 44 . . ".ab sincere" starts printing from the file called SINCERE.

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