Documentation for PRINTPACK1 (tm) Copyright 1985 Vaughn Software.

PRINTPACK1 is a companion program for BITMAC (tm) by Vaughn Software. Although the main BITMAC program is not required to use PRINTPACK1, the program is of little use without BITMAC. PRINTPACK1 is designed to print graphics from a user created BITMAC data base. The program offers 9 additional print options (BITMAC has two print options). These 9 print options are oversize "banner" type prints and utilize existing graphic characters in your printer. PRINTPACK1 is a general print utility and can be used with almost any dot matrix printer. Some daisy wheel printers can be used also.

The required equipment is: MINI MEMORY, EDITOR/ASSEMBLER or EXTENDED BASIC module, PRINTER WITH RS232 or PIO interface, MEMORY EXPANSION, TI-99/4a and a display monitor.

Also included on the diskette is an example BITMAC database. The file names are SCREEN/A through SCREEN/E.

LOADING INSTRUCTIONS:

1. Turn on the computer

Extended basic:

Press <2> twice and follow prompts.

Mini Memory or Editor/Assembler:

Enter Basic language, type OLD DSK1.LOAD, type RUN and press $\langle \text{ENTER} \rangle$ then follow prompts.

The main program menu will then appear.

The menu selections are:

- 1.Single strike 6 bit
- 2.Double strike 6 bit
- 3. Single strike 8 bit
- 4. Single strike 6 bit stretch
- 5.Double strike 6 bit stretch
- 6.Single strike 8 bit stretch
- 7.Single strike 6 bit quad
- 8.Double strike 6 bit quad
- 9. Single strike 8 bit quad

GENERAL PRINT INFORMATION:

All prints use the compressed (132 wide) mode. The control character sent to initialize the compressed print mode is ASCII character 15. The control characters sent to initialize 6 bit print are 27,65 and 6 (6/72 inch line feed). For 8 bit print the characters are 27,65 and 8 (8/72 inch line feed). For double strike prints, the characters 27,71 are sent to initialize double strike mode. AFTER A DOUBLE STRIKE PRINT THE PRINTER SHOULD BE CYCLED OFF THEN ON TO REINITIALIZE THE START CONDITION AND DESELECT DOUBLE STRIKE FROM THE PRINTER'S MEMORY.

To abort a print in process, press <FCTN> <9> (back).

With many printers, bidirectional printing and logic seek functions will be disabled after selecting a character over ASCII 127. This makes little difference in the final print but there is a considerable difference in the time required for a print. If speed is more important than the quality of the print, menu selection #1 or #3 with a selected character under 128 is best.

You should consult the character charts that were included with your printer to select the best character and the best bit height for print.

1.SINGLE STRIKE 6 BIT:

With this print each pixel in the database is one character high. The linefeeds are 6/72 inch. All lines are single striked. The database screen vectors printed are X:1 TO 256 and Y:1 to 130. (See the BITMAC manual and the <R>eport function for BITMAC.)

2.DOUBLE STRIKE 6 BIT:

Same as #1 but double striked. This print takes about twice as long if there is no difference in the printers logic seeking of directional print functions.

3.SINGLE STRIKE 8 BIT:

Same as #1 but with a 8/72 inch line feed for taller character selections.

4.SINGLE STRIKE 6 BIT STRETCH:

Same as #1 but each pixel of the database will be two characters wide at print time.

5.DOUBLE STRIKE 6 BIT STRETCH:

Same as #1 but each pixel of the database will be two characters wide at print time. In addition all lines are double striked. If there is no difference in logic seeking or directional print, this print takes about four times as long as #1.

6.SINGLE STRIKE 8 BIT STRETCH:

Same as #1 but with 8/72 line feed for taller characters.

7.SINGLE STRIKE 6 BIT QUAD:

In this print each pixel of the data base is two characters wide and two characters high at print time. The data base screen vectors printed are X:1 through 256 and Y: 1 through 65. If the logic seek and directional print remain the same, this print takes about four times as long as print #1.

8.DOUBLE STRIKE 6 BIT QUAD:

Same as #7 but double striked. The print time is about 8 times that of print #1 if logic seek and directional print remain the same. This is the most time consuming of all the prints.

9. SINGLE STRIKE 8 BIT QUAD:

Same as #7 but with 8/72 line feed. This is the largest print available from PRINTPACK1.

GENERAL TIPS:

The program does not initialize the printer at the program start. If your printer accepts control codes for special formats, like underline for a grid effect, and these codes are not canceled by the codes for line feed or double strike, you can "preset" a special print.

To preset your printer, you will need to send the control codes you wish to your printer with a Basic or Extended Basic program. If you do not turn off the printer before loading the program, your control codes will remain in effect at print time.

All of the prints print the full width of a BITMAC screen. To get a particular portion of your BITMAC screen within the vectors for print, use the "up" scroll key from the BITMAC draw mode and resave the screen to disk for later printing. (See "DRAW" in your BITMAC instructions.)

Large print dumps consume printer ribbons quickly! With some experimentation, many ribbons can be reinked with a simple stamp pad and some stamp pad ink. It is a dirty job but with some printers you can save as much as \$9.00 each time you reink a ribbon! A pair of rubber gloves and a small sponge help. Don't forget to experiment! There are many ways to ink a ribbon and almost all of them will more than save the cost of the BITMAC program and the PRINTPACK1 program in a short time.