# PAPERSAVER
**Print Preview Utility**

## INTRODUCTION

PAPERSAVER is a utility program that, for the first time, lets the TI-99/4A user see precisely how text that has been prepared using TI-WRITER is going to look *before* it is printed. The entire page is seen without resorting to the visually confusing practices of windowing or scrolling. Because each page can be viewed before printing, you will no longer waste reams of paper while perfecting the format of your documents.

Also, though not a word processor, PAPERSAVER will permit minor corrections to lines of text. This saves you from having to return to TI-WRITER to repair minor mistakes.

PAPERSAVER requires THE MISSING LINK in order to work properly. Although there are a few short assembly language subroutines that perform string handling, it is a remarkable fact that PAPERSAVER is written *almost entirely* in Extended BASIC. PAPERSAVER is a good example of the powerful text and graphics capabilities that can be unleashed by teaming Extended BASIC with THE MISSING LINK.

## PREPARING THE TEXT FILE

In order to use PAPERSAVER, a text file must first be created using TI-WRITER. Prepare a document in the usual manner using the Editor program of TI-WRITER. Include any of the "dot" commands that you need, such as .FI or .AD. You can also use any of the other formatter commands such as the "@@" for overstriking and the "&&" to underline words. Save this file to disk.

Load the Formatter. The Input Filename should be the file you just saved.

Next, instead of sending the formatted file to your printer, print it to disk by entering DSKn.FILENAME as the Print Device Name. Do not include .CR or .LF in the filename.

You will usually choose the next four default options: No mailing list; All the pages; One copy; No pause at end of page.

The formatted document will be saved to disk under the specified filename. This is the file that you will be previewing with PAPERSAVER.
.BP There are several limitations that should be kept in mind when preparing a text file that will be viewed with PAPERSAVER. Because of memory and graphics limitations, PAPERSAVER cannot handle a width of more than 80 columns on a page. Therefore, if using .RM, make sure the right margin is set to less than 80. PAPERSAVER can only display text. Including graphics data will cause unpredictable results on the screen. You can safely include printer codes in your document that will select expanded print, subscripts, backspace, etc. However, they will be ignored by PAPERSAVER.

## LOADING PAPERSAVER

Follow this procedure to load PAPERSAVER:

1 - From the master title screen, select Extended BASIC.
2 - Place THE MISSING LINK disk into drive number 1
3 - Type: RUN "DSK1.TML"<Enter>
4 - Select 1 disk file and the 16 color mode.
5 - Type: RUN "DSKn.PS"<Enter>

PAPERSAVER will load and run.

## USING PAPERSAVER

PAPERSAVER first displays the title screen and loads a character font.  It then displays the main screen.  THE MISSING LINK disk can be removed once the main screen is displayed.

Next, you are asked for the name of your printer.  This should be the same name you usually input when using the formatter portion of TI-WRITER.  Type in the name, then press <Enter>.  (The default printer name can be changed in program line 280.)

Then you are asked for the name of the text file that you have previously formatted.  Place the disk containing this file into a disk drive, type in the filename, then press <Enter>.  If PAPERSAVER cannot find the file in the specified drive, it will issue an error message, then request the filename again.

Once the printer name and file name have been entered, you are presented with a menu containing four choices: View File; Print File; New File; Exit. Press the key that corresponds to your choice.

## VIEW FILE

This is the menu choice that you will use most frequently.  After making this choice, you will be asked for a page number.  Type any page number, then press <Enter>.

At this point, PAPERSAVER will scan through the disk file looking for the specified page.  If you should specify a page number that is higher than the last page number contained in the file, then "EOF" (for End Of File) will be displayed next to the page number of the last page in your document.  Press any key to return to the menu.

If the page was found, then a miniature replica of the page is created in the left hand section of the screen.  This looks exactly as the page will look when it is printed. The page is light green, and the characters are dark green.  Underlines are shown in dark green, and characters that will be overstruck are shown in black.

Pointers to the current line appear on each side of the page, and the line number is displayed.  The text contained in this line is then printed in the lower right corner of the screen.  Underlining is clearly show, and overstruck characters are displayed in black.  Finally, a short menu of options is displayed.

Use the up and down arrow keys (Fctn E and Fctn X) to move the line pointers up and down on the page.

Press "P" when you are ready to input a new page number.  The default page number increments to the next page, except when you are viewing the last page.  Type the desired page number, then press <Enter>.

Press "L" if you want to go directly to a line rather than use the cursor keys to get to that line.  Type the desired line number, then press <Enter>.

Press "E" if you want to edit a line. An area clears where the line can be modified, then the text contained in the current line (minus underlines and overstrikes) appears in this cleared area.  The following function keys can be used as indicated: Fctn S (left cursor), Fctn D (right cursor), Fctn 1 (delete), Fctn 2 (insert), Fctn 3 (erase from cursor on).  Modify the text as desired, then press <Enter>.

Next, you are asked if you want to underline any characters.  Press "Y" or "N" to indicate your choice.  If you press "Y", the line you just edited appears in the input area. Replace any letters that are to be underlined with underlines.  You don't have to erase those characters that will not be underlined.  Press <Enter> when finished.

Next, you are asked if you want words to be overstruck so they will be printed in boldface.  Press "Y" or "N" to indicate your choice.  If you press "Y", the line you are editing (minus any underlines) appears in

the input area.  Use the space bar to erase any characters that are not to be overstruck.  Leave only those characters that you want in boldface. Press <Enter> when finished.

The line you have edited will then be updated in the left hand portion of the screen, the menu choices will reappear, and the text contained in the line will appear in the lower right hand corner of the screen.

IMPORTANT! Editing a line *does not* result in any changes to the disk file.  If you want to change the text permanently, you will have to return to TI-WRITER to make the changes.

Press "C" to print out the page as it is currently displayed.  Be sure your printer is turned on and that it is on line.

Press "Fctn 9" to return to the main menu.


## PRINT FILE

If you have viewed all the pages of the disk file and found them to be correct, then the file can be printed without returning to TI-WRITER.  Press "P" to print the file out.  You are given the option of having a pause at the end of each page.  Choosing this option lets you feed single sheets of paper to your printer.  If you have continuous paper, simply press "N".

All the pages in the file will be printed out.  Be sure your printer is turned on and is on line.


## NEW FILE

Press "N" if you want to change either the printer name or the disk file name.


## EXIT

Press "E" when ready to leave PAPERSAVER.