

## The SOLUTION - Snake Mountain Software

### Introduction

The SOLUTION is a Program that Places text on any of the two color graphic screens. The Program will override basic, when a character is to be Printed on the screen. Whenever Basic wants to Print a character, The SOLUTION will take that character and Print it on a graphic screen. The Program will Print all 96 ASCII characters. It Prints true lower case characters with decenders, not the reverse characters that Basic uses.

### Loading and using the Program

- (1) Turn the computer on.
- (2) Type in CLEAR 200,14860 and Press the (Enter) key.
- (3) Press the PLAY button on the cassette.
- (4) Type in CLOADM"SOLUTION" and Press the (Enter) key.
- (5) When the OK Prompt appears on the screen, Press the stop button on the cassette.
- (6) Type in EXEC and Press the (Enter) key.

A menu will now appear on the screen.

### Options

- <R> Will reverse the screen display. It can be P Pressed any number of times.
- <1> Keeps the screen in PMODE 4, and will display 42 characters Per line with 21 lines displayed.
- <2> Will change the display over to PMODE 2, and will give a display of 21 characters Per line with 21 lines displayed.
- <3> Will change the display to PMODE 0, and will display 21 characters Per line with 10 lines displayed. This option is Particularly useful for young children or People who are visually impaired.
- <4> This will keep the display in PMODE 4 with 4 lines of text at the bottom of the screen. Graphics may have a Y range of from 0 to 154 without interfering with text display. The text will not scroll up into the graphic display area. All graphic commands will function normally.

### Control characters

The SOLUTION recognizes several control characters in addition to the 96 regular ASCII characters. These are:

- 8- backspace by one character space
- 12- clear the screen and set the cursor at top of screen
- 13- carriage return

### Important notes:

- Once a mode option has been selected (Modes 1-4) the screen size may not be changed. If the screen size is wanted to be changed, the program must be reloaded.
- Other graphic screens and modes may be used, but all print statements will go to the screen that was first selected.
- The cursor may be turned off by a POKE &H3F88,255. A POKE&H3F88,0 will restore the cursor. The program will print faster when the cursor is turned off.
- There is one known bug in this program. It's not really a bug, it's more a problem with the Basic Rom. If a program is typed in and listed, all the program lines will be run together. There is a very simple fix for this, just load in a short Basic program (one line will do) and then type in the regular program. All the lines will now list normally. The reason for this is uncertain, but it seems to be locked in the rom somewhere.
- The SOLUTION may be turned off by a POKE 359,57. A POKE 359,126 will turn the program on again.

ETC

These memory locations contain various values used by the SOLUTION. Advanced programmers may find some use for these.

Location	Use
182	- Pmode selection
183	- Start address of graphic screen
185	- Bytes per line
186	- Ending address of graphic screen
240	- X cord. of present cursor location
241	- Y cord. of present cursor location
242	- Y cord. to start cursor on after clearing screen
243	- Start address for scrolling (used with option 4)
16277	- End address for screen clear
16382	- End address for scrolling

The program loads from 14860 to 16383, execution starts at \$3F98.

### Warranty

This program is warranted to be free of load errors for 30 days. If the program fails to load, return the tape for a free replacement within 30 days. This software is sold on an "as is" basis. Snake Mountain Software shall be held responsible for any damages which occur while using this program.

## Addendum

- The PRINT@ function will not work properly with the SOLUTION. However the cursor may be moved around by Pokes to 240 (contains the X location) and to 241 (contains the Y location of the cursor). With this method any print location can be obtained including superscripts and subscripts. (Note-do not change the Y coordinate to more than 180).
- In order to facilitate the creation of a new Basic Program using the SOLUTION; after each copy of the SOLUTION there is a short Basic Program "LIST-OK". By loading this, you may begin typing in a Basic Program and have the lines list properly. If you intend to load in another Basic Program, do not worry with this step.
- The SOLUTION and Radio Shack's screen Print routine will not work together. If a screen Print is wanted, using Shack's Program, turn the SOLUTION off with a POKE 359,57. Then load in Radio Shack's screen Print Program and run it. The SOLUTION will have to be reloaded if you want to use it some more. There is an answer though. Snake Mountain Software has developed a screen print Program which can be used with the SOLUTION. It can be obtained for \$2.50. This includes shipping. This price only applies to people who have purchased the SOLUTION.