

Copyright 1982
by Ross Schwartzberg

With the Banner Canner, you can create banner-type signs with your Atari (tm) 400 or 800 Personal Computer System. The Banner Canner allows you to print banners of up to 120 characters in varying character sizes, print styles, with access to special printer control codes such as expanded and condensed print styles, emphasized print, and compressed line spacing.

The Banner Canner also allows you to load custom character fonts created with almost any character generation program and print your banner in the same font. Included on the Banner Canner disk are four different character sets ready for your use.

The Banner Canner requires a minimum of 24K of RAM, Disk Drive, Interface, and most any printer. The program is written in Atari Basic with Machine Language subroutines.

The Banner Canner

by

Ross Schwartzberg

Required system configuration:

Atari (tm) 400 or 800 computer with minimum of 24K Ram

Atari Basic Cartridge

Atari 850 Interface

Atari 410 Disk Drive

Any compatible printer

HOW TO LOAD THE BANNER CANNER

1. Install Atari Basic cartridge in the left hand ROM slot of your computer.
2. Power on your disk drive without any disks loaded
3. When the busy light on the Disk Drive goes out, insert the "Banner Canner" disk, label side up, into the drive and close the door.
4. Power on your 850 Interface unit and printer
5. Power on your computer. The program will load automatically and the Banner Canner menu will appear on the screen.

THE SCREEN LAYOUT AND OPTIONS MENU

What should now be visible on your screen is the Banner Canner Options menu. You will notice the varying colors in the program title line. This signifies that the program is in the Command Mode and is awaiting a command from the user. Any time the program is busy with one of the menu items, the title line will appear a solid yellow. When it has completed a menu command, it will automatically return to the multi-colored command mode and await a new command.

To execute any command option, simply enter the number corresponding to the command you have chosen. For example, to enter a message, simply type the number 1. There is no need to depress the 'Return' key.

The Banner Canner

The screen is set up so that all available options are listed in the top third of the screen. The middle section contains the message to be printed, the lower left corner always lists all current options chosen, and the lower right corner is used for special option selection messages.

MENU OPTIONS

1. INPUT MESSAGE. By selecting this option, you may enter the message you wish printed on your banner. Simply start typing the message; it will appear in the 'Message' box on the screen. Do not press the 'Return' key until you have finished entering your message. If you make a mistake or wish to modify your message, simply press the backspace key. The maximum amount of characters allowed in a banner is 108.

If there is a previous message in the box when you enter the 'INPUT MESSAGE' mode, you will be asked whether you want to erase the old message. If you do not, simply enter 'N', and you will return to the command mode.

The Banner Canner accepts any non-inverse characters, including upper case, lower case and graphics (control) characters.

2. INVERSE/NORMAL. This option allows you to chose whether you want the banner to be printed with either the character filled in by the printer (normal), or the background filled in (inverse). Each time you press the '2' key, the mode will change between 'normal' and 'inverse'. The current modes chosen for all options are always displayed in the lower left corner of the screen. The default mode is to 'Normal'.

The Banner Canner

3. CHARACTER SIZE. Your Atari (TM) Computer uses an 8x8 grid to represent each character for display on your TV or monitor (Fig. 1). This grid is also the basis in which characters are printed using the Banner Canner. By selecting a character height of 1 and a character width of 1, each letter will be printed using an 8x8 print grid (fig. 2). You can estimate character height and width by multiplying the size factor (1-9) by eight (Fig. 3). For example, if you choose a character height of 9 and a character width of 6, your final character will be constructed with a grid of 72 units in height and 42 units in width.

Because some fonts use characters that are only six or seven units in height and width the final banner may not necessarily be as large as the size estimated with the above formula as in in Fig. 1.

Actual height and width will also be affected when using expanded or condensed printer modes (see Paragraph 5 below).

4. FILL CHARACTER. This option allows you select the actual character the printer will use to construct each letter of your banner. If you choose 'Fixed Character' (by entering an 'F'), you will be prompted to enter the fill character. This character will be used to construct each letter in your message. If you chose 'Variable Fill' each letter will be constructed using that character for it's fill. For example, if your message is 'Hello', the 'H' will be constructed by using repeated 'H's for it's fill character. The default mode is 'Variable Fill'.

5. PRINTER CONTROL. This option allows you to customize your copy of The Banner Canner to the features available with your printer. This option allows you to insert printer control codes at the beginning of each line to be printed.

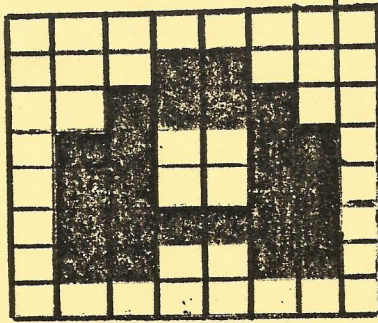


FIG. 1

CHAR. HEIGHT = 1
 CHAR. WIDTH = 1

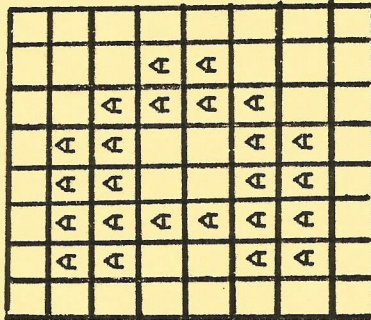
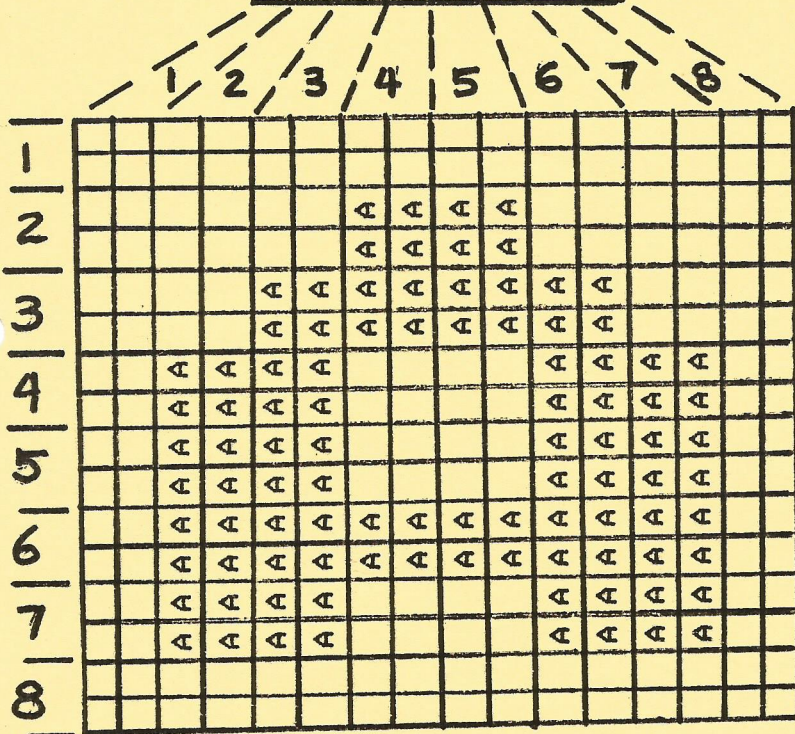


FIG. 2



CHAR. HEIGHT = 2
 CHAR. WIDTH = 2

FIG. 3

The Banner Canner

For example, with the Atari 825 printer you can set it to print expanded characters by pressing the 'Escape' key twice, and then entering a 'Control-N'. A list of control codes is available in the Appendix.

You may enter up to eight characters of printer control codes using this option. When you have entered the codes, press 'Return' and you will return to the Command mode. The current printer control sequence can always be viewed in the lower left corner of the screen in the 'Control' section.

Any time you re-enter this option, you will erase any previous printer control codes.

6. LOAD FONT. This is the option that sets The Banner Canner apart from other banner generators. By selecting this option, you can load your own character set created with almost any Atari Computer character generator program, and use these characters to print your banner.

When you choose this option by selecting #6, you will be prompted with 'Load from which font? (type DIR for directory)'. Pressing 'Return' without entering a font will return you to the command mode. If you already know what font you wish to use, then simply type in the filename, such as 'ENGLISH.FNT' and press Return. It is not necessary to prefix the filename with "D:", but the Banner Canner will accept the filename either way. A special machine language subroutine will load the new font and display it on the screen in a matter of seconds. If the font cannot be found, a message to that effect will be displayed. After the new font has been loaded you will be returned to the command mode.

The Banner Canner

If you would like to examine the directory on the Banner Canner disk or on your own disk before loading a font, type 'DIR' and a full list of programs on the disk will be displayed in the lower right corner of the screen.

I have included four fonts for your use:

COMPUTER.FNT
ENGLISH.FNT
BIGATARI.FNT
MODERN.FNT

7. PREVIOUS FONT. This option allows you to instantly return to the previous font displayed on your screen. Each time the '7' key is pressed the screen will alternately switch between the custom font and the standard Atari font. When you print your message, the font displayed on your screen will always be the one used for printing. The default for this option is the standard Atari font.

If you have not loaded a custom font, and the 'Previous Font' option is selected, the command will be disregarded and you will return to the command mode.

8. PRINT BANNER. After setting all of the desired parameters, it's now time to finally print the banner. Before choosing the 'Print Banner' option, make sure your printer is on and the paper is positioned correctly. When the printer is ready, select this option by entering an '8'. If the printer or interface is not on and properly connected, a prompt will appear asking you to turn them on.

If the printer is ready, the Banner Canner will then start it's print cycle. You will notice an arrow on the screen pointing to the current letter being printed.

The Banner Canner

You may exit the Print routine at any time by holding down the 'Option' key until you hear a beep from the computer. You will then return to the command mode, leaving all option and menu choices unchanged.

9. END PROGRAM. When you no longer wish to use The Banner Canner, use this option to exit the program. Note! The Banner Canner disables the 'Break' key during program execution to prevent accidentally breaking out of the program

WARNING: Do NOT attempt to duplicate or modify the Banner Canner diskette. Always use your original diskette to create banners. This diskette has been protected to prevent unauthorized copies from being made. Do not copy any files to or from the original diskette. If you wish to load your own font, simply insert your own diskette once the program is running.

If your diskette should become damaged, simply mail the original diskette and \$4.00 for the new disk, postage, and handling to:

Magnetic Images
9514-9 Reseda Blvd. #477
Northridge, Ca. 91324

The Banner Canner

ATARI 825 / CENTRONICS 737 PRINTER CONTROL CODES

Escape-Escape-Control-N Start Elongated Print

Escape-Escape-Control-O Stop Elongated Print

Escape-Escape-Control-S Start 10 CPI Monospaced Print

Escape-Escape-Control-T Start 16.7 CPI Condensed Print

Escape-Escape-Escape-Control-Left Arrow - Half Reverse Linefeed

Control-O - Start Underline

Control-N - Stop Underline

Note: Expanded and Condensed modes can be combined to produce an intermediate character size.

EPSON MX-SERIES PRINTER COMMAND CODES

Control-N - Sets printer to print in the Expanded (Double Width) Mode

Control-T - Turns off the Expanded Mode

Control-O - Sets printer for the Compressed (16 CPI) Mode

Control-R - Turns off the Compressed Mode

Escape-Escape-A1 - Allows 7 Vertical Dots (7/72") between lines

Escape-Escape-A2 - Allows 12 Vertical Dots (1/16") between lines

Escape-Escape-A0 - Allows 9 Vertical Dots (1/8") between lines

To print banner with a solid fill character, use an Inverse-Shift-Up Arrow as a fixed fill character (option #4)

The Banner Canner

EPSON MX-SERIES WITH GRAFTRAX OPTION

- Escape-4 - Italics Print Mode
- Escape-A_n - Line Spacing n/72 of an inch
- Escape-E - Emphasized Printing Mode
- Escape-F - Cancel Emphasized Mode
- Escape-G - Double-Strike Mode
- Escape-H - Cancel Double-Strike Mode
- Escape-P - Compressed Mode
- Escape-Q - Cancel Compressed Mode
- Escape-S - Expanded Mode
- Escape-T - Cancel Expanded Mode

To print a banner with a solid fill character, use an Inverse-Shift-Up Arrow as a fixed fill character (see #4)

Example 3

MESSAGE = A
INV/NORM = INVERSE
CHAR. HEIGHT = 4
CHAR. WIDTH = 4
FILL CHAR. = VARIABLE
PRINTER CONTROL = ESCAPE-ESCAPE-LEFT
ARROW (Half-reverse linefeed on Atari 825
printer)
FONT SELECTED = COMPUTER.FNT

```
<CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC>***  
<CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC>***  
<CCCCC>***  
<CCCCC>***  
<CCCCC>***  
<CCCCC>***  
<CCCCC> <CCCCC>***  
<CCCCC> <CCCCC>***  
<CCCCC> <CCCCC>***  
<CCCCC> <CCCCC>***  
<CCCCC> <CCCCC>***  
<CCCCC> <CCCCC>***  
<CCCCC> <CCCCC>***  
<CCC>***  
<CCC>***  
<CCC>***  
<CCC>***  
<CCC> <CCCCC>***  
<CCC> <CCCCC>***  
<CCC> <CCCCC>***  
<CCC> <CCCCC>***  
<CCC> <CCCCC>***  
<CCC> <CCCCC>***  
<CCC> <CCCCC>***  
<CCC> <CCCCC>***  
<CCC> <CCCCC>***  
<CCC> <CCCCC>***  
<CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC>***  
<CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC>***  
<CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC>***  
<CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC>***  
<CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC>***
```