CHARACTER FUN
LEARNING

Colorful and creative fun with letters, numbers, and pictures (ages 3 and up)

by Bruce E. Campbell
Requires: ATARI BASIC Language Cartridge

Diskette version (1) ATARI 810 or 1050 Disk Drive
(APX-20266) 48K RAM

Edition A
CHARACTER FUN
LEARNING

Colorful and creative fun with letters, numbers, and pictures (ages 3 and up)

by Bruce E. Campbell

Requires: ATARI BASIC Language Cartridge

Diskette version (1) ATARI 810 or 1050 Disk Drive
(APX-20266) 48K RAM

Edition A
CHARACTER FUN

by

Bruce E. Campbell

Program and manual contents ©1983 Bruce E. Campbell

Copyright notice. On receipt of this computer program and associated documentation (the software), the author grants you a nonexclusive license to execute the enclosed software. This software is protected by copyright. You are prohibited from reproducing, translating, or distributing this software in any unauthorized manner.
Distributed By
The ATARI Program Exchange
P.O. Box 3705
Santa Clara, CA 95055

To request an APX Product Catalog, write to the address above, or call toll-free:
800/538-1862 (outside California)
800/672-1850 (within California)
Or call our Sales number, 408/727-5603

Trademarks of Atari

ATARI is a registered trademark of Atari, Inc. The following are trademarks of Atari, Inc: 400, 410, 800, 810, 820, 822, 825, 830, 850, 1200XL.

Limited Warranty on Media and Hardware Accessories. Atari, Inc. ("Atari") warrants to the original consumer purchaser that the media on which APX Computer Programs are recorded and any hardware accessories sold by APX shall be free from defects in material or workmanship for a period of thirty (30) days from the date of purchase. If you discover such a defect within the 30-day period, call APX for a return authorization number, and then return the product to APX along with proof of purchase date. We will repair or replace the product at our option. If you ship an APX product for in-warranty service, we suggest you package it securely with the problem indicated in writing and insure it for value, as Atari assumes no liability for loss or damage incurred during shipment.

This warranty shall not apply if the APX product has been damaged by accident, unreasonable use, use with any non-ATARI products, unauthorized service, or by other causes unrelated to defective materials or workmanship.

Any applicable implied warranties, including warranties of merchantability and fitness for a particular purpose, are also limited to thirty (30) days from the date of purchase. Consequential or incidental damages resulting from a breach of any applicable express or implied warranties are hereby excluded.

The provisions of the foregoing warranty are valid in the U.S. only. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, and/or do not allow the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

Disclaimer of Warranty on APX Computer Programs. Most APX Computer Programs have been written by people not employed by Atari. The programs we select for APX offer something of value that we want to make available to ATARI Home Computer owners. In order to economically offer these programs to the widest number of people, APX Computer Programs are not rigorously tested by Atari and are sold on an "as is" basis without warranty of any kind. Any statements concerning the capabilities or utility of APX Computer Programs are not to be construed as express or implied warranties.

Atari shall have no liability or responsibility to the original consumer purchaser or any other person or entity with respect to any claim, loss, liability, or damage caused or alleged to be caused directly or indirectly by APX Computer Programs. This disclaimer includes, but is not limited to, any interruption of services, loss of business or anticipatory profits, and/or incidental or consequential damages resulting from the purchase, use, or operation of APX Computer Programs.

- Some states do not allow the limitation or exclusion of implied warranties or of incidental or consequential damages, so the above limitations or exclusions concerning APX Computer Programs may not apply to you.
Table of contents

INTRODUCTION... 1
  Overview... 1
  Required accessories... 1
  Optional accessories... 1
  Contacting the author... 2
  Author's note... 2

GETTING STARTED... 3
  Loading CHARACTER FUN into computer memory... 3
  The first display screen... 3
  Author's suggestions... 4

USING CHARACTER FUN... 5
  CHARACTER FUN demonstration... 5
  Moving the cursor... 5
  Standard and custom characters... 5
  Changing the characters... 6
  Changing the colors... 6
  Text window... 7
  Erasing characters... 7
  Scrolling... 7
  Special keys... 7
  Joystick controls... 8
  Start position... 8
  Musical notes... 8

CREATING GRAPHICS SCREENS... 10
  Control graphics... 10
  Custom character set... 11
  Crazy characters... 11
  Trains, trucks, and cars... 12
  Houses and buildings... 13
  Making faces... 14
  Special effects... 15

SAVING AND LOADING SCREENS... 16
  Saving a screen... 16
  Loading a screen... 17
  Delete a screen... 18
  Exit from saving and loading... 19
  Sample screens... 19
Table of Figures

1  First display screen...3
2  Control graphics...10
3  Custom character set...11
4  Trains, trucks, and cars...12
5  Houses and buildings...13
6  Making faces...14
7  Special effects...15
8  Insert separate diskette...16
9  Save and load choices...16
10 Sample directory...17
11 Sample screens...19
Introduction

OVERVIEW

CHARACTER FUN is specially designed to introduce small children to the computer, and to show them the functions of the keyboard. (But adults who try out the program are charmed by the creative possibilities the program offers, too.) Just by touching keys randomly at the console, even the youngest children can make pretty designs on the screen. The program also makes a delightful way to show off the color, sound, and graphics capabilities of your ATARI Home Computer.

You can display the entire ATARI character set, including the control graphics characters, just by pressing the keys. You can change the sizes of the letters and even write upside down and backwards. A whole range of colors can be displayed and changed at whim, even in stripes. Besides letters, you can create pictures and graphics. The program plays "Pop Goes the Weasel" and "Yankee Doodle", and lets you sound the notes of the scale. If you like, you can create special effects with a Joystick Controller—an earthquake, for example!

Children learn fast about what the computer can do. They're challenged to create and admire their own designs. And when they leave the screen for a while, CHARACTER FUN goes into a colorful demonstration that entices them to return and play some more.

REQUIRED ACCESSORIES

ATARI 810 or 1050 Disk Drive
48K RAM

OPTIONAL ACCESSORIES

One or two ATARI Joystick Controllers
CONTACTING THE AUTHOR

Users wishing to contact the author may write to him at:

15434 S.W. 77th Court
Miami, Florida 33157

AUTHOR'S NOTE

The distribution version of CHARACTER FUN was produced using copyrighted software products of
Monarch Data Systems, Cochituate, MA 01773.
Getting started

LOADING CHARACTER FUN INTO COMPUTER MEMORY

1. Remove any program cartridge from the cartridge slot of your computer.

2. If you're using Joystick Controllers, plug them into the first and second controller jacks of your computer console.

3. Have your computer turned OFF.

4. Turn on your disk drive.

5. When the BUSY light goes out, open the disk drive door and insert the CHARACTER FUN diskette with the label in the lower right-hand corner nearest to you. Close the door. (Use disk drive one if you have more than one drive.)

6. Turn on your computer and your TV set. The program will load into computer memory and start automatically.

THE FIRST DISPLAY SCREEN

The first display screen prints the program title, CHARACTER FUN, in large letters above a smiling face. At the bottom of the screen, the following notes are displayed:

CHARACTER FUN
by Bruce E. Campbell
COPYRIGHT (C) 1983

Figure 1 First display screen

When you're ready to begin, hold down the START key until the screen clears. A happy face cursor appears at the upper left corner of the screen. The program is now ready to put characters on the screen at the cursor position.
AUTHOR'S SUGGESTIONS

I wrote this program to help my children learn about the keyboard. If you're using CHARACTER FUN with young children, I suggest giving them no instructions. I found my children enjoyed experimenting with all the options. Then when they asked how to repeat some instruction, I showed them how.

Let older computer enthusiasts choose between experimenting and reading the instructions.
Using CHARACTER FUN

CHARACTER FUN DEMONSTRATION

At the beginning of the program, CHARACTER FUN shows you some of the features it offers. For example, letters turn upside down and backwards, and colors change. The demonstration continues until you press the START key.

While you're using CHARACTER FUN, if you pause for four minutes (by not using the joystick or pressing any keys), the demonstration begins again.

MOVING THE CURSOR

When you begin playing CHARACTER FUN, you see the happy face cursor in the upper left corner of the screen. You can move it in several different ways.

Hold down the CTRL key and press the arrow keys to move the cursor to the next desired position.

The joystick in the second controller jack also moves the cursor.

Hold down the CTRL key and press the CLEAR key to clear the screen and move the cursor to the top left corner.

Press the RETURN key to position the cursor at the beginning of the next line.

Hold down the SHIFT and CTRL keys and press the TAB key to remove the cursor from the screen. Then press any key to return the cursor.

STANDARD AND CUSTOM CHARACTERS

Type letters and watch them appear on the screen.
from left to right and top to bottom.

Press the ESC key to switch between these standard characters and "custom characters." (Custom characters are used to draw figures on the screen, like the happy face cursor.) A later section of this manual describes this function in detail.

CHANGING THE CHARACTERS

Press the SELECT key to alternate between typing characters backwards or forward.

Press the OPTION key to alternate between typing characters upside down or right side up.

Press the CAPS key to change the letters to lower case. You can return to upper case (capital letters) by holding down the SHIFT key and pressing the CAPS/LOWR key.

Press the ATARI LOGO key (in the lower right corner of the keyboard, next to the SHIFT key) to switch to inverse video. (For example, if you're typing white letters on a red background, you see red letters on a white background.)

Hold down both the OPTION and SELECT keys and press the START key to switch between large characters (5 or 6 rows of 10) and small characters (10 or 12 rows of 20). Note that at the same time, the screen clears, and the program resets all the options to the normal start position. The background music changes from "Pop Goes the Weasel" when you're using large characters to "Yankee Doodle" for small characters.

CHANGING THE COLORS

Press the START key to rotate the screen foreground colors.

Hold down the SHIFT key and press the CLEAR key to clear the screen and switch between a color
foreground and no foreground color.

Hold down the CTRL key and press the INSERT key to alternate the background and border color between black and white.

Hold down the SELECT key and press the START key to switch between a single color and multicolor foreground.

**TEXT WINDOW**

At the bottom of the screen, you see reminders of the functions of some of the keys in a special text window. To switch the text window on and off, hold down the CTRL key and press the ESC key.

**ERASING CHARACTERS**

Press the DELETE/BACK S key to delete the character immediately preceding the cursor position.

Hold down the SHIFT key and press the DELETE/BACK S key to clear the row the cursor is in.

**SCROLLING**

Hold down the OPTION key and press the SELECT key to scroll the screen to the right.

Hold down the OPTION key and press the START key to scroll the screen up.

You can also use the joystick in the first controller jack to scroll the screen.

**SPECIAL KEYS**

If you press the BREAK key, nothing happens.
Press the SYSTEM RESET key to stop and reload the program.

JOYSTICK CONTROLS

Joystick #1: The joystick plugged into the first joystick port controls screen scrolling. Move the joystick to see the screen scroll up, down, side to side, or diagonally. Press the red joystick button to hear an explosion sound and see the screen image shake.

Joystick #2: The joystick plugged into the second joystick port controls the happy face cursor position. Push the joystick in any of the eight directions to move the cursor. Press the red joystick button to hear a phaser sound and place a star at the cursor position. You can't fire a phaser shot in the same position twice in succession.

START POSITION

If you start the program before you've made any of the choices above, you begin with the following options:

- Large characters (5 rows of 10)
- Instruction text window at bottom of screen
- Cursor at upper left corner, screen clear
- Solid blue foreground
- White background
- Standard character set
- Capital letters
- Characters right side up and forward
- Background music on

MUSICAL NOTES

The program plays "POP! Goes the Weasel" when you're using large characters, and "Yankee Doodle" with small characters, until you press the TAB key.
to turn it off. You can bring the song back by pressing the TAB key again.

When you type the letters A–G and a–g, you hear the corresponding C-major musical notes. The lower case a–g plays musical notes one octave higher than the upper case A–G.
Creating graphics screens

You can use the program to create pictures and designs. There are two ways to produce graphics on the screen:

CONTROL GRAPHICS

Hold down the CTRL key and press the letter keys to produce graphics elements, as in the following chart:

![Image of Control Graphics]

Figure 2 Control Graphics
CUSTOM CHARACTER SET

To produce the custom characters on the screen, press the ESC key. When you press the keys on the console, design elements appear, as in the diagrams that follow.

Press the letter shown above the character you want to see. To get small letter characters, first press and release the CAPS LOWER key.

To get the character under a letter with a circle around it, hold down the CTRL key before pressing the letter key.

To get the character under a letter with a square around it, hold down the SHIFT key before pressing the letter key.

CRAZY CHARACTERS

The "Crazy Characters" can help you create spaceships, faces, bugs, animals, flowers, and stick figures.

Figure 3 Crazy characters
TRAINS, TRUCKS, AND CARS

Hold down the CTRL key and type the letters in the third row from the bottom on the keyboard (plus the letter "L" and the semicolon) to produce train cars.

Hold down the CTRL key and type the keys on the second row from the bottom (from G through K only) to form cars and trucks.

Figure 4 Trains, trucks, and cars
HOUSES AND BUILDINGS

Hold down the CTRL key and press the keys on the second row from the bottom (only A through F) and the keys on the bottom row for houses. You can put together building blocks, windows, doors, and roofs.

Figure 5 Houses and buildings
MAKING FACES

To make faces (like the happy face of the cursor), press the keys on the lowest three rows of the keyboard. The chart below shows which letters form which parts of the faces.

- Use the keys on the third row from the bottom to make hats and eyebrows.
- Keys on the second row from the bottom make combinations of ears and eyes.
- The bottom row keys form mouths and ties.

Note on the chart that you can add decorative effects by holding down the SHIFT key and pressing some of the symbol keys.

Figure 6 Making faces
SPECIAL EFFECTS

Press the top row keys to see some additional graphics characters. The chart below shows what these characters are. If you see a symbol with a square around it, hold down the SHIFT key to produce that character.

Figure 7 Special effects
Saving and loading screens

SAVING A SCREEN

You need a blank formatted diskette to store your screens. You can't use the CHARACTER FUN program diskette for this purpose.

Hold down the SHIFT and CTRL keys and press the RETURN key.

The program prompts you to insert a separate diskette in the disk drive to save a screen as follows:

Insert your screen save disk into disk drive #1. Then press any key to continue.

Figure 8 Insert separate diskette

After you follow these instructions, you see a "Saved Screen Directory". The first time you save a screen, there won't be anything on the directory. This message appears:

NO FILES FOUND!
707 FREE SECTORS

To save a screen with large characters, you must have four sectors available on your diskette. You need sixteen sectors for small characters.

Below the directory, the following choices are displayed:

1)SAVE 2)LOAD 3)DELETE 4)EXIT

Figure 9 Save and load choices

Type 1, and the program prompts you as follows:
SAVE OPTION

Enter 3 letters or numbers
to save screen: PICTURE

PICTURE.

Give your screen a name that's three letters (or
numbers) long and press the RETURN key. If the
new file name matches an existing file name, the
new one replaces the existing. Soon you see this
message:

SCREEN SAVED!

Finally, CHARACTER FUN returns to the screen
you just saved.

LOADING A SCREEN

After you've saved some of your screens, you can
load them at a later time.

Hold down the SHIFT and CTRL keys and press the
RETURN key. The program prompts you to insert a
diskette for saving your screen and press the
RETURN key.

You see a "Saved Screen Directory" with a list of
the screens you've already saved next to the
numbers CHARACTER FUN has assigned to them.
It looks like the following:

SAVED SCREEN DIRECTORY

1) PICTURE.ABC 004
2) PICTURE.102 004
3) PICTURE.GH3 016

Figure 10 Sample directory

The four options (save, load, delete, and exit) are
displayed below the directory. Type 2 to select
LOAD.

Respond to the following prompt:

ENTER NUMBER OF FILE?

Type the number at the left. For example, if you want "PICTURE.ABC", type 1. Press the RETURN key. The program requests that you confirm your choice, as follows:

LOAD PICTURE.ABC (Y/N)?

Type Y. While CHARACTER FUN is loading the screen, this message appears:

LOADING PICTURE.ABC

When the loading is complete, the screen you requested appears.

DELETE A SCREEN

If you've saved a screen that you don't want any more, you can delete it from the diskette. First, hold down the SHIFT and CTRL keys and press the RETURN key. When the four choices (save, load, delete, or exit) appear, type 3. You see the "Saved Screen Directory".

Type the number of the file to delete from your diskette. The program asks you to confirm your DELETE choice.

When CHARACTER FUN has deleted the file you requested, it displays this message:

DELETION COMPLETED

Then you make another choice to save, load, delete, or exit.
EXIT FROM SAVING AND LOADING

Suppose you've finished saving, loading, and deleting, and you want to return to the CHARACTER FUN screen display. Type 4 to choose EXIT from the four choices (save, load, delete, and exit). The screen reappears and you can resume typing characters.

SAMPLE SCREENS

Included with the CHARACTER FUN program are five sample screens to give you an idea of what you can do with the program. Leaving the CHARACTER FUN diskette in the disk drive, you can load these samples using the LOAD option described above.

When the program prompts you to insert a separate diskette (Figure 8), just press any key.

The following directory appears:

1) PICTURE.1 004
2) PICTURE.2 016
3) PICTURE.3 016
4) PICTURE.4 016
5) PICTURE.5 016

384 FREE SECTORS

Figure 11 Sample screens

The four choices in Figure 9 are displayed. Type 2 to select LOAD. The following prompt appears:

ENTER NUMBER OF FILE:?

Type the number of the picture you want to see. The program requests that you confirm your choice, and then it loads the picture you selected.

You can't delete the sample screens. If you want
to change or save the sample screens, save them onto a separate diskette.
We're interested in your experiences with APX programs and documentation, both favorable and unfavorable. Many of our authors are eager to improve their programs if they know what you want. And, of course, we want to know about any bugs that slipped by us, so that the author can fix them. We also want to know whether our instructions are meeting your needs. You are our best source for suggesting improvements! Please help us by taking a moment to fill in this review sheet. Fold the sheet in thirds and seal it so that the address on the bottom of the back becomes the envelope front. Thank you for helping us!

1. Name and APX number of program.
   Character Fun (266)

2. If you have problems using the program, please describe them here.

3. What do you especially like about this program?

4. What do you think the program's weaknesses are?

5. How can the catalog description be more accurate or comprehensive?

6. On a scale of 1 to 10, 1 being "poor" and 10 being "excellent", please rate the following aspects of this program:
   ______ Easy to use
   ______ User-oriented (e.g., menus, prompts, clear language)
   ______ Enjoyable
   ______ Self-instructive
   ______ Use (non-game programs)
   ______ Imaginative graphics and sound
7. Describe any technical errors you found in the user instructions (please give page numbers).


8. What did you especially like about the user instructions?


9. What revisions or additions would improve these instructions?


10. On a scale of 1 to 10, 1 representing "poor" and 10 representing "excellent", how would you rate the user instructions and why?


11. Other comments about the program or user instructions:


From


APX
ATARI Program Exchange
P.O. Box 3705
Santa Clara, CA 95055

[seal here]