

# Fastrac 128

by Mike J. Henry

(C)1990 BASEMENT BOYS SOFTWARE

- \*> FASTRAC DISK COPY: FASTEST 1571/1541 BACKUP TO DATE!
- \*> FASTRAC FILE COPY: SUPPORTS ANY COMMODORE COMPATIBLE DRIVES!
- \*> FASTRAC M/L MONITOR: EXPLORE COMPUTER OR DRIVE MEMORY!
- \*> FASTRAC DIRECTORY EDITOR: EDIT & REORGANIZE ANY DIRECTORY!
- \*> FASTRAC IBM/MFM DISK COPIER: FAST COPY STANDARD IBM DISKS!
- \*> FASTRAC 1581 DUPLICATOR: ULTRAFast SINGLE/DUEL BACKUPS!

THE POWERFUL NEW UTILITY SYSTEM  
FOR THE COMMODORE 128 COMPUTER

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## INTRODUCTION

Let us begin by thanking you for your purchase of Fastrac 128. Fastrac 128 is our finest effort in the C128 field and represents several years of customer input. All features utilize the native 80 column mode. 40 column support is available to those of you who do not own an 80 column RGB monitor. The ultra-fast 2 megahertz mode is utilized whenever applicable. 1700/64/50 RAM Expansion as well as the 64K video Ram is automatically sensed and used as storage buffer whenever present. One or two drive support is available in most modules, as well as extensive 1581 drive support.

We are confident that Fastrac 128 will be one of your most often used utilities, and although its speed and flexibility are unmatched, it does have its limitations.

1> Fastrac 128 was created specifically for **unprotected** software. As far as protected software goes, it will not back-up, copy, transfer files, repair hard errors, or de-protect - Period! This was not our intention when Fastrac 128 was designed. For dealing with protected software, we suggest the Maverick (also from Software support), which will work on your C128 in the C64 mode.

2> Please don't expect us, or anyone else to create a **whole disk** 1541/71 to 1581 disk backup utility that will be of any real use to you. Hardware and software limitations make this type of copying **impossible**.

## PACKAGE CONTENTS

The package containing your purchase of Fastrac 128 should contain the following items:

- 1} A Fastrac 128 Owner's Manual.
- 2} A Fastrac 128 Program Diskette.
- 3} A Fastrac 128 Registration Card.

Take the time right **now** to fill out the Registration card and send it in before you lose it. THIS IS OF THE UTMOST IMPORTANCE. All owner support services are tied into the registration card. Sending the card in immediately is your key to the ownership rights you deserve.

## GETTING STARTED

### **1571 Drive Owners:**

Let's begin by creating a Fastrac 128 work disk. To get started, place a blank diskette into your 1571 disk drive, face up, close the door, and type the following command: **HEADER:FASTRAC 128,BB** . Press RETURN and you will be prompted: Are You Sure. Hit Y for Yes and hit RETURN again. When the format process is complete, remove the work disk and insert the Fastrac 128 master disk in the drive (device #8) and press the reset button on the side of your computer. Fastrac 128 will autoboot and the title/menu screen will appear. Any menu selection can be chosen by simply depressing its corresponding number key. Choose 1 for Fast Data copier. See the instructions elsewhere in this manual pertaining to this module for the details on its use. Our objective is to transfer the Fastrac 128 master disk Side One only to the prepared work disk. When completed, we suggest you put your Fastrac 128 master disk in a safe place and use your work disk for everyday use.

### **1541 Drive Owners:**

Let's begin by creating a Fastrac 128 work disk. Insert the Fastrac 128 master disk in the drive (device #8) and press the reset button on the side of your computer. Fastrac 128 will autoboot and the title/menu screen will appear. Any menu selection can be chosen by simply depressing its corresponding numeral key. Choose 1 for Fast Data Copier. See the instructions elsewhere in this manual pertaining to this module for the details on its use. Our objective is to transfer the Fastrac 128 master disk Side One only to the prepared work disk.

When completed, we suggest you put your Fastrac 128 master disk in a safe place and use your work disk for everyday use.

Fastrac 128 is composed of six different modules. Each module is designed. to return to the main menu after the selected job is completed. Some modules are comprised of several utilities and some are single utility based.

## 1541 FAST DATA COPIERS

### SINGLE DRIVE COPIER

Required Hardware: C128 or C128D, 40 or 80 Column Monitor, 1541 Disk Drive.

Optional Hardware: Commodore RAM Expander, 64K video RAM (Standard in C128D).

Menu Options:

- (D) Directory of disk currently in drive defined by Device # option.
- (C) Copy Disk: Begin backup, follow on screen prompts.
- (R) Re-Boot Fastrac 128. Re-boot Main Menu from device #8 (1571/41 drive only).
- (F1) Write verify: Defaults to ON, but may be toggled to OFF. Read Errors will be reported if the source disk has physical problems. With Verify ON, write errors will occur only when the destination disk is incapable of producing an error free backup. In this case, try another destination disk.
- (F3) Device #: Defaults to 8 but may be set to 9, 10, or 11.

## **DUAL DRIVE COPIER**

Required Hardware: C128 or C128D, 40 or 80 Column Monitor, 2 - 1541/71 Disk Drives.

Optional Hardware: Commodore RAM Expander, 64K Video RAM (Standard in C128D).

Menu Options:

- (D) Directory of source disk. SHIFT/D for Directory of destination disk.
- (C) Copy Disk: Begin backup, follow on screen prompts.
- (W) Fix 2<sup>nd</sup> Drive Number. Software device number of 2<sup>nd</sup> Drive.
- (R) Re-Boot Fastrac 128. Re-Boot Main Menu from device #8 (1571/41 drive only).
- (F1) Write Verify: Defaults to ON, but may be toggled to OFF. Read Errors will be reported if the Source disk has physical problems. With verify ON, write errors will occur only when the destination disk is incapable of producing an error free backup. In this case, try another destination disk.
- (F3) Source Device #: Defaults to 8 but may be set to 9, 10, or 11.
- (F5) Destination Device #: Defaults to 9 but may be set to 8, 10, or 11.
- (F7) Copy Side(s): Not operational in this mode.
- (T) Drive Type: Defaults to 1541 but may be toggled to 1571 or 1581. See documentation elsewhere in this manual for those drives.

## 1571 FAST DATA COPIERS

### SINGLE DRIVE COPIER

Required Hardware: C128 or C128D, 40 or 80 Column Monitor, 1571 Disk Drive.

Optional Hardware: Commodore RAM Expander, 64K Video RAM (standard in C128D).

Menu Options:

- (D) Directory of disk currently in drive defined by Device # option.
- (C) Copy Disk: Begin backup, follow on screen prompts.
- (R) Re-Boot Fastrac 128. Re-Boot Main Menu from device #8 (1571/41 drive only).
- (F1) Write verify: Defaults to ON, but may be toggled to OFF. Read Errors will be reported if the source disk has physical problems. With verify ON, write errors will occur only when the destination disk is incapable of producing an error free backup. In this case, try another destination disk.
- (F3) Device #: Defaults to 8 but may be set to 9, 10, or 11.
- (F7) Copy Side(s): Defaults to both (sides 0 and 1- true 1571 format) but you may also toggle to TOP (1541 Format & Side 0 of 1571 Format) or bottom (Side 1 of 1571 Format).

## **DUAL DRIVE COPIER**

Required Hardware: C128 or C128D, 40 or 80 Column Monitor, 2 - 1571 Disk Drives.

Optional Hardware: Commodore RAM Expander, 64K Video RAM (Standard in C128D).

Menu Options:

- (D) Directory of source disk. SHIFT/D for Directory of destination disk.
- (C) Copy Disk: Begin backup, follow on screen prompts.
- (W) Fix 2<sup>nd</sup> Drive Number. Software device number of 2<sup>nd</sup> Drive.
- (R) Re-Boot Fastrac 128. Re-Boot Main Menu from device #8 (1571/41 drive only).
- (FI) Write Verify: Defaults to ON, but may be toggled to OFF. Read Errors will be reported if the Source disk has physical problems. With verify ON, write errors will occur only when the destination disk is incapable of producing an error free backup. In this case, try another destination disk.
- (F3) Source Device #: Defaults to 8 but may be set to 9, 10, or 11.
- (F5) Destination Device #: Defaults to 9 but may be set to 8, 10, or 11.
- (F7) Copy Side(s): Defaults to both ( sides 0 and 1- true 1571 format) but you may also toggle to TOP (1541 Format & side 0 of 1571 Format) or bottom (SIDE 1 of 1571 Format).
- (T) Drive Type: Defaults to 1571 but may be toggled to 1541 or 1581. See documentation elsewhere in this manual for those drives.

## 6502 M/L MONITOR

### 6502 M/L Commands:

Required Hardware: C128 or C128D, 40 or 80 Column Monitor, 1541, 1571, or 1581 Disk Drive.

**R:** Register Display: Displays:

**Program Counter:** Address at which the program was halted when the processor executed a break instruction.

**MMU:** The value which is stored directly to the MMU register at \$FF00 (any value between \$00 and \$FF). All commands will execute using the displayed MMU configuration. Type in the desired MMU change and if the Bank Register contains a value you must then type in - over that value and press RETURN.

**Bank Register:** Commodore defined Bank number - 0 through 15. When no Bank is specified, < - > will be displayed. If a Bank number is given, then the MMU register will be configured as per Commodore default values. See your Commodore Computer owners manual for complete listing.

**Status Register:** Displays status register at moment of break.

**Status of A, X, Y Registers:** Displays values in respective registers at moment of break.

**Stack Pointer:** Value of stack pointer at moment of break.

**G:** **XXXX** - Executes code starting at \$XXXX, if no address is given, execution begins at location defined by program counter in register display.

**X:** Returns user to Basic

**M:** **FFFF LLLL** - Displays in hex , memory between two addresses. If a second address isn't specified, scrolls forever. RUN/STOP halts.

**@:** Sends disk Command. @ alone returns drive status. @\$ for directory of disk.

**SPACE BAR:** During directory pauses.

**RUN/STOP:** Abort directory listing.

- L:** Load file from disk. L"FILENAME",device#,address (optional). For example- L"FILE",08,C000. If an address is given, it WILL load to that address, (Loads into the memory configuration defined by the MMU register display).
- V:** Verify file in memory. V"FILENAME",device#,address (optional). Same as Load command but verify instead. A "?" stands for verify error, (verifies using the memory configuration defined by the MMU register display.)
- S:** Save File to disk. S"FILENAME",device#,FFFF,LLLL+1.  
Example:  
S"FILENAME",08,C000,D001(Saves memory from the configuration defined by the MMU register display.)
- F:** FFFF LLLL XX - Fills memory from \$FFFF to \$LLLL with \$XX byte.
- D:** FFFF LLLL ( \$LLLL Optional) - Disassembles memory. Use CURSOR U/D to scroll through listing. Editing is possible using mnemonic changes.
- P:** Send code to printer - PD FFFF LLLL sends disassembly listing. PM FFFF LLLL sends HEX Memory listing. (Commodore 1525/801 compatibles only)
- A:** XXXX mnemonic commands - Assemble Code beginning at \$XXXX (Be sure to use proper spacing between characters).
- H:** FFFF LLLL PATTERN - Hunts from \$FFFF to \$LLLL for up to an eight byte pattern. Use quotes on either side of an ASCII pattern. ASCII and Hex may be mixed.
- T:** FFFF LLLL XXXX - Transfers memory from \$ FFFF through \$LLLL to \$XXXX.
- TC:** Use same syntax as T command. Will transfer Computer memory to drive.
- TD:** Use same syntax as T Command. Will transfer drive memory to the computer.
- O:** This is the letter O not a zero. O followed by an 8,9,A,B (device number) will put you in the drive-mon mode for the specified drive. The above commands are the same for the drive-mon except the P feature is inactive. For printer listings of drive memory, send the code to the computer, then the printer. O and RETURN sends you back to the computer memory. A "]" lets you know you're in drive memory, while a "." denotes computer memory.

For more information on Commodore 6502 M/L, we suggest you consult your local bookseller. There are a vast number of books on the subject.

## DIRECTORY EDITOR

Required Hardware: C128 or C128D, 40 or 80 Column Monitor, 1571, 1541, and/or 1581 Disk Drive.

A Directory Editor is a tool that allows you to rearrange directory files on most any non-protected diskette. Our Directory Editor allows hand sorting, alphabetizing, separations, renaming functions, locking and unlocking files, and partitions on the 1581 drive. Please note that functions referred to that are 1581 specific will be **{bracketed and highlighted}**. Once you become familiar with the operation of this utility, we know it will become one of your favorite.

From the Fastrac main menu, select the Directory Editor. Beginning at the top of the screen, your options are:

**Read Directory:** This Command will read the directory of the diskette in the current drive which is listed at the top of the menu screen. The **{root}** or main directory will be read into memory unless **{the drive has been left in partition mode}**, or a new directory has been read in. When the directory has been read, it is placed into the edit buffer until a new directory is read. This means you may edit the same directory without having to re-read it.

**{RETURN: If you place the flashing arrows beside a partition name (indicated by the File Type 'SUB' in the upper part of the screen) and press RETURN, the contents of that partition will be read into the input buffer. In order to return to a previous partition, or to the root directory, you must press restore to return to the Editor Main Menu and use the disk command option to initialize the disk to the root directory /. Use the READ DIRECTORY option and the RETURN key as before to return to the desired partition}.**

**Edit Directory:** Once the directory has been read, use this option to rearrange to suit your needs. See **Edit Directory** option below.

**Device No.:** set this option to the device number of the drive containing the diskette you wish to work on. This option defaults to 8 but may be set to 9, 10, or 11.

**(D) Directory:** Pressing D will display a listing of the directory **{or partition}** of the diskette in the current drive. Pressing the Space Bar while the directory is scrolling will stop the scroll. Pressing the Space Bar again will continue the listing. Use the RUN/STOP key to abort the listing.

**(@) Disk Command:** This option gives you direct access to the disk drive without the headache of using the OPEN statement. All standard disk commands are available, **{including the ability to change partitions}**. This option acts as any other standard DOS wedge. There is no need to type the OPEN 15,8,15 portion of the command. Simply type in the command desired at the flashing cursor. For example, to initialize any diskette in the current drive, just type in **IO**. **{To initialize a partition or sub-partition, use the / command. As an example, let's say you have a partition on the disk called 'PART 1'. First, select the DISK command option from the menu. You'll then be prompted with "Command?". At this point type in /PART 1 and press RETURN. You have now initialized the partition called 'PART 1'. Any disk access now concerns itself solely with that partition. To return to the root directory, simply type in / at the "Command?" prompt and press RETURN. To list the directory, use the D key which is active in this mode}**.

**(R) Re-boot Fastrac 128.** Reboot Main Menu from device #8 (1571/41 drive only).

### **Edit Directory:**

Once a directory has been read into the edit buffer, you may begin work on it by choosing this option. Place the cursor bar over the Edit Directory option and press RETURN. You will find the directory of your work disk in the INPUT buffer on the left hand side of the screen. The options available are:

**Edit Changes:** At the top of the screen, you will see information about the disk and the file currently pointed to by the flashing arrows in the Input Buffer. Use the **U/D Cursor** to move the arrows to the filename you wish to edit. Now press the E key for Edit and type in your changes. The **U/D** or **RETURN** keys will allow you select the following items.

**Current Disk:** You may rename the disk with a name up to 16 characters long. When you have finished, press the **U/D Cursor** key to move to the next selection.

**ID:** A standard disk ID consists of five bytes. The first two are the ID bytes you declared when you formatted the disk. The fourth and fifth bytes are CBM DOS ID bytes. These bytes, plus the space between them, can be replaced with any alphanumeric character (five characters).

**File Type:** This option allows you to change the type of file. Please be aware that you cannot really change a relative file to a program file just by renaming the file type. These changes are only cosmetic and may even prevent some files from loading correctly. Experiment on a work disk if you are unsure. Use the cursor R/L key to toggle the file types available.

**File Name:** This option allows you to rename a file with a name up to 16 characters long. **Please Note:** DO NOT use the characters \*, ?, " in Disk Names or File Names. Using these characters WILL cause problems accessing files that include them.

**Status:** You may Lock or Unlock a file with this selection. When a file is Locked you cannot scratch the file through normal drive commands. **However, if you format the disk, the file will be lost.**

**Left Arrow:** The **Left Arrow** key (not the cursor key) will allow you to abort the **Edit Changes** mode.

### **Buffer Edit Mode:**

The window on the lower left side of the screen is your input buffer (directory reads in) and the window on the lower right of your screen is the output buffer (directory writes out). You may use the cursor U/D key to scroll up and down through the listings on the side pointed to by the arrow. To turn the arrow to the opposite buffer, use the cursor R/L key. With the arrow pointed to the side you wish to work on (both sides can be edited), the available options in this, the ACTIVE buffer, are:

**Home:** Use the Home key to quickly return to the first entry in the file listing.

**Space Bar:** Select the title pointed to by the arrow. Pressing the Spacebar causes one title to be highlighted then moves down one position. You may select one listing, a block of listings, or multiple blocks of listings to be moved to the opposite buffer.

**A:** Toggle ALL listings in the active buffer to highlighted on or off.

**S:** Sort all titles in the active buffer that are currently highlighted. You will be prompted with "are you sure". Answer Yes or No. The sorted block will be placed in the same position it was previously in, except that it will be sorted according to numerical and alphabetical order.

- M:** Move highlighted listings from one buffer to the other. You may use the arrow pointer to select the position to insert the highlighted block(s). Simply position the arrow to the position just below where you want the block(s) inserted, and press M to move it. If the arrow is not positioned to the opposite buffer when the M command is used, the block(s) will move, by default, to the bottom of the stack of the inactive buffer.
- D:** You may insert a Dividing line to separate any or all listings. Simply position the pointer just below the spot you wish to insert the dotted line and hit D. This divider will be cosmetic only, and will not take up any real diskette space other than in the directory.
- W:** Use **W** to re**W**rite the finished directory back to the work diskette. You will be prompted with "Are you sure". When satisfied all is well, prompt Yes and the new directory will be written out. Please note that ALL listings **MUST** be moved to the output buffer in order to re**W**rite the new directory. If not, you will be prompted as such, and be returned to the Edit mode.
- RESTORE:** Use this key to return to the main menu. Your work will not be ruined, as you need only select the **Edit Directory** option again to resume where you left off.

If, before reading a new directory, you feel that your work needs to be altered on the previous disk, even after it has been written out, you may return to make additional changes by using the **Edit Directory** function. You will be returned to the work screen in the same condition you left it. Just make your new changes and re**W**rite the directory again .

## 1571 MFM DISK COPIER

Required Hardware: C128 or C128D, 40 or 80 Column Monitor, 1571 Disk Drive.

Optional Hardware: Commodore RAM Expander, 64K Video RAM (Standard in C128D).

Menu Options:

- (D)** Directory of disk currently in drive defined by Device # option. Will read GCR, MFM and MS-DOS formats .
- (C)** Copy Disk: Begin backup, follow on screen prompts.
- (F)** Format MS-DOS disk. Formats Double Sided, 9 Sector, 360K Standard Format.
- (R)** Re-Boot Fastrac 128. Re-Boot Main menu from device #8 (1571/41 drive only).
- (F1/F2)** Filler Byte. Defaults to \$F6.
- (F3)** MS-DOS Mode: OFF/ON/--. Defaults to inactive (--) when MS-DOS Mode is ON.
- (F5)** Track Index: Off/ON.
- (F7)** Device #: Defaults to 8 but may be set to 9, 10, or 11.

To copy most MS-DOS Formats:

- A} Set Filler Byte (Option F1/F2) to \$F6.
- B} Set MS-DOS Mode (Option F3) to ON.
- C} Set up device # and begin **(C)**opy Procedure.

The copier will attempt to analyze and copy your disk if possible. Follow on screen prompts.

To copy most CPM Formats:

- A} Set Filler Byte (Option F1/F2) to \$E5 unless correct filler byte is known.
- B} Set MS-DOS mode (Option F3) to OFF.
- C} Set Track Index ( Option F5) to OFF.
- D} Set up Device # and begin **(C)**opy Procedure.

The copier will attempt to analyze and copy your disk if possible. Follow on screen prompts. If Copy fails then retry, but this time set the Track Index Option ( F5 ) to ON.

## 1581 FAST DATA COPIERS

### **SINGLE DRIVE COPIER**

Required Hardware: C128 or C128D, 40 or 80 Column Monitor, 1581 Disk Drive.

Optional Hardware: Commodore RAM Expander, 64K video RAM (Standard in C128D).

Menu Options:

- (D)** Directory of disk currently in drive defined by Device # option.
- (C)** Copy Disk: Begin backup, follow on screen prompts.
- (R)** Re-Boot Fastrac 128. Re-boot Main Menu from device #8 (1571/41 drive only).
- (F1)** Write Verify: Defaults to ON, but may be toggled to OFF. Read Errors will be reported if the Source disk has physical problems . With Verify ON, write errors will occur only when the destination disk is incapable of producing an error free backup. In this case, try another destination disk.
- (F3)** Device #: Defaults to 8 but may be set to 9, 10, or 11.

## **DUAL DRIVE COPIER**

Required Hardware: C128 or C128D, 40 or 80 Column Monitor, 2 - 1581 Disk Drives.

Optional Hardware : Commodore RAM Expander, 64K video RAM (Standard in C128D).

Menu Options:

- (D)** Directory of source disk. SHIFT/D for Directory of destination disk.
- (C)** Copy Disk: Begin Backup, follow on screen prompts.
- (F)** Fix 2<sup>nd</sup> Drive Number. Softwire device number of 2<sup>nd</sup> Drive.
- (R)** Re-Boot Fastrac 128. Re-Boot Main Menu from device #8 (1571/41 drive only).
- (F1)** Write Verify: Defaults to ON, but may be toggled to OFF. Read Errors will be reported if the Source disk has physical problems. With Verify ON, write errors will occur only when the destination disk is incapable of producing an error free backup. In this case, try another destination disk.
- (F3)** Source Device #: Defaults to 8 but may be set to 9, 10, or 11.
- (F5)** Destination Device #: Defaults to 9 but may be set to 8, 10, or 11.
- (F7)** Copy Side(s): Not operational in 1581 mode.
- (T)** Drive Type: Defaults to 1571 but may be toggled to 1541 or 1581. See documentation elsewhere in this manual for those drives.

## LIMITED WARRANTY

If at any time within 90 days of purchase, the Fastrac 128 diskette becomes defective, you may call (206 ) 695-9648 for a Replacement Authorization Number. This RA# must appear on the outside of the package containing the diskette being returned. We will replace your defective original diskette. We will expect **YOU TO BE A REGISTERED OWNER OF FASTRAC 128. NO EXCEPTIONS.** Replacements will be given at no charge, upon receipt of your defective diskette, postage paid.

## FASTRAC 128

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Concept and Design by: Les Lawrence  
Tech Support: John Mijo  
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