

SUPER DISK UTILITY



PETROCCI FREELANCE ASSOCIATES

651 N. Haughton Rd
Tucson, AZ 85748
602-296-1041

COLOR COMPUTER

TABLE OF CONTENTS

LOADING INSTRUCTIONS.....	1
CATALOG DISK FILES.....	1
CREATE NEW CATALOG.....	2
DELETE FROM CATALOG.....	2
ADD TO CATALOG.....	3
SORT CATALOG.....	3
PRINT CATALOG.....	4
DISK MANAGER.....	4
DATE DISK FILES.....	4
SUPER DIRECTORY.....	5
PURGE FILES.....	5
COPY BY FILE.....	5
DISKZAP.....	6
COPY DISK SECTORS.....	6
CONVERT GRANULE #.....	6
DISPLAY DISK SECTORS.....	6
DISPLAY FILE SECTORS.....	7
VERIFY DISK SECTORS.....	7
ZERO DISK SECTORS.....	7
MOVE DISK SECTORS.....	7
ALLOCATION TABLE CHECK.....	7
DIRECTORY SORT.....	8
TRACK FORMATTER.....	9
DISKZAP 40 (ACCESSES 40 TRACKS)	
COPY DISK SECTORS.....	9
SAVE DIRECTORY.....	10
RESTORE DIRECTORY.....	10

SUPER DISK UTILITY
BY BRYAN WOODRUFF

THIS PROGRAM BELONGS TO PETROCCI FREELANCE ASSOCIATES. IT IS CONSIDERED A TRADE SECRET AND IS NOT TO BE DIVULGED OR USED BY PARTIES WHO HAVE NOT RECEIVED WRITTEN AUTHORIZATION FROM THE OWNER.

COPYRIGHT 1983 PETROCCI FREELANCE ASSOCIATES. ALL RIGHTS RESERVED.

Program Description

SUPER DISK UTILITY is a tool to aid the experienced as well as the novice programmer. It contains many features for different purposes including: DISK ZAP, CATALOG OF DISK FILES, SUPER DIRECTORY, FILE DATING, PURGING FILES, DISK DIRECTORY SORT, and COPY BY FILE.

SUPER DISK UTILITY was written on a TRS-80 32K Disk Extended Color Computer (1.0). (Some features may require a printer.)

Loading Instructions

Type PCLEAR1:RUN"SUPER" ENTER

The title screen will appear, press any key to enter the main menu.

Program Operation

Each feature can be accessed by a three letter command entered at the prompt after the menu. The program is broken down into four sections:

- 1) Disk Catalog
- 2) Disk Manager System
- 3) Disk Zap
- 4) Directory Sort

SECTION ONE

1.0 The first section of the program is for CATALOG OF DISK FILES found in the CATALOG sub menu. After selection of the CATALOG function you will be prompted to insert SUPER DISK UTILITY into the default drive. The CATALOG sub menu will be loaded and automatically run. CATALOG OF DISK FILES will print a complete listing of all files read in from disk. The catalog can

be sorted in one of three ways: 1) Filename, 2) Extension, or 3) Disk Name. The sorting order continues by Filename, Extension, File Type, File Format, and Disk Name. Upon entering the sub menu a list of choices will be displayed. These are designed to create and manipulate the catalog file.

1.1 CRT - CREATE NEW CATALOG: this routine will take the input from the disks and store them in a catalog file.

DISKETTE INFORMATION INPUT

Make sure that each disk that is to be input into the catalog is error free so that it will not cause an I/O error when being read. If an I/O error occurs when reading a disk type GOTO 20 ENTER . This will take you back to the prompt and will be ready for more input.

You will be prompted for the DISK CODE. If you press ENTER without entering a DISK CODE and there are no catalog entries you will be returned to the sub menu. Enter a unique code for the disk (that is 10 characters or less) so that you will be able to recognize it later. Insert the disk into the disk drive and press enter. The program will read the information from the disk and return to the prompt. When you have completed entering all of the disks that are to be in the catalog just press ENTER . If the number of entries reaches the maximum (800) the program will continue automatically.

During input of the catalog information the computer may seem to lock up. This happens when BASIC does a string garbage deletion routine when a lot of strings are stored in memory. If this become bothersome save the current catalog and use the ADD command.

INFORMATION STORAGE

Next you will be prompted for the filename of the catalog to be saved. Do not include the extension. Example: CAT #1 would be sufficient. Make sure to choose a filename that doesn't already exist. If you accidentally choose a filename that already exists you will be prompted for a new filename.

The catalog will be saved to disk on the selected current drive and you will be returned to the catalog sub menu.

1.2 DEL - DELETE INFO IN CATALOG: this routine will

read in a catalog by records, check the DISK CODE and if it is the same as input will delete the record.

After selection of this function you will be prompted to insert SUPER DISK UTILITY into the default drive and press enter. The deletion subroutine will be loaded and automatically run.

You will be prompted for the OLD CATALOG filename to be input and the NEW CATALOG filename to be output. Be sure that you don't include an extension. Also be sure that the input filename is not the same as the output filename and that the output filename does not already exist. If nothing is entered for the input file you will be returned to the catalog sub menu. Next you will be prompted for the source drive and the destination drive. Also you will be asked for the DISK CODE. The DISK CODE entered will be compared to all of the DISK CODES of records within the catalog and if a match is found it will delete the record. The new catalog will be stored in the output file on the destination drive. The input file will be left untouched. Matches with the DISK CODE will depend on the length of the input DISK CODE. EXAMPLE: an input of "CC" will delete records with the disk codes of CC,CCA,CCA#1. If you wish to only delete records with the disk codes of "CC" enter "CC " for the input DISK CODE. Make sure the extra space is following the "CC".

1.3 ADD - ADD INFO TO CATALOG: will add information to the specified catalog.

You will be prompted for the CATALOG filename. Make sure that you don't include an extension. The file will be read in from the selected current drive. Since the files are random access it is not necessary to load in the entire catalog and then add to it. The new information can be added directly to the old file. This makes the input much quicker when 600 or so entries are currently in the catalog. Refer to 1.1 for instructions on information input.

1.4 SRT - SORT CATALOG: will sort the specified catalog.

After selection of this function you will be prompted to insert SUPER DISK UTILITY into the default drive and press enter. The sort subroutine will be loaded and automatically run.

You will be prompted for the CATALOG filename and then asked how you want the file sorted. After both have been completed you will be prompted to insert the data

disk. The catalog will be read in, sorted, and written back to disk as a sorted file. Since the input file is left untouched it is possible to make all three sorts from the same catalog file. SUPER DISK UTILITY uses a machine language sorting routine for speed. It can sort 800 entries in approximately 10 seconds. To exit the sorting routine press enter at the prompt for the filename and you will be taken back to the catalog sub menu.

1.5 PRT - PRINT CATALOG: will print the specified sorted catalog.

After selection of this function you will be prompted to insert SUPER DISK UTILITY into the default drive and press enter. The printing subroutine will be loaded and automatically run.

You will be prompted for the SORTED CATALOG filename and the way that the file was sorted. Entering a null string for the filename will take you back to the catalog sub menu. Also you will be prompted to insert the data disk and position the paper. The routine will read the file and print it. Paging is automatically done by linefeeds. At the end of the catalog will be a line telling how many files are in the catalog. You will then be asked if you want another listing. Answering yes to this question will make a duplicate listing. If no is answered you will taken to the beginning of the print routine to either return to the catalog sub menu or make a different print out.

SECTION TWO

2.0 The second section of the program is the Disk Manager found in the main menu. The Disk Manager consists of: DATE DISK FILES, SUPER DIRECTORY, PURGE FILES, and COPY BY FILE.

2.1 DATE DISK FILES: will date any file not previously dated by SUPER DISK UTILITY.

Insert the disk into the selected drive and select DATE DISK FILES. After the directory is read in and the files are dated, you will be returned to the menu. The dates will be invisible to the BASIC 'DIR' command but will be seen by SUPER DIRECTORY. DATES can be erased by re-SAVEing a program or by renaming a program. Be sure to enter the correct date in the correct form. DATE DISK FILES will not DATE a previously dated file - the only way to change it is by renaming the file or by

using DISKZAP.

2.2 SUPER DIRECTORY: will print the filename, extension, number of granules, starting granule, date and STARTing, ENDing, and EXECuting addresses. (If a machine language file.)

Insert the disk into the selected drive and select SUPER DIRECTORY. You will be asked if you want a hard copy. If you answer 'YES' then you will be asked for the DISK NAME. Ready the printer and enter the DISK NAME. The directory will be read and printed to the screen. If you did not select a hardcopy the program will wait for a keypress after every file. Press any key to continue. After the entire directory has been listed you will be returned to the main menu. If you selected a hardcopy the program will print the file names continuously and then return to the menu.

2.3 PURGE FILES: will read in the directory from the selected drive and ask one by one if you wish to KILL the file.

Insert the disk into the selected drive and select PURGE FILES. After the last file has been completed you will be returned to the menu.

2.4 COPY BY FILE: will backup a disk by file extensions.

You will be prompted for the SOURCE and DESTINATION drives. Enter the values for the drives respectively. If you have only one drive enter '0' and '0'. Insert the disks in their correct drives. You will then be prompted for the extension. Enter the extension of the files that you wish to copy, if you wish to backup the entire disk enter 'ALL'. At each file you will be prompted on if you want to copy it or not. This will not happen with a complete backup ('ALL'). COPY BY FILE does NOT check to see how much disk space is left on the destination disk or what the length of a file is on the source disk. When copying files be sure that the destination disk has enough free space for the files that you wish to copy. If you run into a '?DF ERROR' (Disk Full) just type RUN and you will be taken back to the menu.

SECTION THREE

3.0 The third section of the program is the DISK ZAP. To access DISK ZAP enter 'ZAP' at the prompt after the MAIN MENU. Upon selection of DISK ZAP, a menu

consisting of the following eight possible options will be shown on the screen.

3.1 COPY DISK SECTORS: selection of this option also requires you to input the track and sector numbers of the SOURCE disk to be copied. Press ENTER after you have entered the track and sector and you will be prompted for the sector count. Sector count is the number of the sectors that you wish to copy. The TRACK # * 18 + SECTOR #, + the SECTOR COUNT cannot exceed 631. If it does you will be returned to the DISK ZAP menu and an error message will be displayed on the bottom. You will then be prompted for the SOURCE drive and the DESTINATION drive, if you have only one drive enter '0' and '0' respectively. Insert the disks into their correct drives and enter values for the SOURCE and DESTINATION drives. The copy procedure will begin and you will be returned to the DISK ZAP menu.

3.2 CONVERT GRANULE NUMBER: will prompt you for the granule number you wish to convert and return to the menu. TRACK and SECTOR numbers will be displayed on the bottom of the screen.

3.3a DISPLAY DISK SECTORS: Upon selection of this option you will be asked the TRACK and SECTOR numbers that you wish to display. The sector will be displayed on the screen from the selected drive (see below for example printout and following page for explanation).

```
T 6126 F15F 20F0 0000 !&_ . ''
R 0000 0000 0000 0000 ''''''
K 0000 0010 AE8D 00F4 ''F..'.
  1F21 8D61 1F12 EC8D !.!r..
2 00E6 31AB AE8D 00E2 '.1....'.
0 8D53 EC8D 00DA 308B .S..'.0.
  8D5C C1FF 2702 8D25 .\..'.b.%.
S AE8D 00D0 AC8D 00CE ..'....'.
E 2510 AE8D 00C4 3001 %F..'.0a
C AF8D 00BE AF8D 00BC ..'....'.
  20B7 3001 AF8D 00B4 .0a..'.
1 20B9 3517 3932 7BC6 .5w92;.
5 04A6 85A7 E55A 2AF9 d....Z*.
  C604 A6A5 A785 5A2A .d....Z*
  F9C6 04A6 E5A7 A55A ..d....Z
B 2AF9 3265 3934 101F *.2%94F
```


Field #1: Displays the TRACK and SECTOR numbers, below the track and sector numbers is a letter ("A" or "B") to inform you which part of the sector you are in. Since the screen is not large enough to handle 256 bytes in this format, the sector has been broken up into 128 byte parts.

Field #2: This consists of 4 pairs of columns that contain the sector data (in HEX), and may be modified by typing over the existing code that is presently highlighted by the flashing cursor (See MODIFYING INSTRUCTIONS).

Field #3: This is an ASCII representation of the printable ASCII bytes contained in Field #2.

3.3b MODIFYING INSTRUCTIONS: When in the DISPLAY DISK SECTORS SECTION you are continuously in a "MODIFY MODE". The cursor may be moved to any data byte on the screen by using the UP, DOWN, RIGHT, and LEFT arrows. Holding down an arrow key will cause the cursor to continuously move in the direction of the arrow until released. Once the cursor is on the byte that is to be modified, type over the existing byte and the changes are automatically updated to both FIELD #2 and FIELD #3. Upon completion of the desired changes, push ENTER and the sector (the modified half sector and its accompanying half sector) will be saved to disk. To end modifying press BREAK and you will be returned to the menu.

3.3c DISPLAY DISK SECTOR

*** COMMAND LIST ***

(-)	- move back one half sector
(;)	- move forward one half sector
(ENTER)	- save contents to disk
(BREAK)	- end, return to main menu
(CLEAR)	- re-read current sector
(P)	- print half sector to printer
UP arrow	- move up one line
DOWN arrow	- move down one line
RIGHT arrow	- move right one half byte
LEFT arrow	- move left one half byte
SHIFT-LEFT arrow	- move to far left of line
SHIFT-RIGHT arrow	- move to far right of line
SHIFT-DOWN arrow	- move to bottom line
SHIFT-UP arrow	- move to top line
(>)	- increment current byte by one
(<)	- decrement current byte by one
(0-9) & (A-F)	- legal character entry for modify mode (HEX input)

* Any key held will repeat. *

3.4 DISPLAY FILE SECTORS: selection of this routine will require input of the filename that is to be displayed. Press ENTER and you will be asked for the RELATIVE SECTOR in file. The RELATIVE SECTOR is the sector count within the program from the starting sector in the first granule to the sector in which you wish to display. To display the first sector enter '0'. The screen format is the same as DISPLAY DISK SECTORS except field #1 which now displays the RELATIVE SECTOR information and the sector part which you are in. Modifications and commands are the same as in DISPLAY DISK SECTORS.

3.5 VERIFY DISK SECTORS: Selection of the option requires that you input the track and sector where you wish to begin verifying and the number of sectors that are to be verified. The routine will then verify each individual sector and advise you of the location of any sectors that it wasn't able to verify.

3.6 ZERO DISK SECTORS: Upon selection of this option you are prompted to input the track and sector where you want to begin zeroing and the number of sectors that are to be zeroed. WARNING: After entering the number of sectors to be zeroed all data on those sectors will be erased with zeroes. NOTE: the selected sectors will be rewritten with all zeroes, but ADDRESS MARKS will remain standard and unchanged.

3.7 MOVE DISK SECTORS: Same as COPY DISK SECTORS but will allow you to copy sectors from one track to another and from disk to disk.

3.8 ALLOCATION TABLE CHECK: will check the allocation table and if it is bad, attempt to repair it.

Insert the disk you wish to check into the selected drive and select ALLOCATION TABLE CHECK. The routine will search for errors in the allocation table. If it finds a file structure error it will prompt you if you wish to purge it. (If you answer no it is impossible to repair the allocation table with the bad file.) If you answer yes the routine will zero the file and continue to attempt to fix the allocation table.

If an error is found (other than the file structure errors) the routine will report the error, repair the allocation table, and return to the menu.

SECTION FOUR

4.0 DIRSORT - will sort the directory and write it back to disk

After selecting DIRSORT from the main menu you will be prompted to insert SUPER DISK UTILITY into the default drive. The DIRSORT routine will be loaded and run automatically.

Insert the disk you wish to sort the directory on into the selected drive and select DIRSORT. The directory will be read in. Sorting can be done in two ways: as an entire entry or into subgroups by extension. Select the desired sort and after the sorting is complete the new directory will be written to disk and you will be returned to the DIRSORT sub menu.

TRACK FORMATTER Version 1.0
BY BRYAN WOODRUFF
COPYRIGHT 1983 PETROCCI FREELANCE ASSOCIATES

Program Description

TRACK FORMATTER will re-format tracks on your crashed disks. TRACK FORMATTER can format up to 40 tracks, beginning at any track and ending at any track. Therefore TRACK FORMATTER can format single tracks or format entire disks. (The RADIO SHACK disk drive can access only 37 tracks.)

This version of TRACK FORMATTER can work in both versions of the DISK ROMS. (1.0 or 1.1)

Loading Instructions

Type LOADM"FORMATTR" ENTER

If you have a RADIO SHACK disk drive that can only access 37 tracks you may want to modify the program so it will error check for input track numbers above track 37. If you wish to do so type POKE &H4003,XX ENTER where XX equals the value of the highest track number you want to access minus one. You may also want to save this new version by typing: SAVEM"FILENAME",&H4000,&H4458,&H4004 ENTER where FILENAME is your new filename for the program.

Next type EXEC ENTER and the program will begin.

Program Operation

After the program execution begins the title will appear and you will be prompted for the STARTING TRACK number. Input format is in two digit form. EXAMPLE: STARTING TRACK 1 would be "01". ENTER is not necessary to continue. Pressing BREAK at any time during the input prompts will return you to BASIC. Next you will be prompted for the ENDING TRACK number. Input for the ENDING TRACK is in two digit form. Make sure your input is greater than or equal to the STARTING TRACK. If you input a value less than the STARTING TRACK the program will restart. If you wish to only format one track input values for the STARTING TRACK

and the ENDING TRACK should be the same.

Next you will be prompted for the SECTOR SKIP FACTOR. This too is in two digit format. Input should be from 00 to 16. If the disk you wish to format has been formatted by BASIC enter 04. For other skip factor formats refer to the COLOR COMPUTER DISK OWNERS MANUAL page 59.

After you have entered the skip factor you will be prompted for the drive number. Input is in single digit format. Enter a value (0 to 3) of the drive you wish to use to format with. Next you will be prompted to press any key to continue. Insert the disk into the selected drive and press any key to begin. If you wish to restart press BREAK and the program will be restarted.

Next the screen will clear and the track it is formatting will be displayed in the middle of the screen. When the ending track is reached the program will verify all of the tracks that were written. If at any time during the formatting an error is found you will be taken back to BASIC and an I/O error message will be displayed. To restart type EXEC ENTER. If no error is found the program will restart automatically.

DISKZAP-40 VERSION 1.0
BY BRYAN WOODRUFF
COPYRIGHT 1983 PETROCCI FREELANCE ASSOCIATES

Program Description

DISKZAP-40 will access up to 40 tracks, copy sectors from track to track and from disk to disk. DISKZAP-40 will also copy the directory track up to track 35 to where BASIC can't get to it.

This version of DISKZAP-40 can work in both version of the DISK ROMS. (1.0 or 1.1)

Loading Instructions

Type LOADM"DISK40" ENTER

If you have a RADIO] SHACK disk drive that can only access 37 tracks you may want to modify the program so it will error check for input track numbers above track 37. If you wish to do so type POKE &H4000,XX ENTER where XX equals the value of the highest track number you want to access minus one. You may also want to save this new version by typing: SAVEM"FILENAME",&H4000,&H4634,&H4008 ENTER where FILENAME is your new filename for the program.

Next type EXEC ENTER and the program will begin.

Program Operation

After the program execution begins the title will appear and you will be prompted for one of four items. Description of these items follows.

1. COPY DISK SECTORS

After selection of this item you will be prompted for the SOURCE track and sector numbers. Input is in two digit format. Pressing BREAK at any time during the input will take you back to the menu. ENTER is not required to continue. Next you will be prompted for DESTINATION track and sector numbers. Again input is two digit format. You will also be prompted for the

sector count. The sector count is how many sectors that you want to copy. Make sure that the sector count + (the highest track number * 18) + the sector number does not exceed ((the highest track number + 1) * 18) + 1) if it does you will be informed of an out of range error and returned to the beginning of the program. You will then be prompted for SOURCE and DESTINATION drive numbers. Input is in single digit format. If you have one drive enter 0 and 0. Insert the disks in the correct drives and respond by pressing any key. The copy procedure will begin. If no error is found the program will continue. If an error is found it will be displayed and you will be return to the menu.

2. SAVE DIRECTORY

Selection of this item will require that you input the drive number of the disk that you wish to protect. Make sure that track 35 is formatted. The program will copy the directory to track 35. If an error occurs it will be displayed and you will be returned to the menu. If no error occurs you will be returned to the menu and the directory will be saved and protected from BASIC.

3. RESTORE DIRECTORY

Selection of this item will require that you input the drive number of the disk that you wish to restore. Make sure that track 35 contains a copied directory. The program will copy track 35 to the directory. If an error occurs it will be displayed and you will be returned to the menu. If no error occurs you will be returned to the menu and the directory will restored.

4. END

Selection of this item will return you to BASIC.

END USER AGREEMENT

BY ACCEPTING A COPY OF _____ (disk, manual and accompanying information sheets, together hereinafter called the "Program"), separately or as part of a computer system or partial system, the Recipient implicitly agrees to all provisions of this Agreement.

After the completed Registration Form has been return to PETROCCI FREELANCE ASSOCIATES, the Recipient is entitled to receive announcements of updates and other information pertinent to changes and revisions in existing program.

It is agreed that the Recipient owns the Program floppy disk and user's manual but that PETROCCI FREELANCE ASSOCIATES retains ownership of the information on the disk and in the manual. Recipient agrees not to copy, reproduce instructions, code or technical description of the Program. Recipient has the right to use the copyrighted information for personal and one in-business use on one only machine forever.

Recipient agrees that the proprietary information of the program is privileged and amounts to a trade secret and that he will take reasonable care not to disclose such information to any third parties nor will he transfer Program for consideration or otherwise to any third party.

PETROCCI FREELANCE ASSOCIATES is not liable for any loss caused by use or malfunction of Program. PETROCCI FREELANCE ASSOCIATES believes that Program is a fully functioning program. Should any question arise as to its use or performance, PETROCCI FREELANCE ASSOCIATES welcomes inquiries from Recipient: Petrocci Freelance Associates, 651 North Houghton Road, Tucson, Arizona 85710.