

MULTI-DISK CATALOG



MULTI-DISK CATALOG III

MDC III is a very fast, machine-language database program designed specifically for keeping track of the contents of your APPLE diskette library. MDC III requires only seconds to read FILENAMES, FILETYPES, FILESIZES, number of FREE SECTORS remaining on diskette, and actual VOLUME NUMBER from each of your diskettes. Both sides of a diskette can be loaded and assigned to the same DISK ID#. MDC III supports use of a two-character CLASSIFICATION field that can be used to group games, utilities, and other types of related files together. TITLING is supported to allow cataloging of PASCAL, FORTRAN, and CP/M diskettes. MDC III supports a fast Shell-Metzner sort on any of the five database fields. A unique "LIST MASK" provides a powerful search capability for interrogating the database for specific information. A "FLIP DOS" command allows MDC III to read directories from DOS 3.1, 3.2, and 3.3 disks and to store the resulting database on either a 13 or 16 sector diskette.

Hardware: APPLE II or APPLE II PLUS

One or two disk drives

Memory: 48K

Language: 6502 machine language DOS: 3.1, 3.2, 3.2.1, or 3.3

Includes: Diskette & User Manual

Price: \$25.00



APPLE is a registered trademark of APPLE Computer Company

III COLSTAD BEIN-INDE

MDC INI is a very fast, machine-language datahase program designed apparaity for keeping reach of the contents of your AFFER apparaity for keeping reach of the contents of your AFFER SECTORS intents, MDC IVI requires only scooned to reach SILERAMES, FILERYPES, FILERIES, mumber of FARE SECTORS teaching on dispatch and actual Youther Nomes from each of your dispatchs. Sorth sides of a dispatch of the same of the

Mardware: APPLE II or APPLE II Stide One or two disk drives Memory: 48K Language: 6502 medhine language 2008: 3.1, 3.2, 3.2.1, or 3.1 Indiades: Diskette & User Manual

Sensible Software

COPYRIGHT c 1981 by SENSIBLE SOFTWARE, INC. All Rights Reserved

TABLE OF CONTENTS

INTRODUCTION												10												1
COMMANDS																								1
ESCAPE TO MENU																								ī
ADD/REPLACE DISK (ID	#)		TI						1	10	d.	a b	12	1.6	12	100		0.0	1.0	Ď.	1	ī
2ND SIDE OF DISK .																								ī
CLASSIFY NAMES																								2
DELETE DISK (ID#)							Ī	·	·	·	•	Ċ	•	•	•	•	•	•	•	•	•	•	2
EXIT																								2
FLIP DOS VERSIONS .																								2
GET DATABASE (#)													:											2
LIST (W/SEARCH MASK)													:											3
NEW DATABASE																								3
ORDER NAMES (&PACK D																								3
PR# (#)				,,,		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	3
QUIET THE SORT NOISE													:											1
SAVE DATABASE (#																								7
TITLE DISK (ID#)	-'	•	•	•	•	•	•	•	•	•	•	•	•	,	•	•	•	•	•	•	•	•	•	4
THE SEARCH MASK CONCEPT													:											•
PRINTER INTERFACE CUSTOMIZ																								5
MODIFIED PRINTER ROUT			N																					′
				•									•											8
																								-
ACCESS TO MF FILES FROM BA																								12
THE "MENU" PAGE																							•	15
DISCLAIMER																								15
DISK REPLACEMENT/UPDATE PO	LI	CY								•				•	•				•		•			15

INTRODUCTION

MULTI-DISK CATALOG III is a fast, machine-language program that reads catalogs on 13 and 16 sector DOS disks and stores the filenames from these catalogs into a database in RAM memory. Each RAM database can hold up to 950 filenames and can be stored off-line as a numbered "master" file (MFl to MF9). MDC III can be used to track an unlimited number of filenames that are broken into "groups" of 950 names.

One of the major benefits that MDC III offers is the ability to rapidly locate files on any version DOS diskette. An additional feature is the ability to identify duplicate files that are wasting valuable disk space.

COMMANDS

O ESCAPE TO MENU

The ESCape or the CTRL/C keys can be used to cancel all commands in MDC III except the SEARCH MASK.

o ADD/REPLACE DISK (ID#)

This command is used to read filenames from the user's disk into the RAM database. All of the filenames from one side of a disk will be assigned to the specified DISK ID number.

Note: This command first DELETES any filenames from the RAM database that were already assigned to the specified DISK ID number. However, MDC III will remember the old "classification"'s from the deleted files and will copy them to the new files being loaded.

Note: DISK ID numbers do not have to match disk volume numbers. It is suggested that the user apply a small, gummed label to the disk to show the DISK ID number that he has chosen.

Note: DISK ID numbers do not have to be consecutive. However, storing disks by sequential DISK ID number will make it easier to physically locate disks later.

o 2ND SIDE OF DISK

This command allows the user to assign the filenames from the back side of a disk to the same DISK ID number that was used for the front side of the disk. This command automatically uses the last DISK ID number entered for the add/replace command.

Note: Do not use this command if you want to be able to later search for filenames on specific sides of disks -- use a different DISK ID number for the back side (for example, odd numbers for fronts, even for backs).

o CLASSIFY NAMES

This command lets you assign or change the 2 letter "classification" code for filenames in the RAM database. This command uses the "search mask" (explained below) to select filenames to be classified. A menu of suggested classifications will be displayed to assist you in classifying your files. This internal menu is intended to serve only as a guideline, the user can use any 2 letter codes of his own choice for classifying files.

Note: The built-in "guideline" menu cannot be changed by the user.

o DELETE DISK (ID# ___)

This command removes all filenames with the corresponding DISK ID number from the RAM database.

Note: Deleted names don't completely go away until the RAM database is sorted.

o EXIT

This command is equivalent to a PR#6 command except that the user is given an opportunity to swap disks before the new disk is "boot"'ed.

o FLIP DOS VERSIONS

This command toggles between 13-sector DOS (DOS 3.1, 3.2, & 3.2.1) and 16-sector DOS (DOS 3.3). The present setting is always shown in the upper right-hand corner of the screen.

Note: The proper DOS must be selected prior to any disk activity or else an "I/O ERROR" will result.

O GET DATABASE (# ___)

This command will load a database from disk back into RAM memory (assuming that the database has already been "saved"). This command will first display a catalog to remind the user what master file number ("MF 1" to "MF 9") was used to store the database. The user will then be prompted for the number portion of the master file name (for example, load "MF 1" by typing the number "l").

o LIST (W/SEARCH MASK)

This command lists the filenames in the RAM database in a columnar format. The search mask (explained below) can be used to limit the display to specified filenames.

Note: Use the LIST command to "find" files.

Note: The paddle controller can be used to control the speed of the listing.

Note: Press any key during the listing to "pause". Press a key again to "resume".

Note: ESCape or CTRL/C can be used to abort the listing.

O NEW DATABASE

This command deletes all names from the RAM database.

O ORDER NAMES (&PACK DATABASE)

This command lets you select one, two, or three of the five columns from the LIST report to be sorted. A sub-menu showing the names of the five LIST columns will appear, followed by the question "ENTER SORT FIELDS?". Enter the first letters of the name of the LIST columns that you want sorted. For example, if you just want to sort by filename, enter an "F" and then press "RETURN". If you want to sort by filename within DISK ID number, enter "I", then enter "F", and then press "RETURN".

Note: Fields are always sorted in ascending order.

Note: If three LIST columns (or fields) are specified for the sort, you do not have to press "RETURN".

Note: The speaker will be "clicked" whenever two names are swapped during the sorting process.

Note: Sorting removes "deleted" names from the RAM database, giving more room to store new filenames.

O PR# (#)

This command allows you to enable the printer for the next LIST command. Enter a "l" if an APPLE serial card is in slot 1 and the output from the next LIST command will go to the printer.

Note: This command must be issued before each LIST that is to be printed. A PR#0 is automatically issued at the end of each LIST!

MULTI-DISK CATALOG

O QUIET THE SORT NOISE

This command removes the speaker "clicking" during the sort process!

o save database (# ___)

This command will save a RAM database to a binary disk file. This command will first display a catalog to remind the user what master file numbers ("MF 1" to "MF 9") have already been used. The user will then be prompted for the number portion of the master file name (for example, save "MF 1" by typing the number "1"). Most users (having less than 950 files) will only need to specify "MF 1" for all of their work.

o TITLE DISK (ID#)

This command allows the user to add a short descriptive title to a DISK ID number. This command is independent of all other commands except "DELETE DISK ID" and "NEW DATABASE". It is not necessary to load any filenames or to read any disks to be able to use this command, thus this command can be used to add titles to help locate non-DOS disks (PASCAL, FORTRAN, PILOT, CP/M, etc.)

Note: Only one title is allowed per DISK ID number.

THE SEARCH MASK CONCEPT

MDC III uses a "mask" instead of the "traditional" sub-string search. The substring search is most useful when you are only searching one field. For example, it would be handy to find all filenames with "APPLE" in them in the FILENAME field. The problem starts getting more complex when you are dealing with 5 fields (as in MDC III) and you want to be able to ask questions about any combination of the five fields. For example, find all filenames that have "APPLE" in the FILENAME field and that have "B" in the TYPE field and that are larger than 100 sectors in the SIZE field.

The search "mask" provides an easy way to ask questions about any combination of the five database fields. The "mask" is the line that you enter in response to the "ENTER SEARCH MASK" question. Any non-blank characters in the "mask" will be compared against each name in the RAM database. Only the entries in the RAM database that exactly match every non-blank letter in your "mask" are going to be "found".

The key is that the "mask" works column by column.

The disadvantage of the "mask" compared to the "sub-string" search is that a substring search for "APPLE" would find both "APPLESOFT" and "MY APPLE" while a mask search for "APPLE" would find only "APPLESOFT".

Examples:

(in the following database:)

T

ID#	CL	<u>T</u>	SIZ	FILENAME
.10		В	.58	MY FILE #1
.80	DU	I	2	FULL DISK CATALOG
110		Α	123	MY FILE
211	DU	I	3	DISK COPY PROGRAM
211	DU	I	8	DISK MAP

ENTER SEARCH MASK ID# CL

? <re< th=""><th>TURN></th><th></th><th></th><th></th></re<>	TURN>			
(wo	uld f	ind:)		
.10		В	.58	MY FILE #1
.80	DU	I	2	FULL DISK CATALOG
110		Α	123	MY FILE
211	DU	I	3	DISK COPY PROGRAM
211	DU	I	8	DISK MAP

SIZ FILENAME

MULTI-DISK CATALOG

ENTER SEARCH MASK

ID# CL T SIZ FILENAME

MY FILE

(would find:)
.10 .. B .58 MY FILE #1
110 .. A 123 MY FILE

ENTER SEARCH MASK

T SIZ FILENAME ID# CL

MY FILE

(would find:)

110 .. A 123 MY FILE

ENTER SEARCH MASK

ID# CL T SIZ FILENAME

? DU

(would find:)

..2 FULL DISK CATALOG .80 DU I

... 3 DISK COPY PROGRAM 211 DU Ι

211 DU ..8 DISK MAP I

ENTER SEARCH MASK

ID# CL T SIZ FILENAME

? 1

(would find:)

.58 MY FILE #1 .10 .. B

110 Α 123 MY FILE

..3 211 DU 211 DU I DISK COPY PROGRAM

DISK MAP ..8

SENSIBLE SOFTWARE, INC.

MULTI-DISK CATALOG

ENTER SEARCH MASK

ID# CL T SIZ FILENAME

?:1

(would find:)
.10 .. B .58 MY FILE #1

The colon (in the above example) is necessary to avoid matching on DISK ID numbers "211" and "110" since they also have a "1" in the second column! The colon only matches on a blank in the corresponding column.

PRINTER INTERFACE CUSTOMIZATION

If you are one of those frugal, hardy souls that invested in a "non-standard" printer interface (such as the game I/O-connector RS-232 driver from the APPLE "red" book), you may still be able to get MDC III to talk to your printer.

If you type a "CTRL/P" instead of a slot number in response to the "PR# ()" question, MDC III will call your print routine with a "JSR \$9200" each time it wants to print a character. The character to be printed will be passed as ASCII in the "A" register with the high-order bit set. It is the responsibility of your printer subroutine to return the "X", "Y", and stack registers the way they were given to you!

Now to make matters a little more complicated, your routine must fit in locations \$9200 to \$9250. Your routine can't just be loaded into location \$9200 directly either, because of the way that MDC III "boots". You must load it into memory locations \$4000-\$4050 prior to "boot"ing MDC III and then MDC III will copy it up to \$9200-\$9250. This can be taken care of with the sample loader program shown below. A sample (very simple) printer driver for the Electronic Systems "dumb" serial I/O board is also shown.

MULTI-DISK CATALOG

MODIFIED PRINTER ROUTINE

	5		ORG	\$9200	
	6		OBJ	\$4000	
	9				; SEND A-REG. TO SER OUT + VIDEO
20F0FD	10		JSR	VIDEO	
0980	11		ORA	80	
C98D	12		CMP	# RETURN	; IF <cr></cr>
D007	13		BNE	SNDCHR	; THEN
A98A	14		LDA	#LNFEED	;DO <cr lf="">!</cr>
201092	15		JSR	SNDCHR	
A98D	16		LDA	#RETURN	
RJUD	17			•	; SEND CHAR CODE FOR ELEC SYS
	18	SNDCHR:			
6E81C0	19	D11201111	ROR	STATUS	;CLEAR TO SEND?
90FB	20		BCC	SNDCHR	
8D82C0	21		STA	SEROUT	;SEND CHAR.
60	22		RTS	98080 .7	aring a world to some class way to
00	23				And the About Service of this billion
	24	VIDEO	EQU	\$FDF0	and It is the court in order to the control of the
	25	RETURN	EQU	\$8D	; <cr></cr>
	26	LNFEED	EQU	\$8A	; <lf></lf>
	27	STATUS	EQU	\$C0B1	or affect that the the book become
	28	SEROUT	EQU	\$C0B2	
		SEROUT	EQU	\$COD2	THE SECOND STATE OF SECOND SECOND
	29	DND-	END		
	30	END=	END		

BSAVE MDC.PRINT, A\$4000, L\$50

(boot a "normal" DOS 3.2 disk and then run the following program on the MDC III disk:)

100 D\$=""

: REM CTRL/D IN QUOTES

200 PRINT D\$; "BLOAD MDC.PRINT,A\$4000"
300 INPUT"INSERT MDC DISK & PRESS RETURN",A\$
400 PRINT D\$; "PR#6"
500 END

SAMPLE SESSION (user responses in boldface)

(insert MDC III disk)

>pr#6

(menu appears showing 0 files loaded)

ENTER COMMAND? n (new database)

(menu appears showing 0 files loaded)

(remove MDC III disk, select one of your DOS 3.2 disks and assign it a disk id \(\frac{1}{4}\), let's use 122 for this example. Place a gummed label on the disk with the number 122 on it, then insert the disk into drive 1)

ENTER COMMAND? a (add disk)

ADD DISK ID #? 122 (your disk id#)

(disk spins momentarily)

(menu appears showing 14 files loaded)

(let's say that you want the files on the back of that disk to be assigned to disk id 123. Remove the disk, add a second gummed label with the number 123 and insert the reverse side into the drive)

ENTER COMMAND? a (add disk)

ADD DISK ID #? 123 (your disk id#)

(disk spins momentarily)

(menu appears showing 31 files loaded)

(select one of your DOS 3.3 disks and assign it a disk id of 47. Place a gummed label with the number 47 on it and place it into drive 1)

ENTER COMMAND? f (flip dos)

(menu appears showing DOS 3.3)

ENTER COMMAND? a (add disk)

ADD DISK ID #? 47 (your disk id#)

(disk spins momentarily)

(menu appears showing 43 files loaded)

SENSIBLE SOFTWARE, INC.

MULTI-DISK CATALOG

(let's say that you have more files on the back of that disk that you also want to assign to disk id# 47. Remove the disk and insert the reverse side)

ENTER COMMAND? 2 (add 2nd side)

(disk spins momentarily)

(menu appears showing 54 files loaded)

(ok, let's save your work so far -- insert a normally initialized disk and continue with this demo. The back side of the MDC disk can be used if a notch is cut in the left side of the disk across from the notch on the right side.)

ENTER COMMAND? s (save database)

(catalog appears, press space bar to continue)

SAVE MASTER FILE #? 1 ("MF 1")

(light flashes in bottom right corner for a moment, then disk whirs for a while. Finally, menu reappears -- you can shut off your APPLE now)

(you return the next day to continue)

(insert MDC III disk)

>pr#6

(menu appears showing 0 files -- insert the disk that you saved the data file "MF 1" onto and continue with the demo.)

ENTER COMMAND? g (get database)

(catalog appears, note the "MF l" file that has the names that you previously saved. Press space bar to continue)

GET MASTER FILE #? 1 ("MF 1")

(disk whirs for a while, then light flashes in lower right corner for a moment. Finally, menu reappears showing 52 files loaded)

(now you want to see what you have already loaded by "listing" the database)

ENTER COMMAND? 1 (list database)

ENTER SEARCH MASK BELOW

ID# CL T SIZ FILENAME

?<return>

(you press the "RETURN" key when the question mark appears so that all of the files in the database will be listed. The names then appear on the screen, press the space-bar to continue) (the menu reappears after you press the space-bar)

(you now want to add a third disk to the database that you are numbering as disk id# 667. Remove the MDC III disk and insert the new disk)

ENTER COMMAND? a (add disk)

ADD DISK ID #? 667 (your disk id)

(the disk whirs a moment, then the menu reappears showing 73 files loaded. At this point, you might want to resave the database as "MF l" with the new information!)

(let's say that you now want to find the file "MY PROGRAM". This is done by "listing" the file as follows:)

ENTER COMMAND? 1 (list database)

ENTER SEARCH MASK

ID# CL T SIZ FILENAME

?

my file

(press the space bar until the cursor is under the "F" of filename and type the filename, then press "RETURN". All of the files in the database whose names start with "my file" will then be listed. The number in the far left column tells you which disk the program is located on. Let's say that the program is on disk 47)

(remove the MDC III disk and insert the disk with the disk id# 47)

ENTER COMMAND? e (exit MDC!)

INSERT BASICS DISK AND PRESS RETURN

(pressing return boots the disk with "my program" and your off and running!)

ACCESS TO MF FILES FROM BASIC

The following Applesoft program listing is presented only as an example of how to access and manipulate the database generated by MDC III. By using this example and your own ingenuity you are no longer limited to the commands offered by MDC III. Printer listings of your diskette library can be formatted specifically to your own needs. We realize that access to the MF files can be accomplished in a more sophisticated manner but offer this listing as an example only.

```
REM [ MDC TWEAKER.APLUS ]
10
20
     REM
           (C) 1981 - SENSIBLE SOFTWARE
30
     REM
     REM ALL RIGHTS RESERVED
40
50
     REM
     REM
70
          allocate memory
     REM
80
           NOTE: following memory
90
     REM
     REM limits must not be exceeded
100
     REM (this prevents the use of RAM
110
120
     REM applesoft.)
     REM
130
     INC = 32:FIRST = 8448: REM $2100
140
     PRINT CHR$ (4) "MAXFILES 1"
150
     HIMEM: FIRST
160
170
     REM
          select & load a master file
190
     REM
200
     REM
     INPUT "INSERT MDC DATA DISK";A$
PRINT CHR$ (4) "MON CIO"
PRINT CHR$ (4) "CATALOG,D1"
210
220
230
240
     PRINT
     INPUT "LOAD MASTER FILE (MF #)? ";MF
250
     PRINT CHR$ (4) "BLOAD MF "MF", A"FIRST
260
     REM = (A$ ... +L$ ...)
265
     LAST = FIRST + PEEK (43616) + 256 * PEEK (43617)
270
280
     REM
290
     REM
300
     REM merge with a 2nd "mf #"?
310
     REM
320
     PRINT
     INPUT "MERGE WITH MF# (0=NONE)? ";M2
330
340
     IF NOT (M2) GOTO 370
     PRINT CHR$ (4) "BLOAD MF "M2", A"LAST
350
     REM = (A$ ... + L$ ...)
355
     LAST = LAST + PEEK (43616) + 256 * PEEK (43617)
360
370
     REM ::
380
     REM
```

```
390
                   REM
                  REM convert the "inverse" ascii
REM to "normal" applesoft ascii
     400 REM convert the "inverse" ascii
     410
     420
     430
                    REM CONVERT TO POSITIVE ASCII
                    DEF FN P(B) = B - 128 * INT (B / 128)
     440
                   REM REMOVE CONTROL CHARACTERS
REM IFB<$20THENB=B+$40
     450
     460
                  REM IFB<$2/UTHENB=B+$40

DEF FN R(B) = B + 64 * (1 - SGN ( INT (B / 32)))

REM GET "CLEAN" ASCII

DEF FN V(B) = FN R( FN P(B))

REM PEEK "CLEAN" ASCII BYTE

DEF FN A(ADDR) = FN V( PEEK (ADDR))

REM

REM

PEM delete files with proces
     470
     480
     490
     500
     510
     520
     530
                    REM delete files with names
REM that fall outside of a
     540
     550
                   REM specified range?
     560
     570
     580
                   PRINT
     590
                   INPUT "DO YOU WANT TO DELETE FILENAMES OUTSIDE OF A SPECIFIED
                      RANGE (Y/N)?";A$
     600 IF NOT (A$ = "Y") GOTO 790
     620 PRINT "KEEP FILES WHOSE NAMES"
630 PRINT "BEGIN WITH THE LETTERS:"
640 INDIM " BOOM TO BE TO
     640 INPUT " FROM THE LETTERS:"
650 INPUT "THROUGH THE LETTER?"; LAST$
660 I = FIRST:NUM = 1: PRINT: PRINT
670 RFM NTI!!!
     1 - FIRST:NUM = 1: PRINT : PRINT

670 REM NTIL((I > = LAST) OR (ID = 65535))

680 VTAB 23: PRINT "FILE# ";NUM;" ";

690 ID = PEEK (I + 1) + 256 * PEEK (I)

700 CHAR$ = CHR$ (FN A/T + 6)
     700 CHAR$ = CHR$ (FN A(I + 6)): REM 1ST LETTER IN NAME$
710 IF (FIRST$ < = CHAR$ AND CHAR$ < = LAST$) GOTO 760
720 POKE (I + 4),90: REM 'Z'=DELETE FLAG
730 INVERSE
     740
                   PRINT "DELETED"
     750
                   NORMAL
     760 REM ::
770 I = I + INC:NUM = NUM + 1: PRINT
                   IF NOT ((I > = LAST) OR (ID = 65535)) GOTO 670
     780
     790
                   REM ::
800 REM
```

```
810 REM
     REM display the remaining names
REM from RAM memory.
REM
820
830
840
      REM
850 I = FIRST

860 REM UNTIL((I > = LAST) OR (ID = 65535))

870 ID = PEEK (I) + 256 * PEEK (I + 1)

880 CLASS$ = CHR$ (FN A(I + 2)) + CHR$ (FN A(I + 3))
890 TYPE$ = CHR$ (FN A(I + 4))
     IF (TYPE$ = "Z") GOTO 1270
SIZE = PEEK (I + 5)
900
NAMES = ""

930 FOR COLUMN = 6 TO INC - 1

940 NAMES = NAMES + CHR$ ( FN A(I + COLUMN))

950 NEXT COLUMN

960 REM ACE
950 NEXT COLUMN

960 REM ASE

970 IF NOT (ID < 10) GOTO 1000

980 PRINT ";ID;

990 ::: GOTO 1060

1000 IF NOT (ID < 100) GOTO 1030

1010 PRINT ";ID;

1020 ::: GOTO 1060
1020 ::: GOTO 1060
1030 REM ::::::::
 1040 PRINT ID;
1050 REM ::
1040 PRINT ID;

1050 REM ::

1060 REM ::

1070 PRINT " ";CLASS$;

1080 PRINT " ";TYPE$;

1090 PRINT " ";

1100 REM ASE

1110 IF NOT (SIZE = 0) GOTO 1160

1120 INVERSE
 1120 INVERSE
        PRINT "-->";
 1130
        NORMAL
 1140
 1150
         ::: GOTO 1250
        IF NOT (SIZE < 10) GOTO 1190
 1160
 1170 PRINT "
                     ";SIZE;
        ::: GOTO 1250
 1180
 1190 IF NOT (SIZE < 100) GOTO 1220
1200 PRINT ";SIZE;
         ::: GOTO 1250
 1210
         REM ::::::::
 1220
 1230
        PRINT SIZE;
        PRINT " "; NAME$
 1260
         I = I + INC
  1280
         IF NOT ((I > = LAST) OR (ID = 65535)) GOTO 860
  1290
         REM
  1300
         REM
  1310
         REM save modified master file
  1320
         REM
  1330
        PRINT CHR$ (4) "BSAVE NEW MF, A"FIRST", L"LAST - FIRST
  1340
  1350
         PRINT
         PRINT CHR$ (4) "CATALOG"
  1360
  1370 END
```

THE "MENU" PAGE

MULTI-DISK CATALOG 653 NAMES/DOS3.3 COPYRIGHT (C) 1980 ALL RIGHTS RESERVED-SENSIBLE SOFTWAREyour name here

ESCAPE TO MENU
ADD/REPLACE DISK
2ND SIDE OF DISK
CLASSIFY NAMES
DELETE DISK
EXIT
FLIP DOS VERSION
GET DATABASE
LIST
NEW DATABASE
ORDER NAMES (&PACK DATABASE)
PR\$
QUIET THE SORT NOISE
SAVE DATABASE
TITLE DISK

ENTER 1ST LETTER OF COMMAND ?

DISCLAIMER

Sensible Software, Inc. makes no representations or warranties with respect to the contents hereof and specifically disclaims any implied warranties of merchantibility or fitness for any particular purpose. Further, Sensible Software, Inc. reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation of Sensible Software, Inc. to notify any person or organization of such revisions or changes.

DISK REPLACEMENT/UPDATE POLICY

Some Sensible Software products are non-copyable. In the event that one of these "protected" disks becomes damaged or "worn out", the following policy applies:

Upon receipt of the (remains of the) disk that was originally purchased from Sensible Software and the appropriate fee (see below), Sensible Software will return to the purchaser a disk containing the latest version of the original program product. Sensible Software reserves the right to return the program product on a diskette other than the one originally purchased. If the product is still available for the retail price in effect at the time of the original purchase, the fee for this update/replacement service is \$5.00 to cover postage and handling. If the program product now retails at a higher price, the fee for this update/replacement service is \$2.00 plus the difference between the two retail prices.



6619 Perham Drive West Bloomfield, Michigan 48033 (313) 399-8877