

MICROSPEC

USER'S GUIDE

VIC

DATA MANAGER

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IT IS BEST TO READ THE ENTIRE MANUAL BEFORE YOU BEGIN TO WORK WITH YOUR PROGRAM IN ORDER TO BETTER UNDERSTAND WHAT YOU ARE WORKING WITH AND TO AVOID USING IMPROPERLY PREPARED DISKS. YOU MAY WANT TO DO A FEW SAMPLE ENTRIES BEFORE PREPARING YOUR TRUE DATA BASE.

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I. INTRODUCTION

Welcome to the MicroSpec Ltd. Data Base Manager. This comprehensive package allows you to do most major data management procedures easily without becoming a programming genius or Systems analyst.

A. The DATA MANAGER Description.

This program allows you to define and create your own disk based storage files by answering just a few questions. The program will prepare another diskette, save a copy of itself on it and allow you to add, change or delete records from your diskette. You also have the ability to Browse thru the records, Search the records for particular information based upon your criteria and print a hard copy report on a printer in any sequence with numeric totals if you desire. Each of the functions will be discussed in detail.

B. Hardware Requirements.

Versions of this program are available for each of the following computer configurations:

Commodore VIC-20 with VIC 1540 disk drive.

Commodore VIC-20 with IEEE Interface and any CBM disk drive.

Any Commodore CBM or PET Computer with any Commodore Disk Drive.

Commodore 64 with any VIC or CBM disk drive.

IBM Personal Computer With at least 1 disk drive.

A printer addressed as device # 4 is optional if hardcopy reports are required.

*** A mininum of 8k of free memory is required

to use this program. ***

C. Care of Diskettes

It is important that you treat your diskettes with care. Each diskette can be the product of long hours of effort and input time and therefore represents a substantial investment. Please!!! DO NOT touch the recording surfaces of the diskette. You can introduce dirt and body oil contaminants which can render the files unreadable. DO NOT leave the diskette out of the drive without replacing the paper jacket. DO NOT Place the diskette near any magnetic force as this can completely scramble any recorded information. Please read the diskette covers back for additional information.

D. File Structure.

Your data base file is a true random access file in that any record can be retrieved and displayed directly without having to read any intervening records. The concept of data base, file, record, and field will be discussed in more detail so that you will understand how to design your file structures.

Data Base: The data base or file refers to a collection of records of related or similar information. It is the largest unit of file structure. Your data base will be limited to the capacity of a diskette.

File: See data base

Record: A record is a collection of related information

usually relevant to a specific person, place, or thing such as all the information required to establish one person on a mailing list file would be contained in a single record.

Field: A field is a specific piece of information in any given record. Such as the "NAME" field of a mailing list record would contain the name of the specific individual associated with that record. If we looked at the name fields of this data base we would see the name of all the people stored on this file. A field can be as general or specific in nature as you require and can contain alpha or numeric information. When describing a field as numeric you should be careful to only enter numbers when establishing a record.

E. Designing your files.

Before creating a new data diskette you should sit down and determine the number of fields you will require in each record. In addition, you should decide what the name of each field should be and whether you will be storing numeric information in it. The system will allow either a 600 record limit or a 1200 record limit. If the total number of character positions exceeds 127 minus the number of fields then you should limit your maximum number of records to 600. If it does not then you can specify the 1200 record limit. This will be discussed further in the CREATE chapter.

F. Error Recovery

In the event that you inadvertently break out of the program, or have an error which stops execution you may recover by carefully doing the following. Clear your screen by pressing [Shift] and [CLR/HOME] simultaneously. Then type [GOTO 100] and press return. This will display the main menu and you may continue processing.

The MENU Page

You may start the program by turning on your computer and disk drive and typing "load "*" ,8". This will load the Data Base Manager and display the blinking cursor. Then enter "run" and press RETURN. This will begin execution of the Data Base Manager. The program will then check to see if the disk has a data base description file stored on it and then display the following options:

MicroSpec Data Mgr

Enter Option: *

CReate a File
ADd a Record
DElete a Record
CHange a Record
BRowse thru the File
SEarch the File
PRint the File
EXit the Program

You should enter the first two characters of the option you desire. Any other entry will be ignored. If you make a mistake just enter another character and the prompt will begin again. If you reach a function in error you may return to the Menu by entering 0 or RETURN immediately.

The first time you load the program the only valid options will be to CReate a File or EXit the Program as the program requires a Data Base description file in order to perform the other options. Each of the other options will be discussed in detail in subsequent chapters.

NOTE

It is imperative that you ALWAYS exit the system thru the EXit Function. This function Closes all files and updates the record directory to insure that all information is stored. If you forget to exit correctly you could lose any information that you had just entered.

The CREATE Function

This function must be executed prior to performing any of the other functions available. It is thru this function that you define and describe the the parameters of the data base you are establishing. This option will create a new diskette, build the data file, create the description file and save a copy of the program. The resulting disk will be a stand alone data base with all of the required files and programs necessary for you to manage your information.

If the disk currently in your drive contains description file, a prompt will appear:

"Disk contains data. Erase (y/n)"

You may then return to the menu by pressing "n", place a new diskette in the drive and press "y" or reformat the current diskette.

The next question will be:

"Max # of Records 1=600, 2=1200"

Entering 0 will return you to the main MENU. Entering a 1 will set the maximum number of records to 600 but will allow up to 245 characters of information in any one record. A 2 will set the maximum number of records to 1200 but you may not exceed 119 characters of information in any one record.

"# of Fields"

Enter the number of fields you will require in each record. For instance, a Mailing list data base might require 5, namely Name, Address, City, State and Zip. You should enter the number (up to 9) of fields you will require in each record.

You will then be queried for the name of each field. Again using the mailing list example you would enter Name for field # 1, Address for field # 2, etc.

Finally you will be asked if the entries are correct.

If you respond with "n" the sequence will start over, otherwise a response of "y" will begin formatting and creating your data base diskette.

This process will take a few minutes, so be patient. First the diskette is formatted, then 600 sectors are allocated on the diskette, the dbdesc file is created and finally the program saves itself on the newly created diskette. When this process is completed you will be returned to the MENU with all functions now available.

The ADD Function

This function allows you to add records to your data base. You will be prompted to enter information for each of the required fields. The screen will clear and the following prompt will appear:

"Enter Record #"

Pressing return will find the first available record number and assign that number to the record being created. This should be the preferred method of creating information in your data base. As an alternative you may also specify the exact record number you wish to create. This might be beneficial if the specific record number is pertinent to you. The following caution should be observed however. The system keeps track of the highest record number used at any given time to reduce the amount of scan time when doing the Print, Search, and Browse functions. It knows that there is no valid data after the high record number. Therefore, if you specify a record number of 600 when you only have 30 actual records, the system would have to scan all the intervening records numbers even though they were blank.

You will then be prompted in turn for each of the specific fields information. Due to the screen constraints of the VIC computer we recommend you do not exceed 22 characters in any given field. This constraint does not apply to any of the other computers this program runs on. Remember press RETURN to signify the end of each fields entry.

After completing the records data entry, the following prompt will appear:

"Enter #, 0=Save"

You may edit any field you just entered by pressing the appropriate number or save the record by pressing 0 and RETURN. The record will be written to disk and you will be returned to the Main menu. Remember, you must exit thru the Exit function to insure the bit map is saved and your records are kept.

The DELETE Function

This function allows you to delete any previously stored records and makes that record number and its associated space available to the manager. The screen will clear and the following prompt will appear:

"Enter Record #"

Entering a "0" will return you to the MENU. Other wise enter the record number you wish deleted. The system will verify that the record exists. If it does not a message will be displayed and you will be returned to the MENU. If the record does exist it will be displayed on the screen along with the following prompt:

"Enter delete Code:"

If it is not the correct record press "n" and RETURN and the delete will not occur and you will be returned to the MENU. Else enter "del" and the record will be deleted from the directory and the space will be returned to the system. After the deleteion you will be returned to the MENU.

The CHANGE Function

This function allows you to change or edit any previously stored records. The screen will clear and the following prompt will appear:

"Enter Record #"

Entering a "0" will return you to the MENU. Otherwise enter the record number you wish to change. The system will verify that the record exists. If it does not a message will be displayed and you will be returned to the MENU. If the record does exist it will be displayed on the screen along with the following prompt:

"Enter #, 0=MENU"

If it is not the correct record press "0" and RETURN and the record will be resaved as is and you will be returned to the MENU. Else enter "the number of the field you wish to change. The cursor will appear on the line you wish to change. Enter the correct information being careful to clear any of the remaining data by pressing space over it and press RETURN. This will change the specified field and prompt you again for the field to change. You may change as many fields as you wish or save the record at any time by entering "0".

The BROWSE Function

This function allows you to scan or sequentially review the records in your data base.

"Enter Record #"

Entering a "0" will return you to the MENU. Other wise enter the record number you wish to begin your review with. The system will verify that the record exists. The specified record (or the next available record) will be displayed on the screen along with the following prompt:

"Press RETURN, c=cancel"

Pressing RETURN will display the next available record until there are no others, then you will be returned to the MENU. If you wish to cancel the browse at any time press "c" which will immediately return you to the MENU.

The SEARCH Function

This function allows you to search sequentially thru your data base and display specific records on the screen.

"Enter Field # to Search"

Entering a "0" will return you to the MENU. Otherwise enter the field number you wish to search. The next prompt will be:

"Enter criteria"

You can make your search criteria as general or specific as you like. For instance entering a criteria of "Dal" will find and display all records where the specified field contained Dallas, Dalton, Dalworth, Dall, Dal, etc. Therefore, if you do not know the entire spelling you may enter only the portion you know and the system will locate any record which matches. When the system finds a match the record will be displayed along with the following prompt:

"Press RETURN, c=cancel"

Pressing RETURN will continue the search, displaying the next record which meets your criteria or press "c" to return to the MENU.

The PRINT Function

This function allows you to print a hardcopy report according to your specifications. You may specify the order and limit of your listing along with the number of fields, their position, and whether or not you wish a total for all similar fields in the report. The first prompt will be:

"0=Record Seq, or enter field # to sort on"

Entering a 0 will print your entire file in record number sequence. If you specify a field to sort on you will be asked to enter the low and high limits. You may restrict your listing to a specified set by entering a range here. For instance if you wished only a specified range of records whose zip codes fell between 75000 and 75999 you could establish that range. Or if you wished only those records where the name started with W, you could Specify W for low limit and WZZZ for the high limit. Finally if you wish all records we recommend you enter "0" for the low limit and "ZZZZ" for the high.

"Enter # of Fields to Print"

you can specify which fields from each record you wish printed. You should respond with the number of fields you wish printed. After this response you will be queried with "#,width,Total". You will be asked to give the following information as many times as you specified fields to print in the above query:

refers to the field number you wish printed. You should give the field numbers in the order you wish them to appear on your report.

width refers to the number of spaces you wish this field to take on the report including any space between it and the next field. Remember if you specify a number smaller than the length of some of your data the field will be truncated at the length you specify. Also you should consider the maximum width your printer can accommodate when determining the width as most printers will wrap to the next line when exceeding the line length.

total refers to whether you wish a total accumulated for this field. Enter a 0 if none is required or a 1 if you do wish a total. Again remember any alpha data or non numeric will be treated as a 0 when running totals. It is possible to have an alpha code following a number and still run a total on the numbers in any given field. i.e. (12.45ab would be treated as 12.45, abc would be treated as 0, etc.) The totals will be printed at the end of the report under the corresponding columns.

Note A response would appear as follows; 2,15,0 which means field 2, fifteen characters wide and no totals, while 3,5,1 means field 3, five characters wide with totals. Remember to separate your entries with commas and press return after each set of parameters.

"Print Record # (y/n)"

If you choose print record numbers respond with a "y". The record number will take the first 5 spaces of each line on your report otherwise respond with a "n". When the report is finished press return and you will return to the MENU.

The EXIT Function

This is the only valid exit from this system. If you do not exit thru the EXIT function the possibility exists that you will lose some of your valuable data. This process recreates the "dbdesc" file and updates the record availability map. If this is not done the next time you use the system it will use the last map created.

We hope you enjoy using this program and that it fulfills all of your needs. If you have any questions concerning the use of this package or its functions feel free to contact us at 214/867-1333 between 9am and 5pm central standard time Mon thru Fri.

