



FOR USE WITH <sup>Color</sup>EINSTEIN COLOUR MICRO COMPUTER

**KUMMA**

## HARDWARE REQUIREMENTS

1. Tatung Microcomputer.
2. Any correctly interfaced printer. The Database program will work with or without a printer, so if you do not have a printer but may be getting one in the future you will not have to make any changes. As soon as a suitable printer is correctly connected you may use the print functions.

## USING THE DATABASE PROGRAM

Whenever you wish to use the Database program the procedure is as follows:

- a) Switch on your microcomputer and load Basic.
- b) Insert the Program disc in drive 0/A.
- c) Type RUN "START" and press ENTER.
- d) You will be asked if a printer is connected, if YES press Y if NO press N.
- e) You will then be given the following three options:  
Create a new file ..... 1  
Load an existing file . 2  
End the program ..... 3

Obviously before you can use a file you have to create one, this is done using the SETUP program. Simply press numeric key 1 and the SETUP program will be loaded for you.

If you wish to load an existing file press numeric key 2 and you will be asked if the data disc is in drive 0. This question allows you to change discs. (N.B. You can either store the datafiles on the program disc or you can use any formatted disc.) When the correct disc is in drive 0 press Y, the program will then display all the datafiles on the disc. Type in the name of the file you wish to load and press ENTER. The file will be loaded together with the main program, then the "Main Menu" will be displayed. See pages 17 to 26 on how to use the Main Program.

## THE SETUP PROGRAM

This program will ask you a series of questions. Each question is numbered, so if you have a problem understanding any of them you will find overleaf a brief explanatory note on each one. Do not worry about making mistakes because the SETUP program is written in such a way that it will allow you to go back and change what you have entered.

Before you start look at a sample page (see Appendix A) and work out how many fields you wish to have per record and therefore how many pages per record you will require. Also write down the names you wish to give to each page (not more than 20 characters long) and the field names (not more than 9 characters long).

It is recommended that you leave a couple of fields spare on each page in case you wish to expand your file later, as once you have set up a Data File you cannot change the number of pages per record.

## Question No. Explanation

1. This is just to remind you to read the manual before you start using the program.
2. By keying Y a page with header and field names will be displayed, press space bar, then the same page with data will appear. This is what a page of the Database will look like (see Appendix A).
3. Enter the number of pages you have decided to have per record the program will then tell you how many records you will have.
4. If for any reason you wish to change the number of pages per record key N; this will take you back to Q3.
5. Here you enter the name (page header) you wish to give to this page. The name must be between 1 and 20 characters long.
6. Having seen what the page header looks like you may change it by keying N, otherwise proceed to Q7 by keying Y.
7. This is like Q5 but here you are entering the field names which go down the left side of the page. These names must be less than 9 characters long, if they are not you will get a message and be asked to try again.

- Q7 loops back on itself until you have entered all the fields. If you do not wish to use all the fields then enter an asterisk as a field name and the program will set all remaining fields to an asterisk; this denotes that they are spare. When using the Database program, it is very easy to change a field name but unfortunately it is not possible to change a page header. When all 10 fields are completed the page will be displayed.
8. If you have made a mistake, here is your opportunity to change it.
  9. Enter the no. of the field whose name you wish to change. The current field name will be displayed and the program will loop back to Q7, enter the new value, then the amended page is displayed followed by Q8 again.
  10. If you would like to check the details you have entered key Y and the program will redisplay all the pages.
  11. Having seen all the pages again, you may make changes by keying Y.
  12. Enter the no. of the page you wish to change.
  13. Enter the no. of the field you wish to change; if you want to change the page header enter 0 (zero) and the program goes back to Q10.

14. If you do not have a printer attached to your computer then you must key N. If you are intending to attach a printer at a later date still enter N as it will not affect the Database program.
15. Keying Y will produce a printed copy of the pages as they appear on the screen. After printing the details the question is redisplayed on the screen in case you require another copy.
16. The Database program, as well as being able to print any page, can also print a summary of each record. The Setup program is initially set so that it will print the data from the first five fields of the first page of every record. (The summary print can be changed by keying Y to Q17).
17. You can, if you wish, change the summary print.
18. Enter the number of fields from each page you wish to print out. The summary can be set to print from 1 to 20 fields in any order, it can even repeat fields.
19. Enter the no. of the page that this field appears on.
20. Enter the no. of the field you wish to print. The program loops back to Q19 until the number of fields specified in Q18 have been defined.

- 21. Enter the number of blank lines you wish to have between each summary print. The program loops back to Q16 to give you the opportunity of having another sample print.
- 22. Enter the name you wish to give to this data file; it must NOT be longer than 8 characters.  
  
(Please note: you cannot use spaces, full stops or commas in the file name.)
- 23. If the data file parameters are now complete and ready to be written on to the disc press Y. If you wish to change anything then press N and the program will go back to Q3.  
  
When the file has been written the MAIN program will automatically be loaded.



THE "MAIN" DATABASE PROGRAM

If you have either created a new file using the SETUP procedure (See pages 12 to 16) or loaded an existing file (See page 11) then the Main Menu will be displayed.

MAIN MENU

- INSERT/AMEND A RECORD ..... 1
- DELETE A RECORD ..... 2
- VIEW A PAGE ..... 3
- CALCULATOR ..... 4
- BROWSE ..... 5
- SEARCH ..... 6
- PRINT LABELS/SUMMARY..... 7
- SORT A FILE ..... 8
- SAVE DATA AND END PROGRAM ..... 9

Below this is the message FREE MEMORY = X BYTES. This informs you how much memory you currently have available for storing data. When this figure drops below 400 a noisy warning is given, and you will not be able to enter any more data in this file, in these circumstances you should either create a new file or split the existing file (See page 27).

To choose an option press the numeric key relating to the no. of the option. There follow some explanatory notes on each of the options.

### Option 1. Insert/Amend a Record

Enter either zero or the no. of the record you wish to set up. If you enter zero the program will automatically find the next free record. (N.B. Always set up the low numbered records first, as this will keep to a minimum the time taken to save and load the Database file.)

The page will appear with the data entry block on the first line.

The top line shows the record no., the page no., and the title of the page.

To enter the data simply type it in.

Each field can contain up to 26 characters (N.B. You may NOT enter graphics characters, commas or semi-colons)

The INS/DEL key can be used to either insert or delete characters.

The cursor keys can be used to move the cursor to the left and to the right and to move the data entry block up and down the screen.

To move on to the next page position the data entry block on field ten and press the down cursor key once. You will then find yourself on the next page.

When you have finished entering data press the ENTER key and you will go into the view mode (See Option 3).

### Option 2. Delete a Record

Just enter the no. of the record you wish to delete and the program will delete all the data on that record.

### Option 3. View a Page

Enter the record no. and the page no., the program will then display the page for you. When a page is displayed there are 9 functions available.

"F" Forward a Page. Key F and the next page will be displayed. If there are no more pages then the first page of the next record will be displayed.

"B" Back a Page. Key B and the preceding page will be displayed.

"P" Print a Page. If you have a printer then pressing the P key will produce a printed copy of the page.

"L" Lock Printer On. If you key L the current page will be printed. If you go backwards or forwards a page the new page will also be printed.

"H" Halt. Keying H resets the printer lock and stops the browse.

"G" Go. Key G will start the browse.

"R" Reverse. This reverses the direction of the browse.

"C" Change the data or field name. Key C to change any or all of the details. The data entry block will be positioned in the middle of the page and you can move it up and down as required. Simply overwrite the existing data with the new and press ENTER.

To change the field name type FN=NEWNAME and press ENTER. The program will overwrite the old field name with the new. (N.B. FN must be in capitals and the NEWNAME can NOT be over 9 characters long.)

"M" Menu. Pressing M will take you back to the Menu.

Option 4 Calculator

4.1 The calculator options are on a separate program so make sure the program disc is in drive 0 before taking this option.

After the calculator program has loaded the following Menu will appear.

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CALCULATOR MENU
A + B = C ..... 1
A - B = C ..... 2
A * B = C ..... 3
A / B = C ..... 4
A * CONSTANT = C ..... 5
SUM OF FIELD A ..... 6
  
```

A, B and C represent fields on any page. It is important to note that when you are using the calculator the result "C" will overwrite any data which is currently in field C, so care must be taken to ensure that you choose the correct field!

**IMPORTANT:** The calculator processes every record and therefore it is possible that there may be insufficient room on a page to hold the result C, if this happens the calculator will be abandoned and a warning message displayed on the screen.

4.2 Calculator options:

- 4.2.1 Add field A on page X to field B on page Y then placing the result in field C on page Z.
- 4.2.2 Subtracting field B on page Y from field A on page X and placing the result in field C on page Z.
- 4.2.3 Multiplying field A on page X by field B on page Y and placing the result in field C on page Z.
- 4.2.4 Dividing field A on page X by field B on page Y and placing the result in field C on page Z.
- 4.2.5 Multiplying field A on page X by a constant, placing the result in field C on page Z.
- 4.2.6 Sum the contents of field A on page X for every record and display the total on the screen.
- 4.3 You select which option you require by pressing the relevant number key. If you press a key greater than 6 then the menu will be redisplayed.
- 4.4 If your database contains more than 1 page per record you will be asked to enter the no. of the page that field A is on. If you key a number greater than the no. of pages per record the question will be redisplayed.

4.5 For option 1 through 4 then 4.3 and 4.4 will be repeated for field B and C. For option 5 you will be asked to enter the value of the constant, any negative or positive value is acceptable, then 4.3 and 4.4 will be repeated for field C.

4.6 When all the details have been entered the program will perform the chosen calculation on every record in the database. If any field does not contain numeric data then the program will assume that field has a numeric value of zero.

Option 5. Browse

You can start browsing on any page of any record. Enter the record no. then the page no. The program will display the selected page for a few seconds, then the same page of the next record will be displayed. The F, B, P & L functions are available, the H (Halt) function will halt the browse, it can be restarted by keying G (Go). The browse can be reversed by keying R (Reverse). Pressing M will redisplay the menu. Whilst you are using the browse, the word "BROWSING" will appear at the bottom of the screen to remind you what is happening!

Option 6. Search

- 6.1 The program can either search for a piece of data or if a field contains numeric data then it can search for a range of numbers.
- 6.2 First the program has to know which field to search, so you are asked to enter the no. of the page and the no. of the field.
- 6.3 You are then asked whether you wish to search for a range of numbers. If you do you will be asked to enter the upper and lower limits of the range. If a field being searched contains non numeric data the program presumes that field has a value of zero. (N.B. + - . . . 0 1 2 3 4 5 6 7 8 9 are valid characters £ \$ , are NOT valid).
- 6.4 If you are not searching for a range of numbers then just enter the data you are looking for, it does not have to be a complete field or even a complete word.
- 6.5 Every time the program finds a field that matches the required search conditions it will display the page that field is on. The P and L functions are available, H will halt the search, G will restart it and A will abandon the search.
- 6.6 When the search is finished or abandoned the last valid page will be redisplayed.

Option 7. Print Labels/Summary

First you will be asked if you wish to change the summary print. If you key N the program will then ask you the number of the first record that the summary is to be printed for, and the number of copies of each summary you require, (this facility is primarily used for producing multiple copies of labels). After you have entered the number the program will start printing. To abandon the print press the A key.

If you have opted to change the summary print you will be asked a series of questions similar to those in the SETUP program. You can change the summary print as many times as you like.

Option 8. Sort a File

The program can sort the file using any field on any page as the key. The sort is performed using the ASCII value of the data; this means that numeric fields will not be sorted into numeric order but character order.

Enter the page the key field is on and then the number of the key field.

The program will give you the option to sort on surnames only, ignoring titles and initials. If you enter names using a full stop after the title and initials the program can ignore all the data up to the last full stop in the line. Thus if you enter Mr. A.B. Smith the program will sort using the name Smith as the key whereas if you enter Mr. A B Smith it will sort using A B Smith as the key.

If you do not require this option key Y.

The sort will take several minutes, and therefore this is an ideal opportunity to make yourself a cup of tea! When the sort has finished the Menu will be displayed.

### Option 9. Save Data and End Program

The start program will automatically be reloaded and you will be given the following 6 options:

- 1 Save this File .....
- 2 Load Another File .....
- 3 Return to the Main Menu .....
- 4 Create a New File .....
- 5 Delete a File .....
- 6 End the Program .....

### 9.1 Save this File

When you are saving the file on to the disc you can either save the whole file (i.e. from the first record to the last record) or you can split the file.

Having taken Option 1 you will be asked to enter the number of the first record, this is normally 1, or if you decide to split the file specify the record number you wish to start from.

Now you enter the number of the last record, (N.B. the program will automatically display this number for you.)

You will then be asked if the data disc is ready, press Y when it is.

The names of the files currently on your data disc will be displayed and you will have to enter the name of the new file (IMPORTANT: you do not have to put the file type .TXT in the file name, the program will automatically add the file type for you).

If the file already exists on the disc then you will be asked if you wish to overwrite the file. If you answer N you will have to enter a new file name; if Y the old file will be overwritten by the new.

9.2 Load Another File

Clears the computer memory and you can then load another file.

9.3 Return to the Main Menu

Redisplays the Main Database menu.

9.4 Create a New File

Loads the SETUP program ready for you to create a new file.

9.5 Delete a File

This will display the names of the files, you simply enter the name of the file you wish to delete.

9.6 End the Program

Ends the program!

APPENDIX A

```
R = 1 P = 1 SALES FILE
-----
1. Co. NAME A. N. OTHER LTD
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2. ADDR1 UNIT 123
3. ADDR2 STATION RD.
4. ADDR3 ANYTOWN INDUSTRIAL ESTATE
5. ADDR4 BRISTOL
6. POSTCODE BS1 AAA
7. TEL. No. 0272-123456
8. CONTACT MR J.H. SMITH
9. NOTES 1 THE NAMES ON THE LEFT ARE
10. NOTES 2 ONLY EXAMPLES.
```