V-NOTCH

By D.M. Smith

ZX SPECTRUM MICRODRIVE/CASSETTE **48K**

V-NOTCH INDEX AND CATALOGUE SYSTEM

For indexing photographs, recipes, books, knitting patterns, pubs, stamps, etc., etc.,
Holds the equivalent of 120k plus characters in RAM.
Up to 3500 items per file.
Infinite files.
32 headings per file.
Search full file in less than a second.
Microdrive and ZX Printer compatible.

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1.0 INTRODUCTION

This program provides an index or catalogue system which can be used to store and retrieve details of photographs, recipes, knitting patterns, pubs, books etc., etc., The possibilities are limited by your imagination.

Data compression techniques allow the equivalent of about 120k of data to be held in the Spectrum.

Each item in the collection is represented as a "card" which must be uniquely identified with a card "I.D.". The file of cards can be searched in a fraction of a second to find all items which have been indexed under one or more of the 32 user defined headings.

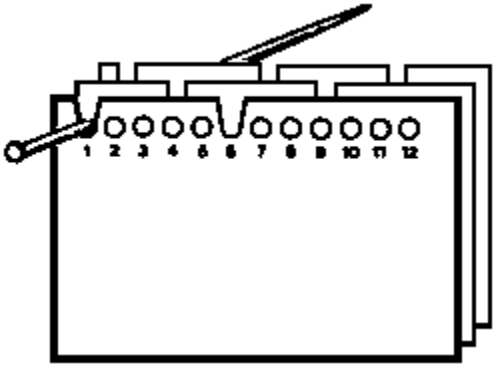
A file may contain a maximum of 1800 to 3500 "cards" depending on the number of characters chosen to identify each card. There is no restriction on the number of files that may be created. The program handles one file at a time and all the files may be saved on cassette or microdrive cartridge. The program can be used with a Printer.

2.0 THE V-NOTCH INDEXING SYSTEM

The program simulates the V-Notch card based system. V-Notch cards have a series of numbered holes punched around their edges. Each numbered hole corresponds to a heading. In a file of a

photographic collection, the first hole might represent the heading "negative", the second might be "print" and the third "slide". If the card represents a negative, then a "V" shaped notch is cut between hole number one and the card edge.

To search the file, all the cards are put together. A needle can be passed through hole number one and all the cards which have been filed as "negative" drop out when the needle is lifted. This process can be repeated to find items filed under a variety of headings. One of the advantages of this program is that it will check each card against all the required headings in one pass. It also searches much more quickly and more reliably than the card based systems.



Your collection of items may already be indexed. If not, you need to do this before you use the program.

The simplest method is to number each new item consecutively. Other methods are possible. For instance, if you cut out recipes from magazines and stick them in scrap-books, the I.D. for a recipe may be "scrap-book number, page number, recipe number". The recipe is then uniquely defined and easily found. You should choose headings that will be most useful for searching your collection. They should be chosen so that each heading is either true or false when applied to each item in the collection.

Taking recipes again as an example, suppose you want a recipe to use up some pork and carrots. Searching your recipes by these two headings may give you a recipe for sweet and sour pork.

3.0 PROGRAM FAMILIARISATION

The instructions assume that you are familiar with the methods for SAVEing, VERIFYing, and LOADing programs and INPUTing numbers and letters; they are described in the manuals supplied with the Spectrum.

The best way of getting to know the program is by using it. The cassette includes a dummy file which has been set up for this purpose.

4.0 LOADING THE PROGRAM.

Load the program by pressing LOAD "", press the "ENTER" key and start the cassette playing. When the READY prompt appears, after about a minute, stop the tape and press any key. The MAIN MENU screen will appear.

Press "3", which will take you to storage options.

Press "f" and, when prompted for a file-name, key in the letters "testdata" end press "ENTER".

Press "l" for LOAD and start the tape. After about one and a half minutes the dummy file will have loaded.

Stop the tape once you have been returned to the MAIN MENU.

The file's name, the current number of cards indexed and the maximum number of cards possible in the file will be shown on the top line of the display. Below it, but also in this information area of the display, is the current option.

To illustrate the power of the program, press "5" to take you into Search index. "Search by notches" at the next screen by pressing "n". A "card" will be displayed showing 32 headings. Use the up and down cursor control keys to move the cursor from heading to heading. If you Press "c" you will clip a "V"-Notch against the current heading (pressing

"m" will "mend" a notch). Clip as many notches as you wish then press "s". The file will search for all of the "cards" which have all of these headings clipped. The number of matches found is given. The "cards" meeting the search criteria can then be shown on the VDU or listed on a printer if you have one connected.

Note that this is a sample file with headings that might be used by a photographer. The card details were randomly generated and may produce some odd results; e.g. there are 489 items filed under both "nude" and "weddings".

Make a note of the I.D. of one of the cards which meet the search criteria.

Press "r" until you are offered "Search for card".

Press "c" and then enter the "card" I.D.. Note that in this example, the I.D. are four characters long with leading spaces; e.g. I.D. 19 should be entered as space space 19 "ENTER". The "card" will be displayed, with notches showing the headings under which it was filed.

Return to the MAIN MENU by repeatedly pressing "r" as prompted.

5.0 PROGRAM DETAILS.

These are explained under the headings of the MAIN MENU screen. First, a few comments on the

general structure of the program and the screen layouts.

The program splits into sections which you get to via the MAIN MENU. Each section may contain a number of sub-sections accessed by further screens. At each stage you may return to the previous screen by pressing the "r" key. Most inputs respond immediately to a single key (upper or lower case) being pressed without the need to press the "ENTER" key. The exceptions are where you are prompted for e.g. a card I.D. or a heading. In these cases, a cursor will flash over the current input position. Control keys CURSOR LEFT, CURSOR RIGHT, DELETE and ENTER operate. Unacceptable characters will be rejected.

The top two lines of the screen provide details of the current status of the file being handled. The top line gives the file name followed by the number of "cards" so far entered and the maximum number that the file can hold. Below this is the current option chosen from the MAIN MENU. The main section of the screen is below these lines and on some screens there is a lower white area which contains a series of prompts. Details of these are given in the following sections.

5.1.0 MAIN MENU

The program is built around this screen. After

pressing one of the option numbers and working through that option you return to this screen by repeatedly pressing "r". You can then go to another option. Note that some options are only available if a file is in memory; i.e. begin with option 1 (create a new file) or option 3 (storage options).

5.1.1 CREATE A NEW FILE

If you get here by mistake, get out NOW by pressing any key other than "C". If you continue, the program will clear any existing data that is in memory and it will be lost unless you have saved a copy.

Having decided to set up a new file, give it a name of up to ten characters (do not include keywords; e.g. STEP). Decide on the number of non-tokens characters you want to use to uniquely identify each "card" which will represent the item to be indexed. This will determine the number of "cards" that the file can handle. The less I.D. characters you use, the more "cards" the file can hold.

5.1.2 EDIT HEADINGS

On entering this option, you will be shown a screen of 32 headings. Each heading may be up to eleven non-token characters long. If you have just created a new file, the headings will be blank.

Otherwise any existing headings will be shown. Move the heading cursor alongside a heading (press the cursor up and the cursor down keys). Press "a" to add a heading there (or to overwrite an existing heading). A flashing cursor will appear to allow you to input a heading. Do so and press "ENTER". You may delete a heading by pressing "d" which will insert blanks in place of the old heading. Pressing "l" will list out all 32 headings on a printer if you have one connected.

5.1.3 STORAGE OPTIONS

You are offered a choice of options. Firstly, ensure that a name is shown after f=file-name. If necessary, press "f" and enter a file-name. You can later change this if you want to make multiple copies of a file under various names. Press "x" to swap between cassette and microdrive. Your selection is highlighted in inverse characters.

You may then select one of the other functions offered by the storage menu. If you wish to update a file which exists on the current microdrive cartridge, you should use the ERASE option before you SAVE and VERIFY it. We strongly recommend that all data files are duplicated and verified.

If an error occurs during a storage operation, type in the direct BASIC command GOTO 3000 and press "ENTER". This will return you to the

beginning of storage options.

5.1.4 EDIT CARDS

Before editing a "card" you need to indicate whether you want to add a new "card" to the index (press "a") or find an existing "card" (press "f"). The edit screen will then appear and you will be prompted for a unique identifying code for the "card" by the message enter card I.D.. This can be any series of non-token characters. The number of characters is limited to the choice you made when setting up the file. The computer will tell you if you try to find a "card" which doesn't exist. Similarly you will be told if you try to give a new "card" an existing I.D.. In both cases you will be given another chance to enter a valid I.D.. If necessary, return from this option to the MAIN MENU and from there go to 'LIST' cards to see a catalogue of all card I.D.s sorted into alphanumeric order.

The edit screen uses a cursor to indicate the current position. It can be moved as described under Edit Headings. Pressing key "c" will clip the card against the current heading. A "V" shaped notch will then be cut in the edge of the card. This will enable the card to be identified against this heading when using the search by notches option (see search index). You can mend a notch by

pressing "m".

You can get a printed listing of the notched headings for the card by pressing "l".

If you want to remove the card from the index, press "d" to delete it. The card counter on the top line of the screen will be reduced accordingly.

Pressing "a" will allow you to either copy (c) the previous card but with a new identity (for those situations where there are several similar items) or to enter a new card without returning to the previous screen. This speeds up the entry of the file cards.

5.1.5 SEARCH INDEX

The index can be searched by two methods. You can press "c" to find a card after entering its I.D. or you can press "n" to search by notches. The latter feature is the heart of this program. You will be shown a screen similar to that used to edit cards. As in that option, you can use the cursor control keys to move the cursor up and down and keys "c" and "m" to clip and mend notches. Clip between 1 and 32 notches and press "s" to search the index. The program will check each card in turn to see if it also has these notches clipped. It finishes its search with a report of the number of cards in the file that meet the search requirements. You can then see a list of these cards either on the screen

by pressing "s" or have the list dumped to the printer (press "p").

Note that if you don't clip any notches before you search the index, the search routine will return the number of cards in the file.

5.1.6 LIST CARDS

This option allows you to see a listing of all the card I.D.s in the index, sorted into alphanumeric order. The listing can be sent either to the screen by pressing "s" or to the printer by pressing "p". If you opt for the screen display you can work through the list pressing "c" to continue after each screen-full of I.D.s. Pressing "r" will allow you to jump out of the listing.

6.0 PROGRAM CUSTOMISING

You can change the colours used in the program by modifying lines 10 to 15.

The size of a new file can be reduced by first reducing the value of size in line 19 before creating the file with main menu option 1.

Use GOTO 1 ENTER to re-start the program.

To print using a full-size printer first initialise your interface, then load V-NOTCH.

If you are using Interface 1 to print add the following line:-

```
505 CLOSE #3: FORMAT "t";X:OPEN #3;"t"
```

X Being the baud rate.

To save the program onto microdrive, break into the program using CAPS SHIFT and SPACE and enter the following lines:-

```
507 INK VAL "5":PRINT AT NOT PI, NOT PI;:
LOAD *"m";1;"vnc" CODE
9999 CLEAR: SAVE *"m";1;"v-notch" LINE 500:
VERIFY *"m";1;"v-notch": SAVE *"m";1;"vnc" CODE
64500,1036: VERIFY *"m";1;"vnc" CODE
```

WARNING THIS WILL CLEAR ALL CURRENT DATA.