

FILEMANAGER+™

THE DISK BASED FILEKEEPING SYSTEM FOR THE
ATARI 800 COMPUTER

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written consent of the publisher. While every precaution has been taken in the preparation of this book, the publisher assumes no responsibility for any errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein.

Copying, duplicating, selling or otherwise distributing this product is a violation of the law. Willful violations of the Copyright law of the United States can result in civil damages of up to \$50,000 in addition to actual damages, plus criminal penalties of up to one year imprisonment and/or a \$10,000 fine. Synapse Software reserves the right to make changes or improvements in the product described in this manual at any time without notice.

COPYRIGHT (1981) SYNAPSE SOFTWARE
5327 JACUZZI STREET-STE.1
RICHMOND, CALIFORNIA 94804

ATARI and ATARI 800 are registered trademarks of
ATARI INC.



TABLE OF CONTENTS

1. INTRODUCTION	1
2. CREATING A FORM	5
One Disk Drive -Format/Initialize.	5
Two Disk Drives-Format	7
Create Form	8
Review Form	17
3. ENTERING RECORDS.	19
Load/Index File.	20
Enter Records	23
Review Index.	29
4. RETRIEVING RECORDS	31
5. UPDATE/DELETE/PRINT.	39
Update	40
Delete	41
Selective Print.	42
Automatic Print.	42
6. LIST/LABELS/SUBFILES	44
List	44
Labels.	49
Subfiles	54
7. RE-INDEX	56
8. SAVE/END	60
9. UTILITIES	61
Copy File.	61
Disk Directory	64
Rename File	66
Delete File	66
10. CONVERT/COMBINE FILES.	68
Modify Form	68
Convert Form.	72
Combine Files	75
11. RAMDISK	77



REFERENCES/APPENDICES	79
A. Summaries.	79
B. Command Glossary	91
C. Conversion from Prev. Releases.	94
D. Arithmetic Functions	96
E. Helpful Hints	97
F. Capacity and Standards	101



1. INTRODUCTION

Congratulations! You have acquired the most popular generalized filekeeping system for the Atari home computer. People all across the world use FILEMANAGER to keep records on names and addresses, birthdays and special events, school records, record album collections, inventories, and even football scouting reports.

FILEMANAGER is a complete filekeeping system that allows you to tailor your files for your particular applications. These files may be reviewed on your screen, printed, updated, deleted and indexed according to your needs. FILEMANAGER features a flexible, user oriented, set of operating commands. In addition, if you use either the TEXT WIZARD* word processor or a RAMDISK*, FILEMANAGER can interface with these products.

FILEMANAGER was created for use by the computer novice as well as the professional. We felt that the easier a program is to use, the more use it will get, and the more service it will provide. We decided, after extensive testing, that the best way to introduce you to FILEMANAGER was a step by step creation of a demonstration file as an instructional aid. This allows you to step through the program, in a methodical fashion, learning to use features as they appear in sequence. In reading the instructions please try all the options as they are described (even if you aren't sure that you will be using them). This will familiarize you with the operation of the system and make the routine operations extremely quick and simple. Additionally, there is a reference section which provides a quick lookup for a particular operation.

As you learn to use the FILEMANAGER for more and more applications, we hope that you find it to be a rewarding experience.

* TEXT WIZARD is a trademark of DataSoft Inc. RAMDISK is a trademark of Axlon Inc.

Before starting it is a good idea to take a look through the Glossary provided in the back of the manual. Please read through the definitions, just to make sure that they are used in the same way to which you are accustomed. Every effort has been made to keep the language as close to spoken English as possible. If you should encounter any unfamiliar words or do not understand a particular function while using FILEMANAGER the GLOSSARY provides a handy reference.

We assume that you are already familiar with the basic operations of your ATARI computer and 810 Disk Drive. FILEMANAGER requires 40K of memory, a BASIC cartridge, and at least one disk drive. It can accomodate up to four disk drives as well as output to a variety of printers. If you have just obtained your equipment please read the literature enclosed with your disk drive and computer before running FILEMANAGER .

First a word about your FILEMANAGER program diskette. The diskette contains all of the FILEMANAGER programs and is protected from being written. NEVER REMOVE THE FOIL WRITE-PROTECT TAB FROM THE FILEMANAGER DISKETTE. Also, in case your primary copy of FILEMANAGER becomes damaged, there is a backup copy on the reverse side of the diskette.

FILEMANAGER is divided into five menus from which you select the operation you wish to perform. The menus are organized so that related operations are grouped together. The following is a brief overview of the operations of each menu:

MAIN MENU

This is the menu which always appears first and is used to select the file that you are going to work with.

- RECORD MENU This is the most heavily used menu in that you use it to enter and retrieve all data.
- CREATE MENU This menu is used to define and modify the way in which you wish to store your data.
- UTILITY MENU These operations perform general utility functions such as copying, renaming, deleting and converting files
- INITIALIZE MENU If you have only one disk drive, YOU MUST USE THIS MENU to initialize your data diskettes.

To begin, turn on your T.V. or monitor, and disk drive(s).

Insert the BASIC cartridge into your computer. Now carefully insert the FILEMANAGER diskette (with the silver label on top and in front) into disk drive number one and close the door. Turn on your computer.

As FILEMANAGER begins to load, the sound to the T.V. speaker will stop. Shortly thereafter, your disk drive will start to make all kinds of odd sounds. Then it will turn on and off, and then back on again, and FILEMANAGER will continue loading. PLEASE WAIT will then come up on the screen.

Moments later the MAIN MENU will appear:

FILEMANAGER 800+

MAIN MENU

1. LOAD FILE
2. REVIEW FORM
3. RE-INDEX
4. CREATE/UTIL
5. INITIALIZE DISK
6. SAVE/END

SELECT=RECORD MENU

© 1981 SYNAPSE SOFTWARE REL: 4

2. CREATING A FORM

To begin with we need to prepare a "data diskette" to store our data. Select a fresh diskette. Make sure that there is nothing important on this diskette, because the next step will erase any previous contents. The format/initialize procedure differs depending upon whether you have one or two disk drives. You only need to Format/Initialize a data diskette before using it the FIRST time. Follow the appropriate procedure below.

ONE DISK DRIVE-FORMAT/INITIALIZE

Press [5] and after a while you will see the INITIALIZE MENU. At this point, remove the FILEMANAGER diskette and insert your data diskette.

There are two basic operations which you can perform at this point. The FRMT/INIT operation formats your data diskette and puts some special files on the data diskette so that users with a single disk drive won't have to keep swapping between their FILEMANAGER and data diskettes. The second option [INITIALIZE only] is for single disk drive owners who wish to update data diskettes created with previous versions of FILEMANAGER (See Appendix C for further information on updating previous versions of FILEMANAGER).

Press [1]. The screen will change and the next message will be:

DISK DRIVE #...

Whenever FILEMANAGER asks you this question always indicate the disk drive number where your data diskette is located (usually 1 or 2). Since the data diskette is in disk drive one, press [1] or [RETURN]. Pressing [RETURN] automatically defaults to drive number one.

Next, the following warning will appear:

DISK IN DRIVE #1 WILL BE ERASED.
DO YOU WISH TO PROCEED (Y/N)?

If you wish to abort the initialization at this point, you can bail out by pressing [N]. However, for the sake of our example press [Y].

The formatting and initialization will take approximately sixty seconds, after which you will automatically wind up at the INITIALIZE MENU once more. We're now ready to CREATE a form. Remove the data diskette and reinsert the FILEMANAGER diskette. Press [4] to go to the CREATE MENU.

TWO DISK DRIVES-FORMAT

With two disk drives, all you need to do is FORMAT your data diskette. Press [4] and after a while you will see the CREATE MENU. Press [5]. The screen will change and the next message will be:

DISK DRIVE #...

Whenever FILEMANAGER asks you this question always indicate the disk drive number where your data diskette is located (usually 1 or 2). Since the data diskette is in disk drive number two, press [2]. (Note: pressing [RETURN] defaults to 1).

Next the following message appears:

DISK IN DRIVE #2 WILL BE ERASED.
DO YOU WISH TO PROCEED (Y/N)?

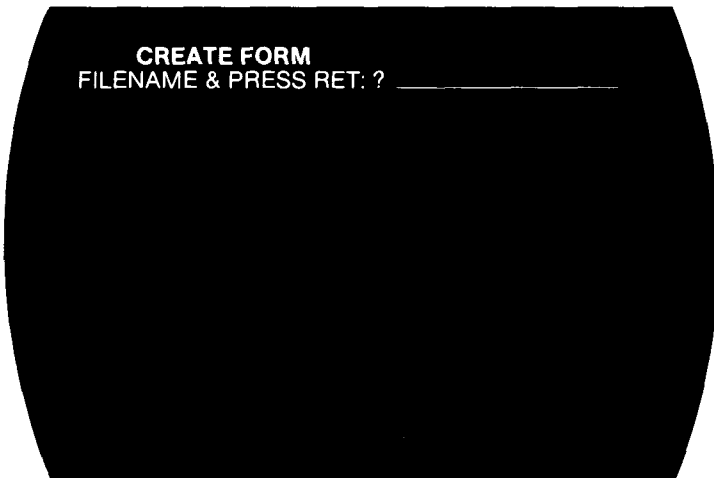
Press [Y]. The formatting will take approximately sixty seconds, after which you will automatically return to the CREATE MENU.

When using FILEMANAGER with two disk drives always keep your FILEMANAGER diskette in drive one the entire time. If at a later time, one of your disk drives becomes inoperable, refer to appendix E to continue using FILEMANAGER.

CREATE FORM



Now select [1] on the CREATE MENU and once again you will see A dark red screen.



The top line, which reads "SLCT=MENU", is called the COMMAND LINE and always displays the commands that are available to you. They will change from function to function, but pressing the yellow [SELECT] key will always take you back to the previous menu. The horizontal bar near the top of the screen is called the FUNCTION BAR. The FUNCTION BAR always displays the operation that you are currently performing. In this case the FUNCTION BAR reads "CREATE".

Throughout the remainder of this guide, we are going to be using a demonstration file that you will build from the beginning. We will continue with this file through the various other functions of FILEMANAGER. In this example, we will assume that you run a small video tape rental business and you wish to keep track of your sales and produce a sales report. You will also generate mailing labels and gain an overall understanding of FILEMANAGER's capabilities.

To begin, type in SALES and press [RETURN]. If another FILE of the same name existed FILEMANAGER would inform us of that fact and ask if we wanted to overwrite the old file. Also, by pressing [RETURN] without entering a filename we can return to the CREATE MENU.

Next the prompt for which DISK DRIVE # we wish to use will appear:

DISK DRIVE #:

Respond with either a [1] or [2], depending where your data diskette is located.

Under the FUNCTION BAR the following information should appear:

FIELDNAME	TYPE
-----------	------

This asks for the fields that will make up your FORM: i.e. NAME, ADDRESS, PRICE...etc., and what type of fields they are. The cursor is now resting under FIELDNAME.

Type in FIRST NAME and press [RETURN].

The cursor will jump to the position under the heading TYPE.

There are seven types of fields as follows:

<u>CODE</u>	<u>NAME</u>	<u>DESCRIPTION</u>
n	Alphabetic	Data has alphabetic letters or special characters, or won't be used in any arithmetic calculations (e.g. number, date, social security number). "n" is the largest number of characters the field will contain. (Type the actual number of characters and not the "n"). A field can be up to 100 characters long. Examples: 10, 25, 80.
N	Numeric	The field will contain a numeric value. No alphabetic letters or special characters are allowed.
\$	Dollars and cents	A numeric field which has two digits after the decimal point.
R	Repeating number	Once entered the numeric value will remain constant for succeeding entries unless changed.

<u>CODE</u>	<u>NAME</u>	<u>DESCRIPTION</u>
Rn	Repeating alphabetic	Where "n" is the largest number of characters the field will contain. A field can be up to 100 characters long. The total character lengths of all constant alphabetic fields in a record cannot exceed 100 characters. Examples: R8,R6,R10.
C	Computed	The field is the result of a calculation. Computed fields must be on the first page of the record.
C\$	Computed dollar and cents	The field is the result of a calculation and will be displayed in a dollar and cents format. Computed fields must be on the first page of the record.

There is one simple rule for field names which should be mentioned. For alphabetic fields (types "n" and Rn), the field name can be any combination of characters. For example:

```
address
FIRST NAME
1 LABEL
%1?
```

are all legitimate alphabetic type field names. However, for all other field types (i.e. N,\$,R,C and C\$). The field name must start with an alphabetic character and can contain only capital letters, numbers and spaces. No special characters are allowed. If you enter an invalid field name, an error message will appear.

Since our first field (i.e. FIRST NAME) is alphabetic, let's give it a length of 10. Enter 10 and press [RETURN]. The cursor now jumps down one line and positions itself under FIRST NAME. If there are any errors simply position the cursor using the standard ATARI editor controls (See the ATARI computer manual for FULL SCREEN EDITING controls), and make your corrections.

Now enter the LAST NAME, STREET, CITY/STATE and MOVIE TITLE fields as follows:

STRT=SAVE SLCT=MENU
CREATE FORM

<u>FIELD NAME</u>	<u>TYPE</u>
FIRST NAME	10
LAST NAME	10
STREET	20
CITY/STATE	20
MOVIE TITLE	15

Next, we want to put in the daily rental rate. Enter:

RATE	\$
------	----

Next, we need a field for the rental date. Since we don't want to have to enter the same date for every sale of a day, let's make it a repeating alphabetic [Rn] field. We don't want to make it a repeating numeric [R] field because we're going to use slashes [/] to separate the month/day/year, and because we don't intend to do any arithmetic computations using the date. So let's enter:

OUT DATE	R8
----------	----

We need another date to show when the video tape was returned. Enter:

RETURN DATE	R8
-------------	----

In order to calculate the total rental, we need the number of rental days. Enter:

DAYS	N
------	---

The next field we'll use to calculate the total rental fee. Enter:

RENTAL	C\$
--------	-----

Then, we need to figure the sales tax. Enter:

TAX	C\$
-----	-----

Lastly, we calculate a total sale with tax. Enter:

TOTAL	C\$
-------	-----

If everything is correct, then our screen should look like this:

STRT=SAVE SLCT=MENU

CREATE FORM

<u>FIELD NAME</u>	<u>TYPE</u>
FIRST NAME	10
LAST NAME	10
STREET	20
CITY/STATE	20
MOVIE TITLE	15
RATE	\$
OUT DATE	R8
RETURN DATE	R8
DAYS	N
RENTAL	C\$
TAX	C\$
TOTAL	C\$

After checking the information, press the [START] key to save the form. After about 10 seconds the screen will appear as follows:

OPT=CLEAR STRT=CONTINUE SLCT=MENU

COMPUTED FIELDS

RENTAL=

> _

FIRST NAME	LAST NAME	STREET
CITY/STATE	MOVIE TITLE	RATE
OUT DATE	RETURN DATE	DAYS
RENTAL	TAX	TOTAL

This screen only appears if you have computed fields (i.e. type C or C\$). On this first screen, you must tell FILEMANAGER how to compute the RENTAL field. Referring to the field names displayed in the lower half of the screen, you should enter:

RATE * DAYS

Press [START]. This will take you the next COMPUTE screen which asks you for information on the TAX field. Assuming a 6% tax, enter:

RENTAL * .06

Press [START]. And for the TOTAL field enter:

RENTAL+TAX

Press [START]. Now FILEMANAGER will save your descriptions of the computed fields on your data diskette and then return you to the CREATE MENU.

You can use any arithmetic operator or parenthesis in your computations. In addition you can use special arithmetic functions (see Appendix D for the list of functions).

REVIEW FORM

Before we leave this let's review what we have just entered . Press [2] and you will see:

REVIEW FORM		STRT=NEXT SLCT=MENU
<u>FIELD NAME</u>	<u>TYPE</u>	
FIRST NAME	10	
LAST NAME	10	FILE: SALES
STREET	20	
CITY/STATE	20	INDEX: NONE
MOVIE TITLE	20	
RATE	\$	INDEX SIZE: 0
OUT DATE	R8	
RETURN DATE	R8	# RECORDS: 0
DAYS	N	
RENTAL	C\$	MAX RECDS: 0
TAX	C\$	
TOTAL	C\$	LIMITED BY:
		DISK DRIVE:

All of the information about the form is presented. You can see which FIELDS are part of your FORM. Also displayed is name of the FILE and the LENGTH of the INDEX(we'll get to that a little later). The "#RECORDS" tells you how many records are currently in the file, and the "MAX.RECDS" indicates the maximum number of records that can be held in that file.

We will discuss how to increase the maximum number of records, if the size of the FILE is limited by memory, when discussing the RE-INDEX option.

Press [START] and you will see the COMPUTE screen for the RENTAL field. Press [START] again and you see the COMPUTE screen for the TAX field. You can keep paging through the COMPUTE fields by pressing [START] or return to the CREATE MENU screen directly by pressing [SELECT].

Congratulations! You have just finished the entire initial process. Now let's go back to the MAIN MENU and begin entering some data. If you have only one disk drive, remove your data diskette and insert your FILEMANAGER diskette. Press [7] for FILEMANAGER and you will be back where you started.

3. ENTERING RECORDS

You should now be looking at the MAIN MENU:



If you only have one disk drive, then remove your FILEMANAGER diskette and insert your data diskette. With a two drive system, you should always leave the FILEMANAGER diskette in the first drive.

LOAD/ INDEX FILE

First, you must LOAD the file you just created. You must always begin a session by LOADING the file you want to work with. Do this by pressing [1]. You will be asked for the disk drive number. Reply with the appropriate number for your data diskette. The next screen shows you all of the files on your data diskette (only SALES in this case) and asks:

ENTER FILENAME AND PRESS RET:

Reply with SALES. You will next see a screen exactly like the REVIEW FORM screen you saw previously. Press [START] and you will see:

LOAD FILE

ENTER INDEX 1, PRESS RET: ? _____

You have to INDEX a file the first time you LOAD it after you CREATE a FORM. However, you may re-index a file any time.

You can choose LAST NAME, FIRST NAME, or any of the other field as an INDEX. The INDEX should be the field by which you will most often retrieve records. For example, the most common INDEX for a name and address file is last name.

Now enter LAST NAME and press [RETURN].

FILEMANAGER will sort your records alphabetically in ascending order (A-Z) on the LAST NAME field. It does not matter whether your records use uppercase or lowercase letters. FILEMANAGER translates both and integrates them into the sort. As we continue through the process you will see how to change the INDEX (sort field) at any time.

The next prompt is:

INDEX FIELD LENGTH (L, #, RETURN)

What this cryptic prompt wants to know is, how many characters of the INDEX do you want sorted. We'll explain this later on, so for now, just press [RETURN].

Next, FILEMANAGER will ask you for a secondary index with the message:

ENTER INDEX 2, PRESS RET:

Let's enter the first name field as follows:

FIRST NAME

Again, you will be asked for the index field length:

INDEX FIELD LENGTH (L,#,RETURN)

Let's press [RETURN] again.

Next, you're asked for a third index. You must have at least one index. But the second and third indexes are optional. Based upon the indexes, the second and third level indexes are used to sort the file in the correct order. For example, you might have several Smith's in your file, but you want to make sure that "Allen Smith" comes before "Bonnie Smith". Thus, the LAST NAME is your primary index and FIRST NAME is your secondary index.

Since we don't need a third index for our example, press [RETURN]. After this, the message ALLOCATING SPACE will appear for a few seconds while FILEMANAGER allocates some space on your data diskette for your file.

Next, you'll be returned to the MAIN MENU.

ENTER RECORDS

Wow! Fortunately you only have to FORMAT, CREATE and INDEX when you first establish a new file. Now we can get on to the real business of entering records. In order to start entering our records we need to get to the RECORD MENU. This is simply done by pressing the yellow [SELECT] key.

The [SELECT] key will always take you to either the MAIN MENU, or if you are already at the MAIN MENU, then to the RECORD MENU. The only additional requirement to get to the RECORD MENU is that we must have either LOADED an existing file or created a new one (as we have just done). If you press [SELECT] with no file LOADED you will be reminded by a "NO FILE LOADED" message appearing at the bottom of the MAIN MENU. Try pressing [SELECT] a few times to see how this key works.

Now if you are not already at the RECORD MENU please press [SELECT] once again...

We are now ready to start entering data!
The RECORD MENU appears as follows:

FILEMANAGER 800+

RECORD MENU

1. ENTER RECORD
2. SEARCH
3. LIST
4. LABELS
5. SUBFILE
6. REVIEW INDEX

SELECT =MAIN MENU

Press [1] and you should be looking at a gray screen as follows:

```
OPT=COMPUTE STRT=ENTER SLCT=MENU P1
ENTER RECORD

FIRST NAME : _____
LAST NAME  : _____
STREET     : _____
CITY/STATE : _____
MOVIE TITLE: _____
RATE       : _____
OUT DATE   : _____
RETURN DATE: _____
DAYS       : _____
RENTAL     : — COMPUTED —
TAX        : — COMPUTED —
TOTAL      : — COMPUTED —
```

The P1 in the upper right hand corner indicates that it is page one of your record (This will appear even if there is only one page in your record).

Below the FUNCTION BAR ("ENTER RECORD") is the FORM which you have created.

Each field name is followed by an underline. This allows you to use the form in a "fill in the blank" fashion. Any entries that exceed the length which you have set will be cut off at that length (e.g. if we enter a FIRST NAME longer than 10 letters it will be cut off after the tenth letter).

We can now begin to fill out the FORM.

Type in: KEVIN and press [RETURN].

Pressing [RETURN] will position the cursor on the next line of the form. Now continue entering the following example:

```
OPT=COMPUTE STRT=ENTER SLCT=MENU P1
ENTER RECORD

FIRST NAME      : KEVIN _____
LAST NAME       : BROWN  _____
STREET          : 789 PINE _____
CITY/STATE      : SUNNYVALE, CA _____
MOVIE TITLE     : E.T.    _____
RATE            : 12.00   _____
OUT DATE        : 9/5/82  _____
RETURN DATE     : _____
DAYS            : _____
RENTAL          : — COMPUTED —
TAX             : — COMPUTED —
TOTAL           : — COMPUTED —
```

After you have finished entering this information, check the screen carefully. Are there any typographical errors? If so, merely press the CONTROL key and the appropriate arrow key to position the cursor over the line that you wish to edit. Now you can type over the incorrect entry. You may use all of the Atari full screen edit controls except the [SHIFT]-[INSERT], [SHIFT]-[DELETE] AND [CONTROL]-[INSERT] and [CONTROL]-[DELETE]. These keys have been locked out to prevent data entry errors.

Now press the yellow [OPTION] key. All of your computed fields (i.e. RENTAL, TAX, & TOTAL) are now displayed. However, since we haven't entered the number of rental days yet, all of the computed fields calculate to zero.

OPT=COMPUTE STRT=ENTER SLOC=MENU P1
ENTER RECORD

FIRST NAME	:	KEVIN	_____
LAST NAME	:	BROWN	_____
STREET	:	789 PINE	_____
CITY/STATE	:	SUNNYVALE, CA	_____
MOVIE TITLE	:	E.T.	_____
RATE	:	12.00	_____
OUT DATE	:	_____	_____
RETURN DATE	:	_____	_____
DAYS	:	0	_____
RENTAL	:	0.00	_____
TAX	:	0.00	_____
TOTAL	:	0.00	_____

You can still go back and change something if you wish. When it looks alright, then press [START]. Your disk drive will engage and your record will be stored on your data diskette. If you are entering several records, you may not want to take the time to review the computed fields every time. In this case, just press [START] without pressing the [OPTION] key.

If there is more than one page to your FORM, the next page of your FORM will appear after you enter the first. Otherwise, your completed RECORD will be saved and the FORM for your next record will appear.

In order to build our sample file please enter the following information in the correct fields, e.g. FIRST NAME, LAST NAME, etc. Notice that the DATE field is repeated from the first entry. Remember to press [START] to save each record and go on to the next one.

FIRST NAME : JOHN
LAST NAME : COOK
STREET : 123 OAK
CITY/STATE : SUNNYVALE, CA
MOVIE TITLE: CASABLANCA
RATE : 7.50
OUT DATE : 9/5/82
RETURN DATE:
DAYS :
RENTAL :
TAX :
TOTAL :

FIRST NAME : JOHN
LAST NAME : DOE
STREET : 123 MAPLE
CITY/STATE : BERKELEY, CA
MOVIE TITLE: SUPERMAN
RATE : 8.00
OUT DATE : 9/5/82
RETURN DATE:
DAYS :
RENTAL :
TAX :
TOTAL :

FIRST NAME : ELISE
LAST NAME : STURZA
STREET : 789 CEDAR
CITY/STATE : BERKELEY, CA
MOVIE TITLE: CAMELOT
RATE : 7.50
OUT DATE : 9/5/82
RETURN DATE:
DAYS :
RENTAL :
TAX :
TOTAL :

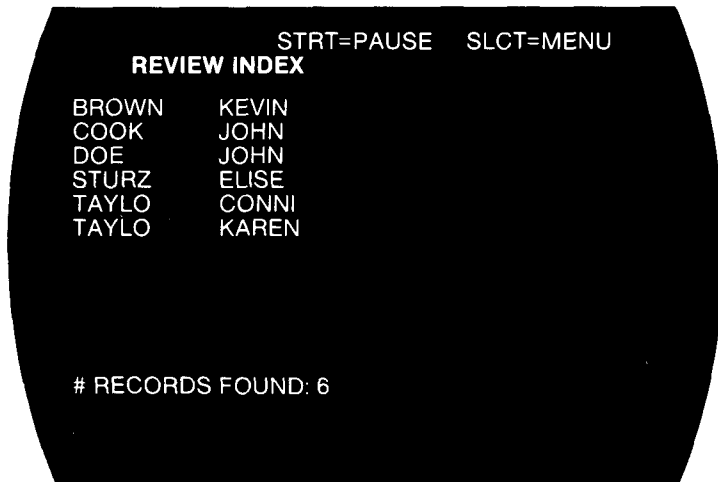
FIRST NAME : CONNIE
LAST NAME : TAYLOR
STREET : 456 SPRUCE
CITY/STATE : BERKELEY, CA
MOVIE TITLE: STAR WARS
RATE : 10.75
OUT DATE : 9/5/82
RETURN DATE:
DAYS :
RENTAL :
TAX :
TOTAL :

FIRST NAME : KAREN
LAST NAME : TAYLOR
STREET : 456 ROSE
CITY/STATE : SAN FRANCISCO, CA
MOVIE TITLE: CASABLANCA
RATE : 7.50
OUT DATE : 9/5/82
RETURN DATE:
DAYS :
RENTAL :
TAX :
TOTAL :

Now that we have a file of these six names we can really explore what FILEMANAGER can do. Press [SELECT] to return to the RECORD MENU.

REVIEW INDEX

Suppose that you just want to scan your index to see if a particular record exists. Let's try out another choice on the RECORD MENU. Press [6].



These are the last and first names on which our FILE is indexed. Notice that only the first five characters of the names are displayed. This is because we pressed [RETURN], which gave us a default of five characters, when we chose the INDEX LENGTH. Also, notice the names have been arranged alphabetically. Your entries are automatically alphabetized as they are entered.

After the last name the message "# RECORDS FOUND:6" appears at the bottom of the screen. If our INDEX were longer than one screenful, the top names would disappear under the FUNCTION BAR and new names would rise up from the bottom. This is called scrolling. We could press [START] to pause this scrolling. To continue, we would press [START] again, and the scrolling would resume.

Now let's press [SELECT] to return to the RECORD MENU.

4. RETRIEVING RECORDS

The retrieval capabilities of FILEMANAGER are very powerful. To fully utilize the power built into the program we should thoroughly understand all of the SELECTION options.

There are three basic formats, or ways of viewing the data. They are called SEARCH, LISTS, and LABELS. However, before retrieving the data in any of these formats, you must first tell FILEMANAGER which group of records you're interested in. We'll demonstrate this with the SEARCH option. You should be looking at the RECORD MENU. Now press [2] to call the SELECTION screen. The screen appears as follows:

```
*"scan"* OPT=CLEAR STRT=CONT SLCT=MENU  
FIELD          FROM — TO
```

```
FIRST NAME  
LAST NAME  
STREET  
CITY/STATE  
MOVIE TITLE  
RATE  
OUT DATE  
RETURN DATE  
DAYS  
RENTAL  
TAX  
TOTAL
```

```
ATARIKEY: PRINT=OFF  AUTOPAGE=OFF
```

The cursor is positioned under the FROM-TO column. In our sample file we have chosen LAST NAME as the INDEX so the cursor is in the LAST NAME row. If we should now press [START] without entering any information FILEMANAGER assumes that we want all of the records in our file displayed sequentially. Let's do just that. Press [START].

After KEVIN BROWN's record a PAUSE message will appear at the bottom of the screen.

Press [START] to continue to the next record. Now you see JOHN COOK's record.

All of the records will be presented in alphabetical order.

We will return to the manipulation of individual records after exploring the SELECTION function more fully.

Keep pressing [START] and page through all of the records. After the last record is displayed, the message "# RECORDS FOUND: 6" will appear at the bottom of the screen.

Press [SELECT] to return to the RECORD MENU.

Now press [2] to return to the SELECTION screen.

We know that the default condition of the SELECTION screen is to present all records, so let's try something different. Enter the following on the LAST NAME line:
A-C

Now press [START].

Page through the records with the [START] key. You will notice this time, that only the records with LAST NAMES falling in the range of A-C were presented (KEVIN BROWN and JOHN COOK). We could choose any range of numbers or letters to specify the range of records that we wish to retrieve. Press [SELECT] for RECORD MENU and [2] for the SELECTION screen.

Another option in the index field is to simply place a hyphen(-) after a letter, as in (G-), to recover all records with LAST NAMES beginning with the letters G to Z. Similarly, we could type a hyphen(-) before a letter, (-G), and recover all records with LAST NAMES of A to G. The previous option also applies to ranges of numbers, e.g. (1-10), (-100), etc.

Let's try that right now. Press [OPTION] to clear the screen and then type a (N-) and press [START]. Page through the records with the [START] key and notice that just those last names beginning with N-Z (STURZA and the two TAYLORs) were shown on the screen.

(NOTE: The access time to find any record in the INDEX, even with a disk full of records, is less than 2 seconds.)

Now that we have seen how to retrieve records using the INDEX, let's try something else. Press [SELECT], then [2], then [OPTION]. You should be back at the SELECTION screen. Press [OPTION] to clear the screen.

Press the [ATARIKEY] (the one on the bottom row with the Atari symbol on it) once. This will allow us to step through the records without having to press [START] each time. In fact the [START] will now serve to PAUSE the continuous presentation of our records. We will be back to describe the functions of the [ATARIKEY] more fully. The bottom line should read:

ATARIKEY: PRINT=OFF AUTOPAGE=ON

If it doesn't, keep pressing the [ATARIKEY] until it does. Now, enter a T in the LAST NAME field.

Press [START].

What happened?

You get both TAYLORs because they're the only records with last names that start with a T.

But suppose you want to go directly to KAREN TAYLOR's record without having to page through CONNIE's record? This involves using subfields. A subfield is any field other than your index fields. For example, press [SELECT] and [2] and [OPTION]. Enter TAYLOR on the LAST NAME row. Press [CTRL]-[©] to place the cursor on the FIRST NAME row. Enter KAREN and press [START]. And presto, there's KAREN's record.

We can choose up to four subfield search options in addition to the INDEX. This will often allow a very useful search, e.g. if there are thirty last names starting with "S" but only two of them are in a particular city. The uses of this subfield search option will become even more obvious once you start using FILEMANAGER for your own applications.

Because of the way the record retrieval system is set up, a search on an INDEX field is almost instantaneous. The subfield retrieval however, is much slower. In order to find a record with ONLY a subfield specification, FILEMANAGER must read through the entire file, record by record. It is for this reason that the cursor is positioned in the INDEX row. It is a good idea to always specify INDEX field as part of your selection criteria whenever possible.

You can always exit from the retrieval process by pressing [SELECT].

Now let's continue with the other SELECTION options.

Press [SELECT] and then [2] to return to the SELECTION screen. Now press [OPTION] to clear the screen of previous information.

In the upper left corner of the COMMAND LINE you may have noticed the word **"scan"**. Let's see how this command can be used to retrieve records. Let's imagine that for some strange reason you wish to retrieve all of the records that contain a **"CE"** in the street name.

Position the cursor in the STREET row and type in the following:

The screenshot shows a terminal window with a black background and white text. At the top, the command **"scan"** is entered, followed by menu options: **OPT=CLR**, **STRT=CONT**, and **SLCT=MENU**. Below this is a header for a table with two columns: **FIELD** and **FROM — TO**. The table lists various fields: **FIRST NAME**, **LAST NAME**, **STREET**, **CITY/STATE**, **MOVIE TITLE**, **RATE**, **OUT DATE**, **RETURN DATE**, **DAYS**, **RENTAL**, **TAX**, and **TOTAL**. The **STREET** field is highlighted with a cursor, and the value **"CE"** is entered next to it. At the bottom of the screen, the status **ATARIKEY: PRINT=OFF** and **AUTOPAGE=OFF** is displayed.

```
"scan"  OPT=CLR  STRT=CONT  SLCT=MENU
FIELD      FROM — TO
FIRST NAME
LAST NAME
STREET      "CE"
CITY/STATE
MOVIE TITLE
RATE
OUT DATE
RETURN DATE
DAYS
RENTAL
TAX
TOTAL

ATARIKEY:  PRINT=OFF  AUTOPAGE=OFF
```

Now press [START] and you will see ELISE STURZA's and CONNIE TAYLOR'S record. They're the only ones that have CE in their street names (CEder and spruCE). So you can see that this feature, called character SCAN can be used to locate any records with a particular word

or combination of characters in a field. We could also use this to find all the people in a given state by scanning the CITY/STATE field.

Now press [SELECT] and then [2] to come back to the SELECTION screen. Press [OPTION] to clear the screen. This time, instead of the quotation marks, let's sandwich the *CE* inside of the asterisks. Enter:

```
***scan** OPT=CLR STRT=CONT SLCT=MENU  
FIELD FROM — TO  
FIRST NAME  
LAST NAME  
STREET *CE*  
CITY/STATE  
MOVIE TITLE  
RATE  
OUT DATE  
RETURN DATE  
DAYS  
RENTAL  
TAX  
TOTAL  
  
ATARIKEY: PRINT=OFF AUTOPAGE=OFF
```

Notice that this time all the records were retrieved EXCEPT for ELISE and CONNIE. The asterisks tell FILEMANAGER to retrieve all the records that DO NOT have the characters within the fields indicated.

Some of the uses are searching for records not in a particular zipcode area or any exclusive requirement.

The SCAN feature may be used in conjunction with all of the other INDEX and subfield options.

The character SCAN allows the following options and formats:

"ABCD"= Retrieve all records with the characters specified within a field.

ABCD= Retrieve all the records that DO NOT contain the characters specified.

ABCD" = Retrieve all records that end in the characters specified. It doesn't matter what precedes these characters.

ABCD* = Retrieve all records that DO NOT end in the specified characters.

"ABCD = Retrieve all records that begin with these characters and ignore the trailing characters.

*ABCD = Retrieve all records that DO NOT begin with the specified characters.

NOTE: When using the character SCAN feature on the INDEX field, FILEMANAGER will retrieve each RECORD to check the entire INDEX field, not just the number of characters indexed on. As we explained earlier any search that requires FILEMANAGER to review each record will be much slower than the INDEX search. Using the SCAN feature in the INDEX does this.

Press [SELECT] and then [2] to return to the SELECTION screen. Now press [OPTION] to clear the screen.

IF YOU DO NOT HAVE A PRINTER, SKIP TO CHAPTER 5.

The ATARIKEY (the key with the ATARI symbol on it), allows us to print all of the selected records. Press the ATARIKEY and notice that the PRINT and AUTOPAGE options change. The normal condition is PRINT=OFF and AUTOPAGE=OFF. By pressing the ATARIKEY we can change these to whatever status we wish. (NOTE: If you select the PRINT option and no printer is hooked up you will get an error message when FILEMANAGER tries to print.)

Let's take our file as an example. If we wanted to print all of the records to a printer, we would want to turn on the PRINT option and the AUTOPAGE option. As we have seen the AUTOPAGE presents all of our records, one after another, without our having to do anything. In the AUTOPAGE mode the [START] key stops and starts this automatic paging through our records. We will demonstrate the PRINT option a little later.

The ATARIKEY options are turned off (returned to default), when a new file is loaded. Also, as a way to make searches more foolproof, FILEMANAGER will search for your records whether they have been entered in uppercase or lowercase characters.

If you enter a name incorrectly you will return to the SELECTION screen. Try entering incorrect information and see what happens.

5. UPDATE/DELETE/PRINT

Now let's go on to investigate the commands that appear as each entry is presented. Once again summon the SELECTION screen. Make sure that the PRINT and AUTOPAGE functions are off. Clear the screen with the [OPTION] key and press [START].

The COMMAND LINE shows the following:

U/D/P STRT=PAUSE SLCT=MENU P1

Below the FUNCTION BAR the screen will show the KEVIN BROWN record. Now let's check out what the various commands can do.

The COMMAND LINE shows the following command choices:

- [U] --UPDATE the record
- [D] --DELETE the record
- [P] --PRINT the record
- [STRT] --depends on the position of the AUTOPAGE
 option. If AUTOPAGE=ON, [START]
 will call the next record. In other
 words, you will have to press [START]
 for each record.
- [SLCT] --Returns to RECORD MENU.

UPDATE

We are going to try the UPDATE option first. Press [U]. You will hear two tones, "UPDATING" will appear at the bottom of the screen and the cursor will position itself at the beginning of the entry. We can now proceed to change the entry.

Notice that you are again in the full-screen edit mode. You can move the cursor around anywhere on the screen, to make any changes you wish.

Let's say that KEVIN returned his video tape (Casablanca) two days later. Update the RETURN DATE and DAYS fields as follows:

RETURN DATE	9/7/82
DAYS	2

Now press [OPTION] and we see that Mr. Brown's rental \$24.00 with a tax of \$1.44 and a total of \$25.44. Press [START] and we'll go on to JOHN COOK, press [U] and enter:

RETURN DATE	9/9/82
DAYS	4

Press [START] and go on to John Doe's record.

Anytime that you review a record you can UPDATE it by simply pressing [U].

When you wish to edit several records one after another you can turn on the AUTOPAGE option. This will present the records one after another. When you see the record you wish to update you then press [U]. This will stop the paging process. After you have updated your entry and pressed [START], your AUTOPAGE will continue through your file. You may also choose to PAUSE during the paging process by pressing [START]. You may also UPDATE your record at this time.

We will now check whether our records have indeed been updated. Press [SELECT] to return to the RECORD MENU and then [2] to call the SELECTION screen. Press [START].

And there's Kevin's updated record.

DELETE

And now for the DELETE function. We will now delete JOHN DOE's record completely (and good riddance, the name is overused anyway).

To do this return to the SELECTION screen and press [OPTION] to clear the previous specifications. Now summon Mr. DOE's record (Enter DOE in the LAST NAME field). Once up on the screen press [D].

The screen will turn red and the prompt "DELETE VERIFY Y/N" will appear in the bottom left portion of the screen. This is a check to make doubly sure you wish to DELETE the record.

Type a [Y] to confirm your wish to delete this record.

Now return to the SELECTION screen by pressing [START]. If we press [START] again to search for DOE, we will simply be returned to the SELECTION screen, indicating that no such record exists.

After viewing, deleting or updating a record, FILEMANAGER will continue searching through the file looking for other records which match the SELECTION criteria. If you have found the record that you wish, or simply want to abandon the search process, press [SELECT] to return to the RECORD MENU.

IF YOU DON'T HAVE A PRINTER SKIP TO CHAPTER 6.

SELECTIVE PRINT

We can now try out the [P] control to print individual records. Summon the SELECTION screen once again and type in COOK in the INDEX row.

Press [START] and this will display JOHN COOK's record on the screen. Now, if you have a printer connected, press [P] and your record will be printed.

There is a difference between this print control and the print option using the ATARIKEY on the SELECTION screen. If you choose PRINT on the SELECTION screen, ALL records will be printed. If, however, you choose the [P] option as the records are called up, ONLY the record currently displayed will be printed (as we have just done).

AUTOMATIC PRINT

Next we'll print all of the records selected instead of pressing [P] for each one. Press [SELECT] and then [2] to return to the SELECTION screen.

Press [OPTION] to clear the screen.

Now press the ATARIKEY until both the PRINT and AUTOPAGE options are ON.

Press [START].

Under the FUNCTION BAR the following prompts appear:

TITLE&PRINTER CONTROL:

CARRIAGE RETURNS: 1

The TITLE & PRINTER CONTROL (37 characters max.) is useful in two ways. First, you can enter any title that you wish. There is also another very important use for the TITLE line. You can enter printer control codes on this line. Many printers have special characters which activate the built in features of the printers; i.e. condensed fonts, boldface, expanded fonts etc.

Since there are many printers that require these special control characters to utilize their unique print capabilities. FILEMANAGER will set up your printer using these control characters before printing commences.

(NOTE: CONSULT YOUR PRINTER INSTRUCTION MANUAL TO FIND OUT WHAT YOUR INDIVIDUAL PRINTER REQUIREMENTS ARE)

We won't be typing in any TITLE & PRINTER CONTROL:line, so if you do not wish any control characters simply press [RETURN]. This will position the cursor over the "1", next to the second prompt; "CARRIAGE RETURNS:". The number of CARRIAGE RETURNS establishes how many lines you wish between the records being printed out. The default condition is ONE line. This value is reset to default everytime you load a NEW file.

Now press [START]. All of your records will be printed.

This concludes the discussion of the SEARCH and SELECTION functions. Next we will investigate how SELECTION is used in conjunction with the LIST and LABELS functions.

But first, let's go back to the RECORD MENU by pressing [SELECT].

6. LIST/LABELS/SUBFILES

Aside from the SEARCH option, there are two other ways to retrieve and view your data. These are called the LIST and LABELS functions. There also is a special SUBFILE function to identify portions of a file to be used by other functions.

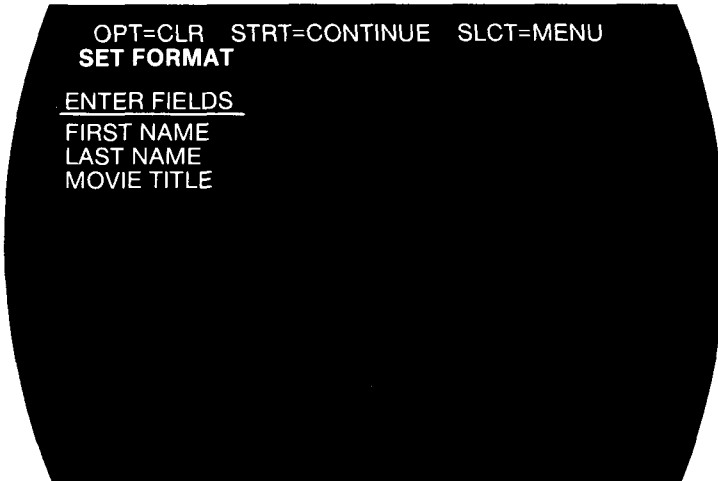
LIST

The list option allows you to list the data for any selected fields. Since seeing is the best way to learn, let's press [3] and notice that the SELECTION screen once again greets us.

We can use all of the SELECTION options that we have previously discussed in SEARCH function.

Use the [ATARIKEY] to select PRINT=OFF and AUTOPAGE=ON. Then press [START] and you will see the SET FORMAT screen.

Let's suppose that we wanted to get a list of all of the first names, last names, and movies rented. Fill out the screen as follows:



```
      OPT=CLR  STRT=CONTINUE  SLCT=MENU
    SET FORMAT

  ENTER FIELDS
  _____
  FIRST NAME
  LAST NAME
  MOVIE TITLE
```

If you have made any mistakes, you can change your form by positioning the cursor on the screen, and making the corrections. Also, in this mode the [SHIFT]-[INSERT] and [SHIFT]-[DELETE] controls are available to you to move entire lines around (See ATARI MANUAL).

You actually don't have to enter the full field name, just enough characters to make the field name unique.

For example you could enter:

F
L
M

FILEMANAGER will interpret these entries correctly.
Press [START] and you will see:

LIST		SLCT=MENU
FIRST NAME	LAST NAME	MOVIE TITLE
KEVIN	BROWN	E.T.
JOHN	COOK	CASABLANCA
JOHN	DOE	SUPERMAN
ELISE	STURZA	CAMELOT
CONNIE	TAYLOR	STAR WARS
KAREN	TAYLOR	CASABLANCA

RECORDS FOUND: 6

If you have misspelled a field name you will get an error message and an arrow ">" will appear next to the incorrect entry.

Now let's suppose that we want to produce a sales report. Press [SELECT] and [3]. Put an asterisk [*] in the RETURN DATE field as follows:

**"scan"* OPT=CLR STRT=CONT SLCT=MENU	
FIELD	FROM — TO
FIRST NAME	
LAST NAME	
STREET	
CITY/STATE	
MOVIE TITLE	
RATE	
OUT DATE	
RETURN DATE	*
DAYS	
RENTAL	
TAX	
TOTAL	

ATARIKEY: PRINT=OFF AUTOPAGE=OFF

This will select all of the records with the RETURN DATE field filled in (i.e. not a blank field). Press [START] and you will see the SET FORMAT screen again. Press [OPTION] to clear the screen and then fill in as follows:

OPT=CLR STRT=CONTINUE SLCT=MENU
SET FORMAT

ENTER FIELDS
MOVIE TITLE
RENTAL+

Be sure to put a plus sign[+] after RENTAL. That tells FILEMANAGER to add the RENTAL column. Press [START] and there's your report. Wow! We've made \$54 so far.

IF YOU DO NOT HAVE A PRINTER SKIP OVER THE REMAINDER OF THIS SECTION AND GO TO LABELS.

As your list is presented on the screen, you can choose to print the entry that last appeared on the screen. Try it. Notice that when you pressed [P] the entire record is printed, not just the fields that were specified on the SET FORMAT screen. In this way you can quickly scan through your files and choose to print selective records. Please experiment with this feature.

Now, return to the RECORD MENU by pressing [SELECT] and press [3]. When the SELECTION screen is displayed, press the [ATARIKEY], to choose AUTOPRINT=ON AUTOPAGE=ON.

Press [START] and when the SET FORMAT screen appears, notice that your last FORMAT information is still there. FILEMANAGER remembers your format till a new file is loaded. Now press [START]. The next prompt asks for the following:

TITLE & PRINTER CONTROL:

CARRIAGE RETURNS: 1

This allows your LIST to have a title not exceeding 37 characters. You can also insert the special control characters needed for your printer (See LABEL function for a more detailed explanation of printer codes).

Or, if you choose no title line at all just press [RETURN] without entering any information. The cursor will jump to "CARRIAGE RETURNS:".

Let's enter a [0] to instruct the printer to print each RECORD one after another.

Now press [START].

Your list will now be printed rather than displayed on the screen. When all of the records have been called, a record count will appear on the screen.

If at any time you wish to abort the LIST function, just press [SELECT] and you will return to the RECORD MENU.

LABELS

The LABELS option is primarily intended to produce mailing labels, although it can also be used to display the data in a convenient form.

Suppose we want to send late notices to everyone in our file who has not returned their videotape. Use the [SELECT] key to return to the RECORD MENU. Press [4] and you will see the familiar SELECTION screen before you. In the LABELS function like the LIST function, you can choose the range of records that you wish to display or print. Enter a quote ['] in the RETURN DATE field. This selects all the records with a blank RETURN DATE field.

```
*"scan"*  OPT=CLR  STRT=CONT  SLCT=MENU
          FIELD      FROM — TO

FIRST NAME
LAST NAME
STREET
CITY/STATE
MOVIE TITLE
RATE
OUT DATE
RETURN DATE  "
DAYS
RENTAL
TAX
TOTAL

ATARIKEY:  PRINT=OFF  AUTOPAGE=OFF
```

If you have a printer, press the ATARIKEY to PRINT=ON AUTOPAGE=ON. Otherwise set the [ATARIKEY] to PRINT=OFF AUTOPAGE=ON. Now press [START].

You will be looking at the same SET FORMAT screen which you encountered in the LIST function. As in LIST we can now enter those fields that we wish to use. However, LABEL fields MUST be in the first PAGE of the record. In addition to the field names (such as LAST NAME, FIRST NAME, etc.), there are two special characters that instruct FILEMANAGER how to format the LABELS in a particular way.

The first is the plus sign [+]. If we enter a plus sign, FILEMANAGER will send the printer to the next line. If we enter a comma [,], the FIELDS specified before and after the comma will be joined by a comma on the same line. Let's try it out.

We are going to construct a mailing label. First clear the screen by pressing [OPTION]. Type LAST NAME and press [RETURN]. This brings the cursor down to the next line.

Enter a comma [,] and press [RETURN].

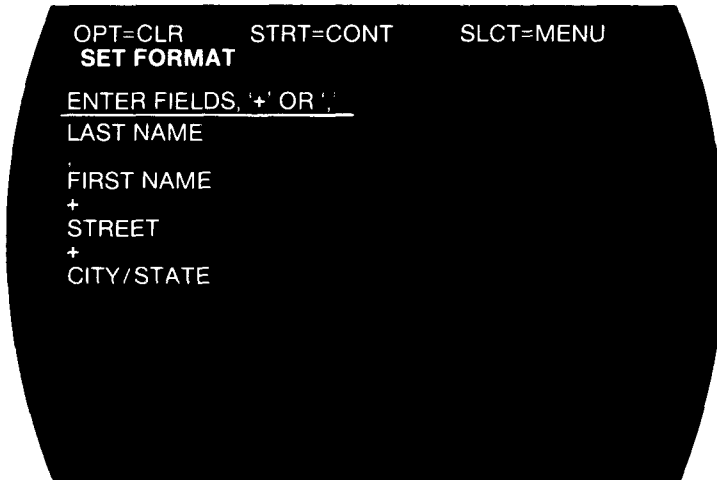
Now type in FIRST NAME and press [RETURN] again.

Once again the cursor skips down to the next line. This time enter a plus sign [+] and press [RETURN]. When encountering this plus sign, FILEMANAGER will skip to the next line before printing the next field. Now type in STREET and press [RETURN].

And now, once again, let's enter a [+] and press [RETURN].

Finally, type in CITY/STATE and press [RETURN].

Your screen should look like this:



Press [START] and FILEMANAGER will now begin to display the selected labels on the screen. Notice that the LAST NAME and the FIRST NAME are on the same line and separated by a comma. Then STREET is on the next line and so on.

Press the [START] key to pause the AUTOPAGE function after the second or third label has scrolled up. Press [START] again and the labels will continue to be displayed.

IF YOU DON'T HAVE A PRINTER, SKIP OVER THE REMAINDER OF THIS CHAPTER.

Now press [P] and FILEMANAGER will print the last record displayed on the screen to your printer. You can print LABELS while the display has paused or "on the fly", just as we have done.

In this way we can selectively print any labels we wish after seeing them come up on the screen.

Now let's go back to the RECORD MENU by pressing [SELECT] and then press [4] to go through the labels function once again.

Let's press the ATARIKEY this time to select PRINT=ON AUTOPAGE=ON. Now press [START] to print all of our records.

Once again we are at the SET FORMAT screen. FILEMANAGER has saved the specifications of our LABELS.

Now press [START] and then the next screen appears:

TITLE & PRINTER CONTROL:

CARRIAGE RETURNS:1

You can enter a title line of 37 characters if you wish. And, of course, you may insert printer control characters. For our demonstration however, just press [RETURN] to move you to the next "CARRIAGE RETURNS:" position.

On the assumption that you most often want to use the LABEL option to print gummed labels, "CARRIAGE RETURNS", specifies the total number of print lines for one LABEL (usually six or nine). NOTE: This meaning of CARRIAGE RETURNS differs from that in the SEARCH and LIST options, where "CARRIAGE RETURNS" indicates spacing BETWEEN records.

Press [RETURN] for no TITLE LINE, and to position the cursor on the "CARRIAGE RETURNS:" line.

Type a [6] and press [START].

Now we can watch all of the records being printed out.

Pressing the [START] key at any time will stop the printing process and it will resume when you press the [START] again.

As you can see, you can specify which field will be printed regardless of the order in which they appear on your form.

Please feel free to experiment with the LABELS function. After you finish, return to the RECORD MENU by pressing [SELECT].

SUBFILE (Text Wizard* and Copy)

There are some instances where you might want to perform a particular operation on a subset or portion of a file. Taking our example, suppose that we want to create a file that contains only those records where the rental movie has not yet been returned. This is done through a combination of the SUBFILE facility along with the COPY function. SUBFILE is also used to identify a subset of records to be passed to Text Wizard. In this way you can use FILEMANAGER in conjunction with Text Wizard to produce separately addressed form letters to a selected group of people. If no subfile has been generated, both COPY and Text Wizard will operate on the entire file.

Let's create a subfile of the late renters that we'll use later when we get to the COPY function. Make sure you are at the RECORD MENU then press [6] and you will see the familiar SELECTION screen. The quote["] should still be in the RETURN DATE field. Press [START] and you will next see the index fields listed for all the records that are identified as part of the subfile. Upon completion, the REVIEW MENU will reappear. The process is exactly the same in order to select a subfile to be used by Text Wizard. It should be noted that the SUBFILE operation does not create duplicate copies of the selected records. SUBFILE merely generates a list of the selected records that is later used by the COPY function or by Text Wizard to access the file.

*Text Wizard is a trademark of Datasoft Inc. Early versions of Text Wizard do not interface to FILEMANAGER. To use this feature, make sure that you have a version with the FILEMANAGER interface.

Upon completion, the REVIEW MENU will reappear. The process is exactly the same in order to select a subfile to be used by Text Wizard. It should be noted that the SUBFILE operation does not create duplicate copies of the selected records. SUBFILE merely flags selected records for later use by the COPY function or by Text Wizard.

The SUBFILE flags are deleted anytime that a record is updated or entered, or the file is re-indexed.

7. RE-INDEX

Press [SELECT] twice to return to the MAIN MENU.
Press [3].

The FUNCTION BAR reads: RE-INDEX. The prompt on the screen is:

ENTER INDEX 1, PRESS RET:

Here we can enter the new INDEX that we wish or simply press [RETURN] for the MAIN MENU. (NOTE: Even though your FORM can be up to 9 pages long, you may INDEX on fields IN THE FIRST PAGE ONLY. This means that all fields that you may wish to INDEX on, must be put on the FIRST PAGE of your record.)

Let's RE-INDEX on the MOVIE TITLE field. Type MOVIE and press [RETURN].

Now the prompt appears and asks us:

INDEX LENGTH: L, #, or [RETURN]

FILEMANAGER offers a choice of how many characters you would like to sort on in the INDEX. The INDEX LENGTH option allows you to enter either:

[L] =full length of the FIELD (up to 24 characters

[#] =to enter your own length (up to full length of FIELD or 24 characters, whichever is less).

[RETURN] =the default value of 5 characters.

Each of these options has its applications. For example: An alphabetical sort of names seldom requires more than the first five characters to be accurate. However, you may decide to INDEX other information (e.g. social security numbers or account numbers) which could require a different length. FILEMANAGER provides this choice.

Rather than entering the default of five characters again, this time we will set the INDEX at the full length. Press [L] and press [RETURN]. Let's skip the secondary index by just pressing [RETURN] again.

A message "READING FILE" will appear below the last entry.

FILEMANAGER will now read all of the records in our file. As it is doing so you will see the cursor moving below the "READING FILE" title. This will take a few seconds and then, almost too fast for the eye to see, the message "SORTING" will appear under this line. Immediately following this you will be back at the MAIN MENU. Press [2] and we'll be at the REVIEW FORM screen. You will notice that the arrow is now pointing to the MOVIE TITLE field. This information is also presented on the right side of the screen; "INDEX:MOVIE TITLE". Also notice that the INDEX SIZE=15, and the MAX # of RECORDS has been reduced.

Now press [SELECT] and then [SELECT] again, to call the RECORD MENU and press [6] to REVIEW INDEX.

You can see that not only is the INDEX changed to MOVIE TITLE but the entire INDEX field is presented, not just five characters of the names, as before.

There are two considerations when RE-INDEXING your file.

The first is the tradeoff of INDEX LENGTH and the maximum number of records. As was mentioned earlier, the longer the INDEX LENGTH, the fewer the maximum number of records. There is a limited amount of memory for the INDEX to reside in, so we have introduced the Variable Index Length option.

Typically, if you are keeping 1/2 page (128 byte) records, a disk can hold approximately 600 or more of these. With an INDEX LENGTH of five characters, memory will hold approximately 500 records. With a longer INDEX LENGTH, fewer records can be kept track of. You may change the INDEX LENGTH at any time. If the maximum number of records exceeds the INDEX capacity you will get a "IDX TABLE FULL" message. At this time, simply RE-INDEX your file with a shorter LENGTH.

Of course, if your records are more than one page long, the maximum number of records that can fit on a disk also decreases. The maximum number of records is calculated and displayed in the REVIEW FORM function.

If, upon reviewing the FORM for your file, the file LENGTH constraint is DISK rather than MEMORY, use a disk with more space on it. If a file has grown so large that you would like to put it on another disk, refer to the COPY FILE function in the CREATE/UTIL part of the program. This will explain copying files from disk to disk.

The other question is when to RE-INDEX a file?

If you have a very large file it will take FILEMANAGER some time to read all of the records in order to RE-INDEX them, even though the actual SORTING of 800 records takes less than 4 seconds. You should INDEX your file on the most often used field and use the subfield search options in conjunction with the INDEX

for more infrequent calls. If, for any reason, you want to change the INDEX, then by all means do so. The longest it will take is less than five minutes for a file occupying an entire disk. Otherwise, remember to use your INDEX and the subfield search options to recall your data.

A file CANNOT be more than one disk long. If you have more data than will fit on one disk, you will have to keep separate files (e.g. A to M on one diskette and N to Z on another).

With these considerations in mind, you can decide what will be the most efficient way for you to choose to INDEX your own files.

You might wish to experiment with the RE-INDEX option, by entering different INDEX length specifications. Notice how doing so affects the maximum number of records.

8. SAVE/END

Go back to the the MAIN MENU, press [6], "SAVE/END". At the bottom of the MAIN MENU screen you will see the message, "SAVING INDEX".

When you've finished working with a file, you must leave FILEMANAGER operations by using the SAVE/END option. If you do not, the next time you load your file, you will have to RE-INDEX. Always leave the program by using the SAVE/END option rather than simply turning off the computer. However, even if you don't SAVE/END no data will be lost, but, as was mentioned earlier, your file will have to be RE-INDEXED the next time it is loaded. If you are not exiting, but want to access another file on the same disk, the LOAD FILE option automatically saves your current index before loading in the next file.

If you have only been reviewing records on the screen or using the print options, then the index remains unchanged, and upon pressing SAVE/END no "SAVING INDEX" message will appear. Your index has not been altered, and therefore does not have to be saved.

You may have up to twelve files on any one disk.

9. UTILITIES

Make sure that your FILEMANAGER diskette is in drive number one and then, press [4] on the MAIN MENU and read the following while the CREATE menu is loading.

COPY FILE

The COPY FILE function allows you to duplicate existing files. It is VERY IMPORTANT that you back up your files.

Accidents can and will happen (bad diskettes, read/write errors, system lockups, etc.) at the most inopportune times, so it is imperative to duplicate your files frequently. A good rule of thumb is to copy your files at the end of every input session or if you've entered enough records to make it inconvenient to re-key the same data.

FILEMANAGER allows you to easily and quickly copy files from diskette to diskette or to back them up on the original diskette.

The COPY FILE function differs from the copy that the DOS performs, in that the files are stripped of free blocks, when using FILEMANAGER'S COPY FILE function, and not when using DOS.

Twenty-five free blocks are created by FILEMANAGER when allocating space (Think of free blocks as blank record forms waiting to be filled in). Extra free blocks are allocated when the file is first created, and then are used up, one by one, as you enter records. When these extra blocks are exhausted, more are created and you will see "ALLOCATING SPACE" at the top of your screen

When you delete records from your file the space that the record occupied becomes a free block. As you enter new records, FILEMANAGER assigns this space to these new records. It will not allocate any more space until all of the free blocks are used up.

Sometimes, however, you may wish to delete many records from a file and do not anticipate creating many more records in that same file. The space is still allocated for a certain number of records. There are now many free blocks (blank records) that have been created by the deletion process. They all take up space on your data diskette. The COPY FILE function strips away all of the free blocks. So, it is a good idea to process a file with many deletions by copying it over. However, if your file is an active file, it is not necessary to remove free blocks, as the allocated space will soon be used up anyway.

Proceeding with our example, you should be looking at the CREATE MENU. Press [SELECT] and you will see the UTILITY MENU.



Press [1] and you transfer to the COPY screen.

The sequence of prompts is:

SOURCE DISK DRIVE #...

Enter 1 or 2, wherever your data diskette is.

INSERT SOURCE DISKETTE
ENTER OLD FILENAME....?:

At this point, type in the name of the file you wish to copy. Type in SALES and press [RETURN].

DO YOU WANT TO COPY ONLY THE SUBFILE? (Y/N)

This message only appears if a SUBFILE has been previously defined. Since we defined a SUBFILE of late renters back in Chapter 6, we now have the choice of copying over the entire file, or just the SUBFILE. Let's respond with [Y].

OUTPUT DISK DRIVE #...

Enter 1 or 2, wherever your data diskette is.

INSERT OUTPUT DISKETTE
ENTER NEW FILENAME....?:

For our sample enter NEWFILE and press [RETURN].

IS SOURCE AND OUTPUT
DISKETTE THE SAME (Y/N)

For our example we are copying the file over onto the same diskette so press [Y].

The cursor will now bounce along under the last prompt, busily reading and copying your file. As soon as FILEMANAGER has finished copying, you will be returned to the UTILITY MENU.

If you had responded with [N] to the last prompt, you would have been instructed to insert the SOURCE diskette and the OUTPUT diskette alternately until your entire file was duplicated.

If you enter an OUTPUT FILENAME that is already used on the disk that you wish to copy to, the following message will appear:

FILE ALREADY EXISTS
OVERWRITE FILE (Y/N)

If you answer [Y] you will delete the existing file and replace it with the file you are duplicating. If you try to name the OUTPUT file the same as the SOURCE file, the message SAME FILE will flash in the command line.

NOTE: The SOURCE FILENAME and the OUTPUT FILENAME must be DIFFERENT even if they are being written to separate diskettes. This is a protection for you.

You can exit from the COPY FILE function by simply pressing [RETURN] instead of entering a FILENAME when prompted for one.

DISK DIRECTORY

Let's take a look at what files are out on the disk. Press [4] DISK DIRECTORY from the UTILITY MENU. The next prompt is DISK DRIVE #: Enter 1 or 2, wherever your data diskette is.

The directory of all of the programs on the data disk will now be displayed. The FUNCTION BAR will read DIRECTORY and the COMMAND LINE will display SLCT=MENU. The following data should appear:



There's the duplicate file (NEWFILE) which we just created.

The DIRECTORY function only shows FILEMANAGER data files on the diskette.

You can examine the contents of any disk without accessing the ATARI DOS (Disk Operating System). For example: You might want to check what other files are out on any particular disk before you decide to add new files. Also displayed is the number of free sectors left on the disk.

Now let's press [SELECT] to return to the UTILITY MENU. Notice that in UTILITY as well as in the main program [SELECT] always returns us to the MENU.

RENAME FILE

Next let's RENAME a file. Press [3].

In order to demonstrate this function we will rename the duplicate file which we just created in the first part of the program. The file was called NEWFILE.

The FUNCTION BAR will read RENAME FILE, and the COMMAND LINE will display the already quite familiar option, SLCT=MENU.

Below the FUNCTION BAR the following prompt should appear:

DISK DRIVE #: 1 or 2 as appropriate.

OLD FILENAME: Type in NEWFILE and press [RETURN]

The next prompt asks:

NEW FILENAME:?

Now type in NEWNAME, press [RETURN] and you will return to the UTILITY MENU.

Summon the DIRECTORY by pressing [4] and respond with the disk drive number. Yes, indeed, the name has been changed from NEWFILE to NEWNAME.

DELETE FILE

Now let's delete the file that we just renamed.

Go back to the UTILITY MENU and press [2].

The FUNCTION BAR will read DELETE FILE and the COMMAND LINE will read SLCT=MENU.

Below the FUNCTION BAR the following prompts appear in sequence:

DISK DRIVE #: 1 or 2 as appropriate.

FILENAME: Type in NEWNAME and press [RETURN].

The next prompt asks the grave question:

ARE YOU SURE (Y/N)

Since we are sure, press [Y] and the file will be deleted. You will once again be looking at the UTILITY MENU.

You can check in the DISK DIRECTORY and notice that the NEWFILE has indeed been nixed.

10. CONVERT FORM

One of the unique capabilities that FILEMANAGER offers is the ability to change the format of records that are already entered.

Imagine that you had a file of several hundred records. You then decide to add another field to the FORM of those records. Or, you decide that one of the fields is superfluous. Or, still another case, you might find that the allotted FIELD LENGTH was either too short or too long for the data you wish to keep track of.

FILEMANAGER allows you to change the name, length and order of any fields in your record AFTER the data has already been entered. You may also add additional fields, rename fields, or delete them.

The convenience of not having to re-enter all of your data into a new form is impossible to really appreciate until you have had to re-enter four or five hundred records.

Converting a file means changing the FORM in some manner and then copying the data into a file in the new format. This is a two step process. The first step is to either CREATE or MODIFY a new form. The second step is to run the conversion.

MODIFY FORM

Press [SELECT] to get you to the CREATE MENU. Press [3].

The sequence of prompts and responses is:

FILENAME & PRESS RET: SALES
DISK DRIVE #...(1 or 2 as appropriate)
OUTPUT FILENAME: SALES
OUTPUT DISK DRIVE#: (1 or 2 as appropriate)

FILEMANAGER now will display the FORM for the SALES file. There are two kinds of modifications that we can make to the FORM. The first, is JUST changing a FIELDNAME. The second, is changing the structure of the FORM, i.e. shortening or lengthening a field, adding/deleting fields or rearranging their order. The two types of changes differ in that the first, changing a FIELDNAME, does not require any additional steps beyond simply entering the new names.

However, if the structure of the FORM is changed, (e.g. lengths or types), you will need to go to the next step, CONVERTING the FORM after the MODIFY FORM step.

Let's try just changing a FIELDNAME first.

We are in the full-screen edit mode. Move the cursor down to the STREET field and change STREET to ADDRESS.

Your FORM will look like this:

```
                                STRT=SAVE  SLCT=MENU
CREATE FORM
FIELD NAME      TYPE
FIRST NAME      10
LAST NAME       10
ADDRESS         20
CITY/STATE      20
MOVIE TITLE     15
RATE            $
OUT DATE        R8
RETURN DATE     R8
DAYS            N
RENTAL          C$    1
TAX             C$    2
TOTAL           C$    3
```

Now press [START] to enter this revised FORM.

You will next be given the option of changing the computed fields. But let's leave everything else the same. So just step through the computed fields by pressing [START] until you are returned to the CREATE menu. This will also save the modified form.

Let's take a look at our change by REVIEWing the form (press [2]). Now your revised FORM is displayed with the new fieldname that we entered. This process is a straightforward way to change the fieldnames of the categories in existing files.

Now, let's consider the second type of change, the **STRUCTURAL** change. Let's assume that we decide to put in a ZIPCODE field in our SALES file so that we can **send out** advertisement mailers to particular zipcode areas. In addition, let's lengthen the size of the MOVIE TITLE field from fifteen to twenty characters.

Press [SELECT] and [3] to return to the MODIFY FORM screen. Answer prompts as follows:

FILENAME & PRESS RET: SALES
DISK DRIVE #...(1 or 2 as appropriate)
OUTPUT FILENAME:

This time, since we are making structural changes we can't output the revised form under the same name. Otherwise, the old form will be lost and we will not be able to access our data. Enter NEWFORM for an output filename. Next respond:

OUTPUT DISK DRIVE #: (1 or 2 as appropriate)

Again we are presented with the SALES form. This time let's make our more extensive changes. First skip to the MOVIE TITLE row. Now press [SHIFT]-[INSERT] and a new blank line appears after CITY/STATE.

Enter:

ZIPCODE 5

Position the cursor over the type field for MOVIE TITLE and change the length from 15 to 20. Your screen should look like:

CREATE FORM		STRT=SAVE	SLOT=MENU
<u>FIELD NAME</u>	<u>TYPE</u>		
FIRST NAME	10		
LAST NAME	10		
ADDRESS	20		
CITY/STATE	20		
ZIPCODE	5		
MOVIE TITLE	20		
RATE	\$		
OUT DATE	R8		
RETURN DATE	R8		
DAYS	N		
RENTAL	C\$	1	
TAX	C\$	2	
TOTAL	C\$	3	

Now press [START] and you will see the computed field screens. Keep pressing [START] until you return to the CREATE MENU.

CONVERT FORM

Now that we have created a new form, we must convert the data in the SALES file to the new format.

The CONVERT FORM allows us to pick out information from one file and insert it into a newly created FILE. FILEMANAGER examines each FIELD in the FORM that we have created and retrieves the information from the original file. The data is then inserted into the matching field names.

If the fields are longer in the new FORM, FILEMANAGER adds blanks at the end of the field. If the fields in the new FORM are shorter than in the original FORM, then the data is truncated to the correct new length. Numeric fields of any type (i.e. N,\$,C\$,C) can be converted to any other type of numeric field. HOWEVER, NUMERIC FIELDS CANNOT BE CONVERTED TO ALPHABETIC FIELDS OR VICE-VERSA.

FILEMANAGER will also insert/delete fields as well as rearrange their order within a FORM. All fields not contained in the new FORM are ignored.

The CONVERT function leaves the original file intact and creates an entirely new file according to the new FORM specifications.

Let's go through this process now. Press [SELECT] to go to the UTILITY MENU. Press [5] and you should be looking at the CONVERT screen.

Here we must enter the file that we wish to CONVERT to the new FORM. Type in SALES and press [RETURN].

SOURCE DISK DRIVE#...(1 or 2 as appropriate)

Next, you will be asked:

INSERT OUTPUT DISKETTE
ENTER NEW FILENAME....:

Now we enter the FILENAME that we created in the MODIFY FORM operation. Type in NEWFORM and press [RETURN]

OUTPUT DISK DRIVE#....:(1 or 2 as appropriate)

IS SOURCE AND OUTPUT
DISKETTE THE SAME (Y/N):Press [Y]

FILEMANAGER will now CONVERT your SALES file and then return you to the UTILITY MENU.

It's time to see the result of all of this activity. We are going to leave the CREATE/UTIL portion of FILEMANAGER and return to the MAIN MENU.

Make sure that the FILEMANAGER diskette is inserted in disk drive number one. Go to the CREATE MENU (press [SELECT]) and press [7].

****LOADING FILEMGR**** will appear in the copyright scroll line at the bottom of the screen. After a moment the familiar MAIN MENU will greet your eyes.

If you have only one disk drive remove the FILEMANAGER diskette and reinsert the DATA diskette.

Press [1] LOAD FILE

Now, following the procedures we laid out earlier, load NEWFORM.

The next screen you should see is the specifications for the FORM. Now press [SELECT].

FILEMANAGER now asks for an INDEX for the new file.

ENTER INDEX 1, PRESS RET: Type in LAST

INDEX LENGTH (L,#, or [RETURN]): Press [RETURN]

ENTER INDEX 2, PRESS RET: press [RETURN]

The file will now be read, sorted, and space will be allocated for new records.

Press [SELECT] to summon the RECORD MENU.

Now press [2] and then press [START].

You will see the changed FORM with the original data entered into the appropriate fields. The ZIPCODE field has been added, and the MOVIE TITLE line is now twenty characters long.

NOTE: You can CONVERT from one page to multiple page records and vice-versa. Remember to keep any fields that you might wish to INDEX on in the FIRST page of the record.

COMBINE FILES

You might have created several files with an identical FORM, and now you want to combine them into a master file. Imagine two SALES files, one for the month of APRIL, and one for MAY.

FILEMANAGER will check whether both of the forms match exactly, and if they do, append one file to the other. When you return to the MAIN MENU you will be required to RE-INDEX the master file.

We will not demonstrate this function with our sample file, but we will describe the sequence of operations to perform the COMBINE FILE function.

The prompts are as follows:

SOURCE DISK DRIVE #: Enter the DRIVE #

INSERT SOURCE DISKETTE
AND ENTER FILENAME...?:

Here we would enter the first filename: APRIL and press [RETURN].

INSERT OUTPUT DISKETTE
AND ENTER FILENAME:

Here we would enter the second filename: MAY and press [RETURN].

Is SOURCE AND OUTPUT
DISKETTE THE SAME (Y/N)

After responding to this prompt, FILEMANAGER would append APRIL to MAY. APRIL would remain as it was originally. However, MAY would now be a combination of both files.

If you wanted to leave both original files separate and intact, you would first copy MAY to another FILENAME, and then combine it with APRIL. This would provide the two originals, as well as the combined file under the name that you chose for the copy of MAY.

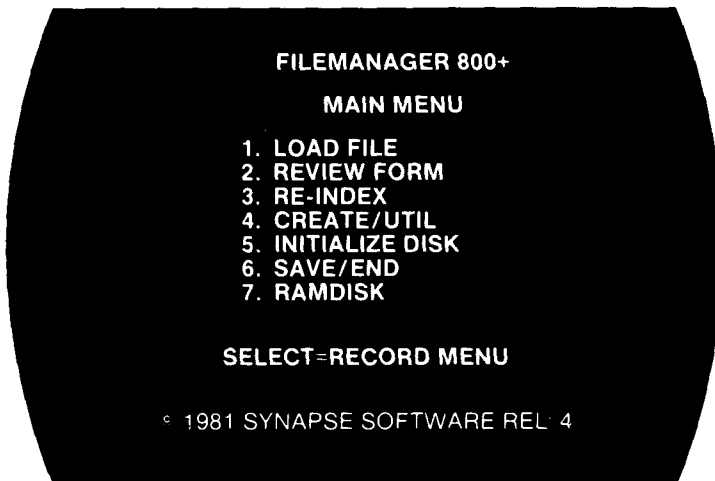
Remember, the SOURCE FILE always gets appended to the OUTPUT FILE. In our case it was APRIL (SOURCE FILE), that was appended to MAY (OUTPUT FILE).

NOTE: When using the COMBINE FILE function, your FORMS must match. If they do not, you will get a "FORMS MISMATCH" message in the COMMAND LINE.

You can, of course, modify the FORMS to match, by using MODIFY FORM and then CONVERT the file. Then you will be able to COMBINE the matched files.

11. RAMDISK

If you have an AXLON RAMDISK*, you can greatly speed up your use of FILEMANAGER. Since the RAMDISK is used in the same manner as a disk, but operates at the speed of memory (RAM), the disk functions are much faster. If you have a RAMDISK installed in your computer, your MAIN MENU will appear as follows:



You have an additional seventh RAMDISK option. There are basically two RAMDISK operations, transferring a file from a disk drive to RAMDISK and vice-versa. When you begin your session, press [7] and the RAMDISK screen will appear with the message:

ENTER SOURCE DISK DRIVE # OR R:

*RAMDISK is a trademark of AXLON Inc.

If you respond with a disk drive number(1,2 or 3), a file will be transferred to the RAMDISK. If you respond with an R, FILEMANAGER assumes that you're going from the RAMDISK to a disk drive.

To begin with, let's transfer our file from our data diskette to RAMDISK. Respond with a 1 or 2, depending where your data diskette is. Next you'll be shown a list of files on your data diskette and asked for a file name. Enter the name of the file that you're working with and the file will be transferred.

When using the RAMDISK in the other portions of FILEMANAGER use #4 in response to the disk drive number.

To complete a FILEMANAGER session using the RAMDISK, first do a normal SAVE/END from the MAIN MENU, then the VERY LAST thing you should do is to transfer the file from the RAMDISK to a diskette. Otherwise, none of your changes will be retained. When transferring from RAMDISK to a diskette, the response sequence is:

```
ENTER SOURCE DISK DRIVE# OR R:R
ENTER FILENAME AND PRESS RET: (Enter filename)
ENTER OUTPUT DISK DRIVE #: (1 or 2 as appropriate)
```

When using the RAMDISK, it is also a good idea to periodically transfer your file to diskette in order to minimize any data loss should something go wrong.

APPENDIX A

SUMMARIES

This appendix summarizes each major FILEMANAGER operation. For easy reference, it is organized alphabetically by operation.

CREATE FORM

The sequence of prompts and responses is:

- FILENAME Enter FILENAME followed by [RETURN].
Pressing [RETURN] without entering a
FILENAME returns to the MAIN MENU
- DISK# Enter the disk drive in which the data
diskette resides. The range is 1-4.
Press [RETURN] for the default of
disk drive #1.

After this specify the FIELDNAME and TYPE of each
field that you wish. There is a maximum of twenty
fields in all 9 pages.

Valid types are as follows:

<u>CODE</u>	<u>NAME</u>	<u>DESCRIPTION</u>
n	Alphabetic	Data has alphabetic letters or special characters, or won't be used in any arithmetic calculations (e.g. name, telephone, social security number.) "n" is the largest number of characters the field will contain. A field can be up to 100 characters long. Examples:10,12,15. Do not enter "n" but rather the actual number of characters.

There can be a maximum of five compute fields (type C or C\$) in a FORM. All computed fields must be on the first page of a record.

If you have any compute fields, you will next be prompted for the formulas. Enter each formula and then press [START] to go on to the next compute field or save the FORM and return to the CREATE MENU. If you press [SELECT] without going all the way through the computed fields, then none of the FORM definition will be saved.

MESSAGES

- | | |
|---------------------|--|
| 3: OUT OF RANGE | Alphabetic fields cannot be longer than 100 characters. Re-enter the information requested making sure that the data is correct. |
| 4: INPUT ERROR | Invalid field name (i.e. special characters in compute field) or type code. When entering formulas, indicates a syntax error. |
| 12: NOT IN 1st PAGE | INDEX and computed fields must be in first page. |
| 16: BAD FILENAME | Syntax error in file name. |
| 99:144 | Make sure that your data diskette is not write protected and that your file is not locked. |

ENTER

Enter the information you wish to record in your form. You may use the full-screen edit to change any data on your form. When all of your information appears as you wish, press [START] to enter your RECORD.

For multiple page records, you must enter each page of the record (by pressing [START]), before the next blank page is displayed. However, if you do not wish to enter any information on any subsequent pages you may exit by pressing [SELECT]. Since information is entered page by page, pressing [SELECT] lets FILEMANAGER know that the rest of the record is blank.

[SELECT] always returns to the RECORD MENU.

MESSAGES

9:DISK I/O ERROR: Data diskette is bad or is write protected.

LABELS

First the SELECTION screen will be displayed (refer to SEARCH/SELECTION).

After you have entered your SELECTION criteria the SET FORMAT screen will appear. The [OPTION], [START], and [SELECT] key functions are the same as in the SELECTION mode.

You may construct your labels by entering FIELDNAMES, plus signs(+), or commas(,).

+ =Skip to next line

, =Insert a comma between the fields.

NOTE: Specify only one FIELDNAME or special character per line. When you have the entire LABEL formatted, press [START] to enter these specs.

If the ATARIKEY PRINT=ON in the SELECTION screen, the prompt asking for TITLE &PRINTER CONTROL: will appear.

Enter the printer control characters.

Press [RETURN] and the cursor will be positioned next to the CARRIAGE RETURNS: prompt. Indicate the maximum number of lines for each label (usually 6 or 9). Then press [START] to enter these specifications. Printing will now commence.

If the ATARIKEY PRINT=OFF in the SELECTION screen, then your LABELS will be displayed on the screen. You may print individual LABELS to the printer by pressing [P] when the LABEL you wish appears on the screen.

LIST

First the SELECTION screen will be displayed (refer to SEARCH/SELECTION).

After you have entered the appropriate specifications the SET FORMAT screen will appear. The [OPTION], [START], and [SELECT] key functions are the same as on the SELECTION screen.

Now enter the FIELDNAMES that you wish to display as column headings (ONE PER LINE). When you have all of the columns specified press [START] to enter these specs.

If the ATARIKEY PRINT=ON in the SELECTION screen the prompt asking for TITLE & PRINTER CONTROL: will appear.

Enter the TITLE and/or PRINTER CONTROL characters.

Press [RETURN] and the cursor will be positioned next to the CARRIAGE RETURNS: prompt. Indicate the number of blank lines you wish between entries and press [START].

Printing will now commence.

If the ATARIKEY PRINT=OFF in the SELECTION screen then your list will be printed on the screen. You may print individual RECORDS to the printer by pressing [P] during the listing.

NOTE: The maximum number of characters permitted in the column headings is 132. This means that the sum of characters of all of the fields cannot exceed 132. Also, if more than 40 characters are chosen the screen display will wrap around and appear rather messy. It may also scroll up through the FUNCTION BAR and COMMAND LINE.

LOAD FILE

The sequence of prompts and responses is:

DISK # (Enter the disk drive being used for the data diskette. [RETURN] defaults to disk drive #1).

FILENAME Enter FILENAME that you wish to LOAD and press [RETURN].

The specifications of the FORM of the FILE just loaded are displayed.

Press [SELECT].

If the FORM was just created or there is no index, you will next be asked to index the file. Refer to RE-INDEX for further actions.

MESSAGES

- | | |
|-------------------|--|
| 1: FILE NOT FOUND | Make sure that you have spelled the name of your file correctly. It will be shown, above this prompt, in the DIRECTORY for the data diskette that you are using. If you do not see the name of the file that you wish to load being displayed, make sure that you inserted the correct diskette. |
| 21: DATA TOO LONG | Make sure that you have not typed in too many characters for the FILENAME. |
| 16: BAD FILENAME | Syntax error in FILENAME. |

RE-INDEX

The sequence of prompts and responses is:

ENTER INDEX Enter the FILENAME of category
you wish to INDEX.

INDEX LENGTH (L,#, or [RETURN]):

[L].....=Full length of FIELD
[#].....=Select # of characters
[RETURN]...=Default of 5 characters

Then the message READING FILE will appear, after
which you will return to the MAIN MENU.

MESSAGES

3: OUT OF RANGE

An alphabetic field cannot
be longer than 100 characters.

5: FIELD NOT FOUND

You have either misspelled
a FIELDNAME or entered one
that does not exist. Re-enter
the FIELDNAME correctly.

13: IDX TABLE FULL

Choose a shorter INDEX LENGTH

- 1: FILE NOT FOUND Make sure that you have spelled the name of your file correctly. It will be shown, above this prompt, in the DIRECTORY for the data diskette that you are using. If you do not see the name of the file that you wish to load being displayed, make sure that you inserted the correct diskette.
- 21: DATA TOO LONG Make sure that you have not typed in too many characters for the FILENAME.
- 16: BAD FILENAME Syntax error in FILENAME.

SEARCH/SELECTION

THE COMMANDS:

[OPTION]	Clears the screen of previous information.
[START]	Saves the SELECTION specifications.
[SELECT]	Always returns to the MENU.

[ATARIKEY]:

PRINT=ON	Prints all records called.
PRINT=OFF	You can select printing individually as the records are presented.
AUTOPAGE=ON	Automatically cycles through all records. Press [START] to pause.
AUTOPAGE=OFF	Press [START] to advance to the next record.

You can enter the RECORD or range of RECORDS you wish to examine, next to the FIELDNAME desired. The cursor is always positioned in the INDEX row when you enter the SELECTION mode. You may choose to retrieve records with up to four SUB-FIELD specifications in addition to the INDEX.



NOTE: When using the character SCAN feature in the INDEX, FILEMANAGER will retrieve each RECORD to check the entire INDEX field, not just the number of characters indexed on. As we explained earlier any search that requires FILEMANAGER to review each record will be much slower than the INDEX search. Using the SCAN feature in the INDEX does this.

APPENDIX B

COMMAND GLOSSARY

AUTOPAGE

A review option that automatically presents consecutive RECORDS in a FILE.

BOOTING UP

The process of activating your computer and loading in a program.

CHARACTER SCAN

A search option which allows a search for any combination of characters within a field.

COMMAND LINE

The line at the top of the screen which displays what commands are available to you. The COMMAND LINE indicates what pressing various keys will do at that time.

CREATE FORM

The selection of fields and types that will make up your record form.

DATA DISKETTE

The diskette upon which your data is stored.

DISKETTE

The 5 1/4" magnetic storage medium on which data is stored.

FIELD

A FIELD is an item of information. Your FORM is made up of FIELDS i.e. NAME, ADDRESS, TELEPHONE.

FIELDNAME

A FIELDNAME is the label for the the information in a FIELD. For example: FIRST NAME is a FIELDNAME that describes the information called JOHN. Each FIELDNAME can be up 12 characters long.

FILE

A file is a collection of RECORDS all using the same FORM. We keep of information, that is categories of information, such as recipes, or relatives etc.

FORM

A FORM is the template of how you wish to keep track of information.

FORMATTING

Preparing a new disk for information storage. Formatting a disk causes any information on that disk to be erased.

FUNCTION BAR

A horizontal bar near the top of the screen which specifies which operation is currently being performed.

INDEX

The field which we choose to organize our files upon. It is arranged in alphanumeric order.

MENU

A list of options available in the program.

PAGE

One screenful (255) bytes of information. A record can be up to 9 pages long.

READ

The inputting of data from the diskette.

SELECTION

The process of specifying which group of records you wish to retrieve.

SUB-FIELD
SEARCH

Any search that is not in the INDEX of the file. A sub-field search will take much longer than an index search, since each record must be accessed from the diskette and the fields read. The character SCAN ALWAYS goes out to the record, even if entered in the INDEX field.

UPDATE

To change a record already entered in a file.

WRITE

The transfer of data to a magnetic diskette. FILEMANAGER writes out records as they are entered.

WRITE-PROTECT

A disk that is protected from having data written to it.

APPENDIX C

CONVERSION FROM PREVIOUS RELEASES

Synapse Software continually upgrades and improves FILEMANAGER by producing new versions or releases of the program. The release number can always be found at the end of the "scroll line" which moves across the bottom of all of the menus. The release number consists of a number followed by a letter. The release number goes in sequence from 1A, 1B etc. When a major change takes place the number is incremented (e.g. 1 to 2), and the letter begins at A again. If your release number is less than 4A (e.g. 3A,3B,3F) you do not have the computation features. However, your existing files are completely compatible with this and later releases.

If you have two disk drives and you always put your FILEMANAGER diskette in disk drive number one and your data diskette in disk drive number two, then all you have to do is RE-INDEX your file.

If you only have a single disk drive, in order to avoid having to constantly swap between your FILEMANAGER and data diskettes, you must put a special file on each of your existing data diskettes and then re-index the files. This is done by first going to the INITIALIZE MENU (select either [5] on the MAIN MENU or [6] on the CREATE MENU) and selecting the second option (INITIALIZE).

Be careful not to select the first or third options on the INITIALIZE MENU as these will both destroy your data.

After the initialization is completed, press [4] to return to the MAIN MENU. Then load and re-index your file.

The FORM definition remains the same as it was. While you can add new numeric fields with the CONVERT operation, you cannot redefine an existing alphabetic field to a numeric field even though it may contain only numbers.

SPECIAL NOTES:

1. For a one drive system, you will need about 100 free sectors on an existing data diskette in order to perform the initialization process. If you have less, you will have to copy one of the files to another disk.
2. In some cases, you may find that files created under the earlier version of FILEMANAGER give you a INDEX FULL message on the new version. If this occurs RE-INDEX using an index size of 1. You may then split your file up using SUBFILE, or continue with a smaller index than before.

APPENDIX D

ARITHMETIC FUNCTIONS

The following functions are valid within compute field definitions:

ABS=Absolute value $ABS(-10)=10$

ANT=Artangent. $ANT(x)$

CLOG=Log to base 10. $CLOG(x)$

COS=Cosine. $COS(x)$

EXP=e raised to power x. $EXP(x)$

INT=Integer value. $INT(1.23)=1$

LOG=Natural log of x. $LOG(x)$

RND=Random number between 0 and 1. $RND(0)$

SGN=Return -1 if x is negative, 0 if positive.
 $SGN(x)$

SIN=Sine. $SIN(x)$

SQR=Square root. $SQR(4)=2$

NOTE: All trigonometric operations are in degrees.

APPENDIX E

HELPFUL HINTS

1. FILEMANAGER won't load

If your FILEMANAGER won't load, check the following:

- A. BASIC cartridge in the left slot.
- B. The cable between the computer and the disk drive is in place.
- C. At least 40K RAM is installed.

If you still can't load it, try the backup FILEMANAGER diskette provided. At this point it most likely has something to do with your disk drive. If you have more than one drive, try loading from the other one (don't forget to set the disk address to 1). Also try loading other programs from your disk drive (sometimes this will work, but because of speed variations, you still won't be able to load FILEMANAGER). If you are sure that all of your equipment is operating correctly and you are within the 90 day warranty period established at the date of purchase, then you may mail us your FILEMANAGER diskettes along with sales slip or proof of purchase and we will verify their condition and replace if necessary.

2. LARGE FILES

If your files are large you may run out of space either on the data diskette or in memory for your index table.

If the latter is the case try getting along with a shorter index (see Chapter 7). If that won't work then you'll have to divide your file on two data diskettes. To do this use SUBFILE (Chapter 6) to define how you want to split the file. Then copy the SUBFILE over to another diskette. Repeat the process, but this time define the SUBFILE so that it contains everything that wasn't selected the first time. COPY this SUBFILE to a third diskette. For example, if my primary index is LAST NAME I might create one SUBFILE containing all the last names from A to L and COPY those records to one diskette. Then I would create another SUBFILE for all last names from M to Z and COPY those records to another diskette.

3. BROKEN DISK DRIVE

If you normally use two disk drives and one breaks (unfortunately not an uncommon occurrence), you might want to use FILEMANAGER with only one disk drive. But since your data diskettes were only FORMATTed and not INITIALIZed also, you won't be able to use your system without constantly switching back and forth between your FILEMANAGER and data diskettes. To get around this follow the same procedure outlined in Appendix C (Conversion from Previous Releases).

4. NUMERIC FIELDS - Numeric fields (TYPE=N,\$,C,C\$) are automatically allocated fourteen spaces in a record. Fourteen digits is the longest number that the Atari computer can handle. Given that most numbers are less than fourteen digits, it is often more efficient to define a field as alpha even though it may contain only numbers. An example of this might be social security number.

Therefore, you should restrict the use of numeric types to fields that are to be used in computations. The other case where it makes sense to use numeric fields is when you wish to index on a field that may contain a variable number of digits to the right of the decimal point. Since an alphabetic is sorted alphabetically instead of numerically, it would sort like this:

1
90
3.4
500
.03

If the field were defined as numeric, the sort would be as follows:

.03
1
3.4
90
500

However, if all of the numbers were whole integers or had the same number of digits to the right of the decimal AND were right justified in the field then the alphabetic sort would be the same as the numeric sort. For example, since social security numbers are all the same length and are not used in calculations, it is usually better to define it as an alphabetic field.

5. PRINTER CONTROLS

At several points in the operation of FILEMANAGER you are asked for PRINTER CONTROLS. These are special characters required by the various printers to utilize other than normal fonts, spacing, character size, and so-on. Unfortunately, there is very little consistency from printer to printer so it is important that you refer to your specific manual for the control codes to use for your printer.

Most printer codes use either the [ESC] key or the [CTRL] key followed by a letter or number. For example, condensed print (132 characters across an 8 inch page) for the Atari 825 printer requires that you press the [CTRL] key plus the letter [T]. On the NEC 8023A-C you would press [ESC][ESC] plus the letter [Q]. Most printer manuals give you a table for these control codes, so refer to the manual for your printer.

In reviewing your printer manual, you will notice that you can also type printer control characters using the CHR\$ function from Atari Basic. THE CHR\$ FUNCTION WILL NOT WORK WITH FILEMANAGER. You must use the control codes themselves.

One final note about printer controls. When calling for expanded print, most printers require that you send them a new control code at the beginning of each new line. For this reason the wide characters are not recommended for LISTS. You may use the wide characters in the title for added effect, however.

APPENDIX F

CAPACITY and STANDARDS

The following are some of the FILEMANAGER capacities and standards:

1. There can be a maximum of twenty fields per record
2. FILEMANAGER will utilize up to nine pages per record depending on the number and length of fields defined during the CREATE process.
3. The maximum number of records depends on index size and record size. As an example, a file with an index of five characters and a record size of 125 characters results in a maximum file size of approximately 500 records.
4. There can be a maximum of 5 computed fields per form, and ALL must appear in the first page.
5. All fields to be used for a LABEL must appear in the first page.
6. The total length of all repeating alphabetic fields cannot exceed 100 characters.
7. Field names can be up to twelve characters. Alphabetic fields can contain any characters. Numeric fields can contain alphabetic, numeric, and blanks only.
8. File names can be up to eight characters and must begin with an alphabetic character and contain only alphabetic characters or numeric characters. (no special characters)

WARRANTY

All SYNAPSE SOFTWARE computer programs are distributed on an "as is" basis without warranty of any kind. The entire risk as to the quality and performance of such programs is with the purchaser. Should the programs prove defective following their purchase, the purchaser and not the manufacturer, distributor, or retailer assumes the entire cost of all necessary servicing or repair.

However, SYNAPSE SOFTWARE warrants to the original consumer/purchaser that this SYNAPSE SOFTWARE program diskette (not including the computer programs) shall be free from any defects in material or workmanship for a period of 90 days from the date of purchase. If a defect is discovered during this 90 day warranty period, and you have timely validated this warranty, SYNAPSE SOFTWARE will repair or replace the diskette at SYNAPSE SOFTWARE's option, provided the diskette and proof of purchase is delivered or mailed, postage prepaid, to SYNAPSE SOFTWARE.

If the defect, in the judgement of SYNAPSE SOFTWARE, resulted from accident, abuse or misapplication of the diskette, SYNAPSE SOFTWARE shall have no responsibility to replace or repair the diskette under the terms of this warranty. Any applicable implied warranties, including warranties of merchantability, fitness and application, are hereby limited to 90 days from the date of purchase. Consequential or incidental damages resulting from a breach of any applicable express or implied warranties are hereby excluded.

SYNAPSE SOFTWARE shall have no liability or responsibility to a purchaser, customer, or any other person or entity with respect to any liability, loss or damage caused or alleged to be caused directly or indirectly by computer programs sold through SYNAPSE SOFTWARE. This includes but is not limited to any interruption of service, loss of business or anticipatory profits or consequential damages resulting from the use or operation of such computer programs.

The provisions of the foregoing warranty are subject to the laws of the state in which the diskette is purchased. Such laws may broaden the warranty protection available to the purchaser of the diskette.

FILEMANAGER Copyright(C) 1981 by SYNAPSE SOFTWARE
ATARI is a registered trademark of Atari, Inc.



ATARI VERSION

<u>PAGE</u>	<u>LINE #</u>	<u>NOW READS</u>	<u>SHOULD READ</u>
9	1	The top line, which reads "SLCT=MENU, is called the...	The top line is called the...
9	5	always take you back...	often take you back...
9	18	FILEMANAGER's capabilities.	FILEMANAGER's capabilities. Insert your data disk.
13	14	field name, an error message will appear.	field name, an error message will appear when saving the form.
16	ADD		<u>NOTE:</u> COMPUTED FIELDS MUST APPEAR ON PAGE 1 OF YOUR FORM AND CANNOT CONTAIN FORWARD OR RECURSIVE REFERENCES.
17	2	Press [2] and you will see:	Press [2], enter your file name, and you will see:
34	12	TAYLOR on the LAST NAME row. Press [CTRL]-[C] to...	TAYLOR on the LAST NAME row. Press [CTRL]-[4] to...
39	3	SELECTION screen. Make sure that the PRINT and...	SELECTION screen by selecting #2 from the RECORD MENU. Make sure that the PRINT and...
40	10	(Casablanca) two days later. Update the RETURN DATE...	(E.T.) two days later. Update the RETURN DATE...
41	19	[START]. If we press [START] again to search for...	[2]. If we press [START] again to search for...
51	11-12	IF YOU DON'T HAVE A PRINTER, SKIP OVER THE REMAINDER OF THIS CHAPTER.	IF YOU DON'T HAVE A PRINTER, SKIP TO PAGE 54.
54	16	are at the RECORD MENU then press [6] and you will...	are at the RECORD MENU then press [5] and you will...

FILEMANAGER+ WILL NOT BOOT:

1. Make sure that your BASIC cartridge is inserted in the left cartridge slot.
2. If the FILEMANAGER+ program disk still fails to boot, remove it from the disk drive and re-insert the disk label side down. The program disk has been copied on both sides as a back-up. Re-boot the system.

MISSING RECORDS:

If you have duplicated your data file and find zero records:

1. Return to the MAIN MENU.
2. Select item #3; RE-INDEX.
3. Follow the prompts for the RE-INDEX process (page 56 of the manual).

BOOT ERRORS:

If boot errors are encountered after FILEMANAGER+ has been loaded:

1. Make sure that your data disk has been INITIALIZED by FILEMANAGER+. This is done from the CREATE/UTIL menu. See page 5 of the manual.
2. If you are upgrading from a previous release (3A-3F, 4A-4C), your data disks must be INITIALIZED by the new version. Refer to appendix C, page 94 of the manual.

FIELD NAME ERRORS:

Numeric Dollars & Cents, Calculated, and Calculated Dollars & Cents fields:

1. Can contain only CAPITAL letters in the field name. No special characters (#,\$,% etc.) can be used.
2. No BLANK spaces can be used in the field name. For example, the field name "TOTAL SALES" cannot be used.

STILL HAVING PROBLEMS:

Should you require further assistance in the use of your FILEMANAGER+ program, please feel free to call or write our Customer Service department. Please include the release number of your FILEMANAGER+ disk which can be found in the scrolling line of the MAIN MENU.

SYNAPSE SOFTWARE
CUSTOMER SERVICE DEPARTMENT
5221 CENTRAL AVENUE
RICHMOND, CA 94804

(415) 527-0622 (BETWEEN 10:00 AM and 4:00 PM PST)

ATARI VERSION

<u>PAGE</u>	<u>LINE #</u>	<u>NOW READS</u>	<u>SHOULD READ</u>
54	21	subfile. Upon completion, the REVIEW MENU will...	subfile. Upon completion, the RECORD MENU will...
55	1	Upon completion, the REVIEW MENU will appear. The...	Upon completion, the RECORD MENU will appear. The...
56	1	Press [SELECT] twice to return to the MAIN MENU.	Press [SELECT] once to return to the MAIN MENU.
66	5-7	The FUNCTION BAR will read RENAME FILE and the COMMAND LINE will display the already quite familiar option, SLCT=MENU.	The FUNCTION BAR will read RENAME FILE.
70	9	(press [2]). Now your revised FORM is displayed with...	(press [2] and enter your file name. Now your revised FORM is displayed with...
80	ADD		Field type explanation is not complete. See REFERENCE GUIDE for a complete listing of all valid field types.

FOR CUSTOMER SERVICE CALL: (415) 527-0622

MAIN MENU:

- | | |
|---------------------|---|
| 1. LOAD FILE: | Load existing data file. |
| 2. REVIEW FORM: | Review specifications of existing form. |
| 3. RE-INDEX: | Create new index for re-sorting of data. |
| 4. CREATE/UTIL: | Go to create menu. |
| 5. INITIALIZE DISK: | Go to initialize menu. |
| 6. SAVE/END: | Last step in session. Save index to disk. |

▲PRESS [SELECT] ▼

RECORD MENU:

- | | |
|-------------------|--|
| 1. ENTER RECORDS: | Enter data into record form. |
| 2. SEARCH: | Find record(s) meeting specified criteria. |
| 3. LIST: | Produce columner report of data. |
| 4. LABELS: | Produce mailing label report of data. |
| 5. SUBFILE: | Flag records meeting search criteria for later copying to separate file. |
| 6. REVIEW INDEX: | Review index fields for all records. |

CREATE MENU:

- | | |
|---------------------|--|
| 1. CREATE FORM: | Create blank data entry form. |
| 2. REVIEW FORM: | Review specifications for existing form. |
| 3. MODIFY FORM: | Change field names or field order in form. |
| 4. DIRECTORY: | List data files on data disk. |
| 5. FORMAT DISK: | Completely erase disk. |
| 6. INITIALIZE DISK: | Go to initialize menu. |
| 7. FILEMANAGER: | Go to main menu. |

▲PRESS [SELECT] ▼

UTILITY MENU:

- | | |
|------------------|---|
| 1. COPY FILE: | Copy file or subfile. |
| 2. DELETE FILE: | Erase a particular existing data file. |
| 3. RENAME FILE: | Change name of existing data file. |
| 4. DIRECTORY: | List data files on data disk. |
| 5. CONVERT FILE: | Convert existing data file to conform to a different form. Necessary for the addition or deletion of fields or the changing of field lengths. |
| 6. COMBINE FILE: | Merge separate data files with similar forms. |

INITIALIZE MENU:

- | | |
|---------------------|---|
| 1. FRMT/INIT DISK: | Erase disk and write program modules on data disk. |
| 2. INITIALIZE DISK: | Write program modules on previously formatted disk. |
| 3. FILEMANAGER: | Go to main menu. |
| 4. CREATE/UTIL: | Go to create menu. |

COMMON TERMS

AUTOPAGE:	If Autopage is on then records will be displayed in immediate succession.
FIELDS:	Each of the named input lines in a form.
FILE:	A collection of data records.
FORM:	A blank data input mask consisting of named fields and associated blank entry lines.
FORMAT DISK:	Erasure process which prepares a disk for the acceptance of data.
INDEX:	Field(s) selected to sort data file.
RECORD:	One filled in data form.

FIELD TYPES AND SPECIFICATIONS

TYPE	CODE	DESCRIPTION
ALPHA	n	Field will contain character information which will not be referenced by any computed fields. The code "n" refers to a number which indicates the maximum number of characters to be allocated to the field.
NUMERIC	"N"	Numeric information only. Alphabetic and special characters are not permitted. A field length of 14 characters is automatically assigned to all numeric fields.
DOLLARS & CENTS	"\$"	A numeric field formatted to two decimal places.
REPEATING NUMERIC	"R"	Once entered at the beginning of each input session, the numeric value will show up on all successive data entries unless changed.
REPEATING ALPHA	"R"n	An alpha field which, once entered at the beginning of the input session, will show up on all successive data entries unless changed.
COMPUTED	"C"	Field entry is the result of a calculation based upon previously appearing on the first page of the form. Computed fields must appear on the first page of the form.
COMPUTED DOLLAR & CENTS	"C\$"	A computed field whose result is formatted to two decimal places.

SYNOPSIS