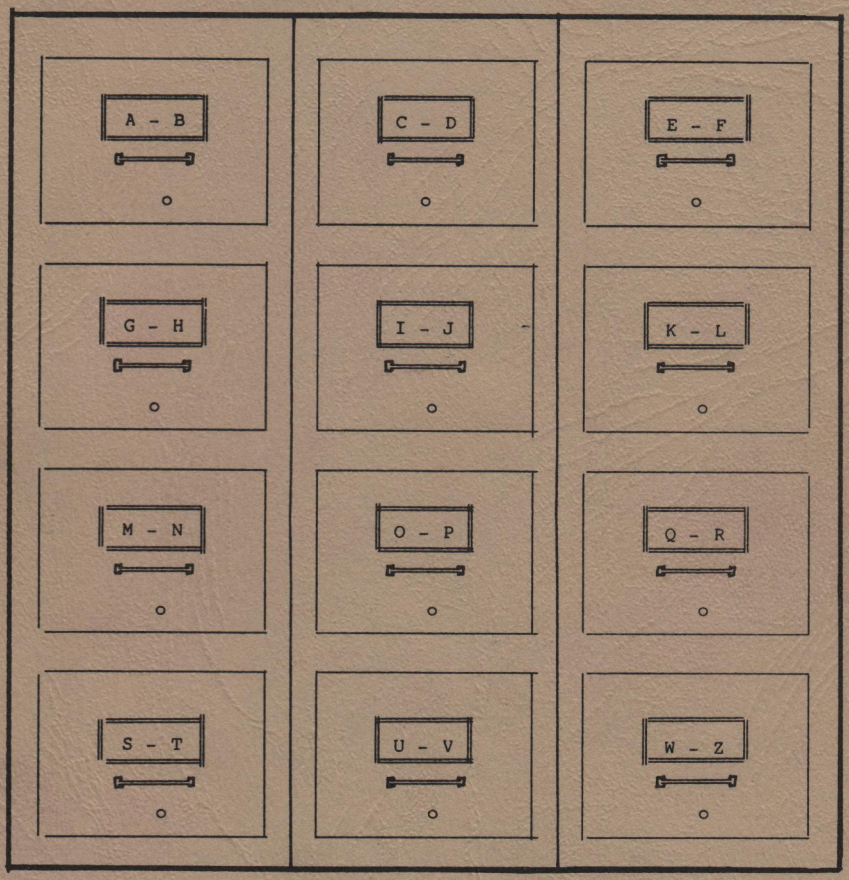
DISK

FILMASTR



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F I L M A S T R

FILMASTR -- is a data management system for the COLOR COMPUTER. Using this program will allow you to create and maintain files of any information that you choose. Keep a mailing list, a customer file, an appointment file, a student file, inventory files, medical histories, personnel files or just about any type of file that you can think of. FILMASTR lets you design the data input screen with up to 20 data fields. You may give the data screen a title and label the data fields as you choose.

FILMASTR uses a blinking cursor with full text editing control of data input. Copying data fields from one record to the next speeds entry of similar records.

Fast machine language sorts on any field and searches on any field provide quick access to any record or list of records. Records may be changed or updated easily, and you can select and save sub-files or combine files.

Every effort has been made to allow use of this program without reference to the manual. All functions are selected from menus and are fully prompted on the screen. A natural impulse is to want to RUN the program and see how it works. Before doing this, I strongly recommend that you take a few minutes to read this manual. It has been made as complete as possible and should answer most of your questions.

I would also recommend that you create a practice file , such as the "CLUB MEMBERS" example in the manual and familiarize yourself with the program's saving and loading procedures before you devote an hour or more, entering your own file only to find that you cannot reload it because you did not save it properly.

I N S T R U C T I O N S

1. LOADING DISK VERSION

Theprogram disk contains a file named "F/BAS", which will set the basic pointers to zero graphics pages. This is necessary in order to alow the maximum use of memory for the data files. This is the equivalent of the missing basic command "PCLEAR 0".

"F/BAS" will also load and run the "FILMASTR" program. It is not necesary to do any pokes.
To initiate the program, just type:

RUN "F" <ENTER>

2. LOADING TAPE VERSION

The tape version uses AUTO RUN, a tape loading utility available from Sugar Software, Reynoldsburgh, Ohio. This utility handles all of the setup procedures that are necessary to release unneeded graphics pages for data storage. To load and run the tape version, make sure that the tape is fully rewound. Place the tape in the cassette player. Set the volume properly. Press the PLAY button, and then enter:

CLOADM <ENTER>

The program will be loaded and execution will begin automatically.

3. CREATE A FILE

When the program begins, you will have two choices displayed on the title screen:

1) **CREATE A NEW FILE**
2) **LOAD AN OLD FILE**

To create a new file, touch (1). This will invoke the **CUSTOM SCREEN EDITOR** which will be used to

define your file record and to create the data screen format. This is like creating a form that you will use by filling in the blanks.

The screen will clear and a Blinking Black Block cursor will appear in the midle of the top line of your screen. At the bottom of your screen, instructions will tell you that you can move the cursor with the four arrow keys to any position that you may want to display the title.

You may position the title anywhere on the screen except for the two bottom lines, which are used to display the menus, reports, and instructions. You should also avoid the first eight and the last eight positions on the top line. These locations are used to display the current record number and the maximum number of records allowed for any given format. Unless your record will contain a large number of fields, (the maximum is 20) it is probably best to place the title on the second or third line.

Position the cursor so that the title will be centered and press the <@> key. The instructions at the bottom of the screen will now tell you to "ENTER TITLE". Type in your title, using "CLUB MEMBERS" for this example. All titles and field labels will appear in inverse (green on black) for contrast with the data input fields.

If you make a mistake, press <CLEAR> and retype the title. If you decide that the title is not centered or is on the wrong line, press <BREAK>. This will erase the entry and allow you to move the cursor to another position.

When you are satisfied with the title, press <ENTER>. This will complete the title and prepare to begin setting up the data fields. The screen instructions will now tell you to move the cursor to the position of the first data field. If you are going to have a large number of fields, you can use the next lower line. Otherwise it is best to allow at least one line between the title and the first data field.

Move the cursor to the left side of the screen and press the <@> key. The field number will appear and the instructions will tell you to "ENTER LABEL". Continuing with our example, type "NAME " and <ENTER>. The blank space at the end of the label is optional but it improves the appearance of the screen. Use <CLEAR> or <BREAK> as above if you make a mistake. Press <ENTER> when you have

NO MORE THAN 255 CHARACTERS PER RECORD

finished the label and the instructions will tell you to fill the field with characters. Any character will do. The purpose is to determine the length of the field and to help layout the input screen. Use dashes, periods, or type in the longest entry that you would expect for this field. For this example, type "ALEXANDER P. FORTESQUE" or any 22 characters. Press <ENTER>. The first field has now been defined as the "NAME" field and formatted for up to 22 characters. You may allocate more characters or fewer characters, depending on your application.

The instructions now ask if you want to enter another field. Answer yes by touching <Y>. Move the cursor to the left end of the next line. Press <@>, and label field #2, "ADDRESS ". Fill the field with 18 characters. The Next line should contain label #3, "CITY " with 15 characters for the field.

Field #4 should be on the next line, labeled "STATE ", with a 2 character field. There is enough room on this same line for the next field. Do not move the cursor after you have answered <Y> to "ANOTHER FIELD?". Press <@> and label field #5, "ZIP ", with a 5 character field. The next line can also hold two fields. Field #6 is "AREA "with 3 characters. Field #7 is "PHONE " with 8 characters.

Put the last field on the next line. Label it "CODES " and give it 5 characters. The instructions will ask if you want to enter another field. Look the screen over very carefully. If you have made any mistakes you can still make corrections by pressing <CLEAR> or <BREAK>. If everything is all right, press <N> to answer "ANOTHER FIELD?". No more fields. Your screen will show:

```
YOUR FILE--CLUB MEMBERS
HAS 8 FIELDS
THE LONGEST IS 22 CHARS
EACH RECORD IS 78 CHARS
THIS FILE CAN HOLD
108 RECORDS
PRESS ANY KEY TO CONTINUE
```

The record capacity will vary according to the amount of memory that you have available. If you increase the size of your system at a later date, it will not be necessary to re-define your files. They will automatically adapt to the new memory size.

4. SAVE FORMAT ON TAPE

Now that you have designed and defined your file format, you will want to save it on tape before beginning to enter data. A seperate tape should be used for each file for convenience. It will save you from having to search through a long tape to find the file that you need.

Remove the program tape from the recorder and insert the data tape. Be sure that it is positioned past the non-magnetic leader. Press the PLAY and RECORD buttons on the recorder and then press <ENTER> on the keyboard.

The recorder will run for a few seconds and stop. The screen will say:

REWIND DATA TAPE
TYPE RUN AND <ENTER>

Your screen design has been recorded on the cassete. In order to provide the maximum capacity, the CUSTOM SCREEN EDITOR is automatically deleted from memory, causing program execution to halt. The "OK" prompt and the colored cursor will appear on screen. If you had selected option #2. LOAD OLD FILE at the begining, the program would have jumped to this position.

You are now ready to enter data into the record format that you have defined.

5. SAVE FORMAT ON DISK

When you have finished with the design phase, you will be asked for a filename. Enter any name up to eight characters without an extension. The progam automatically adds the "DAT" extension. Press <ENTER> and the format will be stored on disk.

The screen will then ask you for the filename again. This time when you enter it, the format will be displayed on screen along with a flashing menu line, ready for your selection.

6. LOAD OLD FILE

If you select #2. LOAD OLD FILE, or have just completed the creation of a new file format and saved it to tape, the screen instructions will tell you to rewind the data tape and "RUN" the program. Be sure to press <PLAY> on the recorder.

The screen will turn blue and the recorder will run for a few seconds while the file header is read. This file header contains the format and the screen design for the file. When the read is completed, the data screen will appear. If there are any records in the file, the recorder will run until all of the records have been read. After reading all of the available data, the first menu will appear.

7. MENU I

ADD	LIST	SORT	LOAD	END
1	2	3	4	5

This menu appears after a "LOAD" as above or can be called to the screen at any time by pressing the <BREAK> key. In some cases you may have to press the break key twice. This menu offers the primary functions that involve the complete file. The desired option is selected by pressing the corresponding number key.

8. ADD

Select this option to add new records to the file from the keyboard. The menu will be replaced by the instruction, "ADD NEW RECORD", and the blinking cursor will appear on the first field of the input screen, indicating that it is ready for input.

Enter data as you would normally fill in a form. The cursor can be moved to any field on the form by pressing the up and down arrows and may be moved to the right and left on any field by pressing the right and left arrows. For complete instructions on cursor movement and text editing, see the EDIT section of this manual.

You cannot enter more characters on any field than you have reserved in the field. When you have reached the end of each field, the cursor will stop and you will hear an audible alert.

If you are entering data from a long list of similar records, such as a mailing list, where you are repeating the same data on each record, you can save a lot of time and reduce errors by using the auto-copy feature. Just press and hold the <CLEAR> key while pressing <ENTER>. The field from the previous record will be copied to the current record.

When you have completed the last field, a screen prompt will ask "ENTER OR CLEAR". If the data is all wrong or you decide not to add the data to the file then press <CLEAR>.

If you want to make a few changes, press the up arrow key to return the cursor to the data field and make any corrections.

If the entry is correct, press the <ENTER> key. The record will be added to the file and the screenwill clear for the next entry. Note that the record on display is always shown in the upper left corner of the screen.

To exit this mode at any time, press <BREAK>. MENU I will appear with your options.

9. LIST

This option allows you to view any record in the file, paging forward or back by pressing the left or right arrow key. Select LIST by pressing <2> on MENU I. The program takes a second or two to create an index of all of the records in the file and then displays the message, "KEY=ALL RECORDS", and "RECORDS=nn, where nn is the number of records in the current file.

The first record in the file will be shown on the screen. You may see the records in order by pressing the right arrow or you may jump to the last record in the file by pressing SHIFT/right arrow. You may see the previous record by pressing the left arrow or you may jump back to the first record by pressing SHIFT/ left arrow. As you move from record to record you will see the current record number displayed in the upper left corner of the screen.

To see the other options that are available to you press <BREAK> to call MENU II to the screen. You can then select one of the options as shown on the menu and described below or continue to page through the file by pressing the arrow keys.

10. SORT

Use this option to sort your file on any field or combination of fields. The fields do not have to be pre-defined as key fields. When you press <2>, the bottom of the screen will ask you "WHICH FIELD?". Type the field number and press <ENTER>.

This program uses a fast machine language sort that will complete the sort in under five seconds. When the sort is finished, the screen will display the first record and the message, "KEY=ALL RECORDS". In effect the program does a list function before each sort so that all records are included in the sort. Multiple field sorts are performed one at a time by returning to MENU I and selecting the next field by which to sort.

Sorting a file by "NAME", then by "CITY", and then by "STATE" will group together in alphabetical order, all of the records for each state. Within each state group, the records will be in order by city and within each city group, the records will be in order by name. The whole process will take about 30 seconds.

For the purpose of sorting, numerical data is considered to be in character form. This means that a field that contains "21" will be percieved as lower than one which contains "5". To maintain numerical order you should be sure that all data is entered with the same number of places including leading zeros where necessary. This is not necessary if you do not need to sort on the field in numerical order.

To maintain chronological order when sorting on date fields, The dates should be entered in the European format -- YY/MM/DD -- or seperate fields should be allocated for MONTH, DAY, and YEAR.

11. LOAD

The load option will let you load a previously saved file and add it to the file that is currently in memory, creating a new single file. Since the files are to become one file, they must have the same format, the same number of fields and the same number of characters in each field. If you attempt to combine two dis-similar files, the computer will ignore the second file.

If the two files combined will contain more than the maximum number of records, the computer will load as many as possible and will then display the "FULL" message in the REC. NO. position. This will not crash the program. You will still be able to access all of the records that are in the computer memory but you will not be able to add any new records.

Press (4) to select this option. You will be asked for a file name. This must be the same name

CASSETTE GOTO 56
DISK GOTO 6

that was given to the file when it was saved. You might save several different files using the same format but with different filenames that could be combined for a specific purpose. An address list of "SUPPLIERS" could be combined with a list of "CUSTOMERS" to produce a combined mailing.

When you type the filename and press <ENTER>, you will be instructed to prepare the recorder and to press <ENTER> again. Be sure to position the tape so that it is at the start of a file. If the tape contains more than one file the program will search for the correct filename, but if the search begins in the middle of a file, an I/O ERROR will result and the program will halt. If this should happen you can resume the program without loss of data by typing "GOTO 6", <ENTER>.

When loading is complete, MENU I is displayed and you may select any of the available options from it by pressing the corresponding number.

12. END

When you are ready to end the session, make this selection by pressing <5>. You will be asked if you have saved the file. This is a reminder that if you have made any changes, additions, or deletions in the file, you must save the new file or all changes will be lost. Any answer other than <Y>es will return you to MENU I so that you can save the file if you want to. If you do not want to save any files, or if you haven't made any changes then you must decieve the computer by answering <Y>es when you are asked. Be warned that this will erase the program and all data from the computer memory.

13. MENU II

SEL	SAV	PRT	SUM	DEL	CHG
1	2	3	4	5	6

This menu is called to the screen by pressing <BREAK> whenever a list of records is available for review such as after a LIST or SORT. When this menu is on screen, you may select any of the options listed by pressing the corresponding number key or you may page through the current file by pressing the left or right arrow keys. You may also call MENU I by pressing <BREAK>.

14. SEL

Select is a very powerful function. It allows you to select a sub-group of records from the current list. This sub-group becomes the current list and can be subjected to further selection. When this option is chosen, the program will search through the current list of records and create an index of records that meet you selection parameters.

Selection parameters can be very broad or very specific. Records can be selected if the chosen field contains a partial match of your key word or phrase or they may be selected on the basis of being GREATER THAN (>) or LESS THAN (<) your key word or value.

This will make it possible for you to search through an expense file and find all records of medical expenses for any member of you family that were over $100 and occurred before Jan 15, 1981 and after August 23, 1977 if your records are complete.

To use this option, press <1>. You will be asked which field you want to use as a selection target. If you want to select those members of your club that are from California then enter the number of the "STATE" field. The cursor will jump to the selected field and you will be instructed to "ENTER KEY WORD". Type "CA" and <ENTER>. In a few seconds, the screen will display the first record that contains "CA" in the state field. The bottom of the screen will show "KEY=CA" and also the number of records that meet your selection key. These records now make up the current list and can be viewed in order by pressing the right and left arrow keys.

If you had used only "C" as the key word, the list would also include all records from Colorado, Connecticut, North Carolina and South Carolina. To select a single specific record, be as specific as you can. Searching the "NAME" field for "HERBERT J. LIVINGSTONE" will locate only that record. It will not locate the record of "HERBERT LIVINGSTONE" without a "J."

To use the relational operators in a select operation, just precede the key word with the appropriate character. Using the "ZIP" field as the target, the key ">89999" will return a list of west coast states whose ZIP CODES are all 90000 and up.

Remember that the relationship is evaluated on the basis of ASCII code. "A" is "<B" and ">4". If numerical fields are to be selected properly based on these relational operators, they will have to be formatted properly with leading zeros where necessary. In order to select before (less than) or after (greater than) a certain date, the date will have to be entered in YY/MM/DD format.

To recall the full list of all records, return to MENU I by pressing <BREAK> <BREAK> and selecting the LIST or SORT function.

15. SAV

The current list may be saved to tape or disk as a new file using this function. Remember that you are saving the currently selected list which may be only a small part of the total file if you have made a selection. If you want to save the whole file be sure that you have just previously used LIST or SORT.

When you press <2>, you will be asked for a filename. Enter any eight character name. Do not enter a file extension. If you are using the tape version, you will instructed to "PREPARE THE RECORDER ... PRESS ENTER". Place a tape in the recorder and position it past the leader. If you are saving more than one file on a tape, be sure that the tape is positioned beyond the end of the previous file. When you have done that and set the recorder by pressing both PLAY and RECORD you can press <ENTER> and the file will be recorded.

For a disk based system you do not have to change disk although you may if you want to. Just enter the filename and press <ENTER>.

The file is saved with a header that describes the file length, the record format, and the screen format so the file can be reloaded at a later time without the need to load a format file first.

The format of this header is described in the appendix. This information will allow you to use the data files for other programs if you want to.

16. PRT

Choosing this option will let you print the data from the current list using a simple and flexible format code. Press <3> to print and you will be given the choice of screen or printer for output.

If you choose "PRINTER", be sure that your printer is plugged in, turned on, and loaded with paper or labels. This program does not output any special codes for printers. If you need special format codes for your printer you will have to send them to the printer before loading FILMASTR.

You will be asked if you want the print-out to include the field label with each field. Answer yes or no. A yes answer will provid a print-out such as:

```
1 NAME WILLIAM WHIPPLE
```

and a no answer will provide only:

```
WILLIAM WHIPPLE
```

Then you will be instructed to "ENTER CODE". The code that you enter will determine which data fields are printed and which line they will be printed on. You may print all fields or only selected fields. You may print the fields in any order and you may print any field more than once if necessary. You may also include any additional character or group of character such as a comma or a space for formatting purposes or even a complete phrase such as "OR THE FAMILY RESIDING AT" which will be printed with each record.

The code that does the formatting is simple. Any number is recognized as a field number and will cause that field to be printed. A colon (:) will cause a line feed / carriage return and any other character will be out-put to the print device. A number that is greater than the highest field number will end the current record and cycle to next record and print it in the same format. Printing will continue until all records in the current list have been printed.

Using the "CLUB MEMBERS" file that we created in the example, a code of "1:2:3, 4 5::::99" will give a result like this:

```
AMOS T. HARDING
412 VISTA DRIVE
CINCINNATI, OH 45221


FRANK PALUMBO
RD 2 BOX 343
ALIQUIPPA, PA 15001
```

A code of "(6) 7 1:" will produce this result:

```
(513) 243-4376  AMOS T. HARDING
(412) 341-1432  FRANK PALUMBO
```

Notice that in the first code example there are a total of six colons. This will give the proper spacing for address labels that are 15/16ths high and which repeat every inch on the page. If you are using labels of othe sizes, you can adjust accordingly by adding the proper number of line feeds.

Notice also that trailing blanks are stripped from each field so that the comma prints immediately after the city no matter how long or short the name is.

The "99" at the end signals the program to go to the next record. The format code is limited to 64 characters which should not cause any great problems.

When the printing is complete, pressing any key will return you to the first menu.

17. SUM

If your records contain a numerical field such as an expense file or an invoice log with an "AMOUNT" field, you can sum that field for the current list by pressing <4>. You will be asked "WHICH FIELD?". Enter the field number and the sum of that field will be shown on the screen.

When used with the correct selection key this can be a very useful function. If your record format includes a DATE field, you might select all records for a particular category of expense and then from that list, select all records for a particular month or a particular period. The total of the amounts from each record is just a keypress away.

18. DEL

To delete any record just call the record to the screen and press <5> from MENU II. You will be instructed to press <CLEAR> to delete the record. Any other key will abort the delete function and leave the record in the file.

19. CHG

To change any record in the file, display the record and then press <BREAK> to call MENU II. Then press <6>. You will be asked "WHICH FIELD?". Enter the field number and the cursor will jump to the selected field. Make any changes that you want using the EDIT features and the press <ENTER>. The change will be recorded in the file but of course this does not affect the file that is stored on tape or disk. To permanently record the change, the file must be SAVed.

----- END -----

TEXT EDITING

Any time that the blinking cursor is on the screen, you can use these editing features:

KEY	FUNCTION
RIGHT ARROW	Move the cursor one space to the right.
LEFT ARROW	Move the cursor one space to the left.
UP ARROW	Move the cursor to the previous field.
DOWN ARROW	Move the cursor to the next field.
SHIFT RIGHT ARROW	Move the cursor to the next blank space.
SHIFT LEFT ARROW	Move the cursor to the first character position.
SHIFT UP ARROW	Open text and insert a blank space.
SHIFT DOWN ARROW	Delete the character and close up the text.
CLEAR	Erase the field and move the cursor to the first position.
CLEAR / ENTER	Copy the field from the preceding record.
BREAK	Call MENU I or MENU II.

FILE HEADER FORMAT

Each file on tape or disk storage includes the following format data as a header.

#	TYPE	DISCRIPTION
1	NUM	RECORD LENGTH
2	NUM	NUMBER OF FIELDS/RECORD
3	STR	TITLE
4	NUM	PRINT POS. FOR TITLE

LOOP FOR EACH FIELD:

1	STR	LABEL
2	NUM	PRINT POS. FOR LABEL
3	NUM	POSITION IN THE RECORD OF THE FIRST CHARACTER OF THIS FIELD.
4	NUM	FIELD LENGTH.
5	NUM	PRINT POS. FOR FIELD.

FOLLOWED BY RECORDS AS STRINGS OF EQUAL LENGTH.

Each record is stored as a single string. The fields within the string are defined by the values of data items 3 and 4 above. This information will allow you to use the data files for other programs if you want to.

```
=====================================
[ REC  1 ]##############[ MAX 195 ]
[ ######################################
[ ########[CLUB MEMBERS]##############
[ ######################################
[1 NAME] ----------------------- [
[2 ADDRESS] ------------------- [
[3 CITY] --------------- [
[4 STATE] -- 5 ZIP] ----- [
[6 AREA] --- 7 PHONE] -------- [
[8 CODES] ----- [
[ ######################################
[ ######################################
[ ######################################
[ ######################################
[    ADD   LIST   SORT   LOAD  END   [
[     1     2      3      4     5    [
=====================================
```

```
=====================================
[ REC 43 ]##############[ MAX 310 ]
[ ######################################
[ ########[EXPENSES]##############
[ ######################################
[1 DATE] --/--/-- [2 AMT] ----.-- [
[3 FOR] ------------------------- [
[4  TO] ------------------------- [
[5 WITH] ------------------------ [
[6      ] ------------------------ [
[7 PURPOSE] --------------------- [
[8 CODE] ----- [
[ ######################################
[ ######################################
[ ######################################
[    ADD   LIST   SORT   LOAD  END   [
[     1     2      3      4     5    [
=====================================
```

```
REC 42 ]##############[MAX 244
#########################################
#########[ INVENTORY ]#########
#########################################
1 PART#] --------
2 SUPPLIER] -- 3 ALT] --
4 MIN] ---- 5 MAX] ----
6 STOCK] ----
7 PRICE] ------ 8 COST] ------
9 UNIT PKG] ------
10 SALES LST MO] ----
11 SALES LST YR] ----
#########################################
#########################################
   ADD   LIST   SORT   LOAD   END
    1     2      3      4      5
```

```
REC 23 ]#[SUPPLIERS]#[ MAX 222
#########################################
1 NAME]-------------------------
2 ADDRESS] --------------------
3 CITY] --------------------
4 STATE] -- 5 ZIP] -----
6 AREA] --- 7 PHONE] --------
8 PRODUCT CODE] -------
9 MIN ORD] --- 10 DISCT] ---
10 TERMS]--------
11 FREIGHT CODE] -----
12 ALTERNATE]--------------------
#########################################
#########################################
   ADD   LIST   SORT   LOAD   END
    1     2      3      4      5
```

UP-DATES AND REVISIONS

Use the enclosed card to register your purchase of this program with SUM-WARE. Registration will allow us to notify you of any changes or revisions that are made to this program.

FILMASTR

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FILMASTR

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