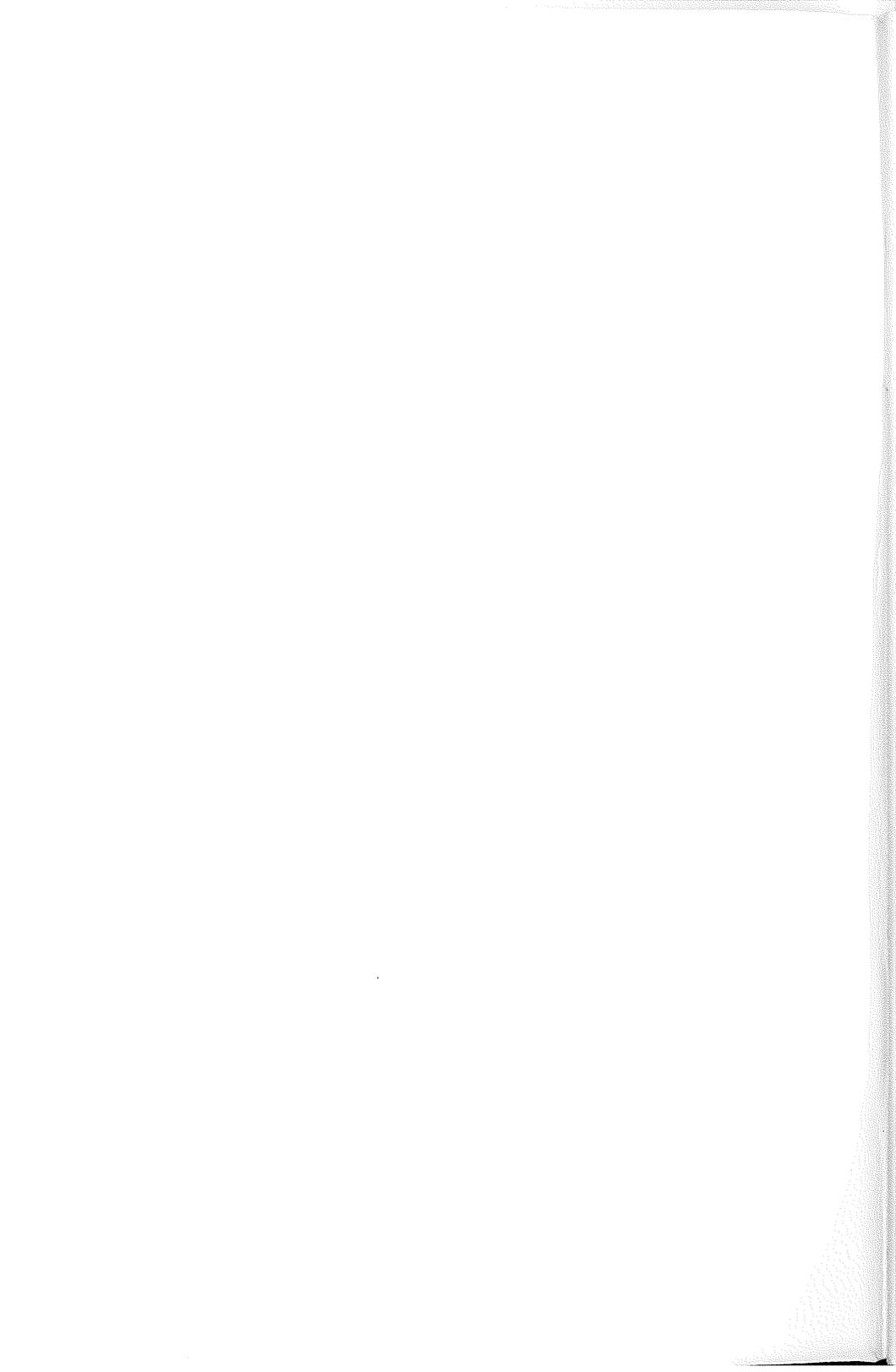


QUIKPRO+II

**AUTOMATIC
PROGRAM
WRITERS**

ICR FutureSoft



QUIKPRO + II Automatic Program Writer

(Advanced QUIKPRO +)

USER'S MANUAL

© 1981-1986 ICR FutureSoft

2nd Edition

Printed in U.S.A.

This basic work is protected under the Copyright laws of the United States Register of Copyrights, Library of Congress, Washington, D.C. All rights reserved. No parts of this manual may be reproduced in any form without the express written permission of ICR FutureSoft.



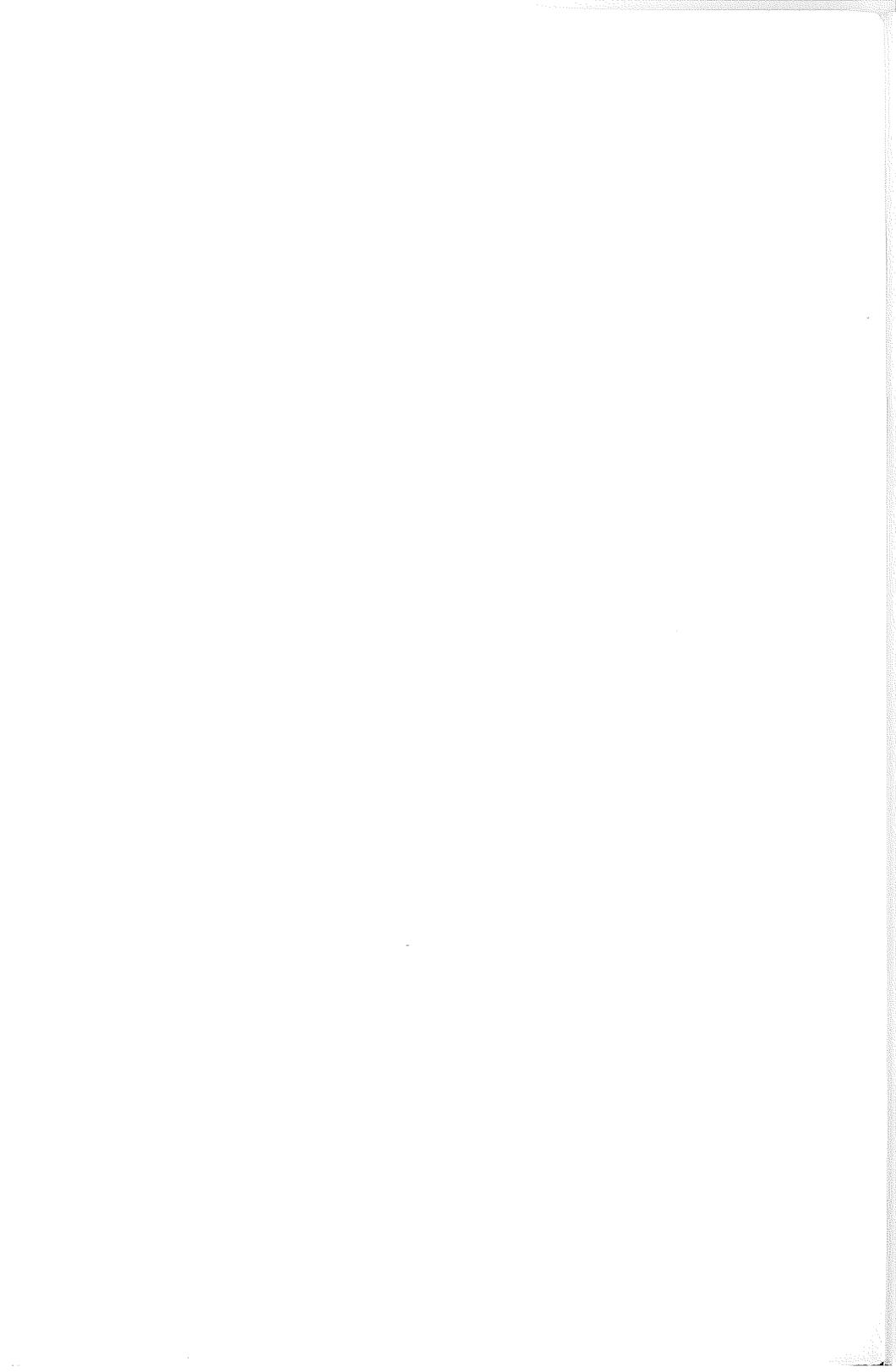
Terms of License Agreement

Opening this Diskette Package indicates your acceptance of these Terms and Conditions.

All ICR FutureSoft Programs are licensed on an "AS-IS" basis without warranty expressed or implied.

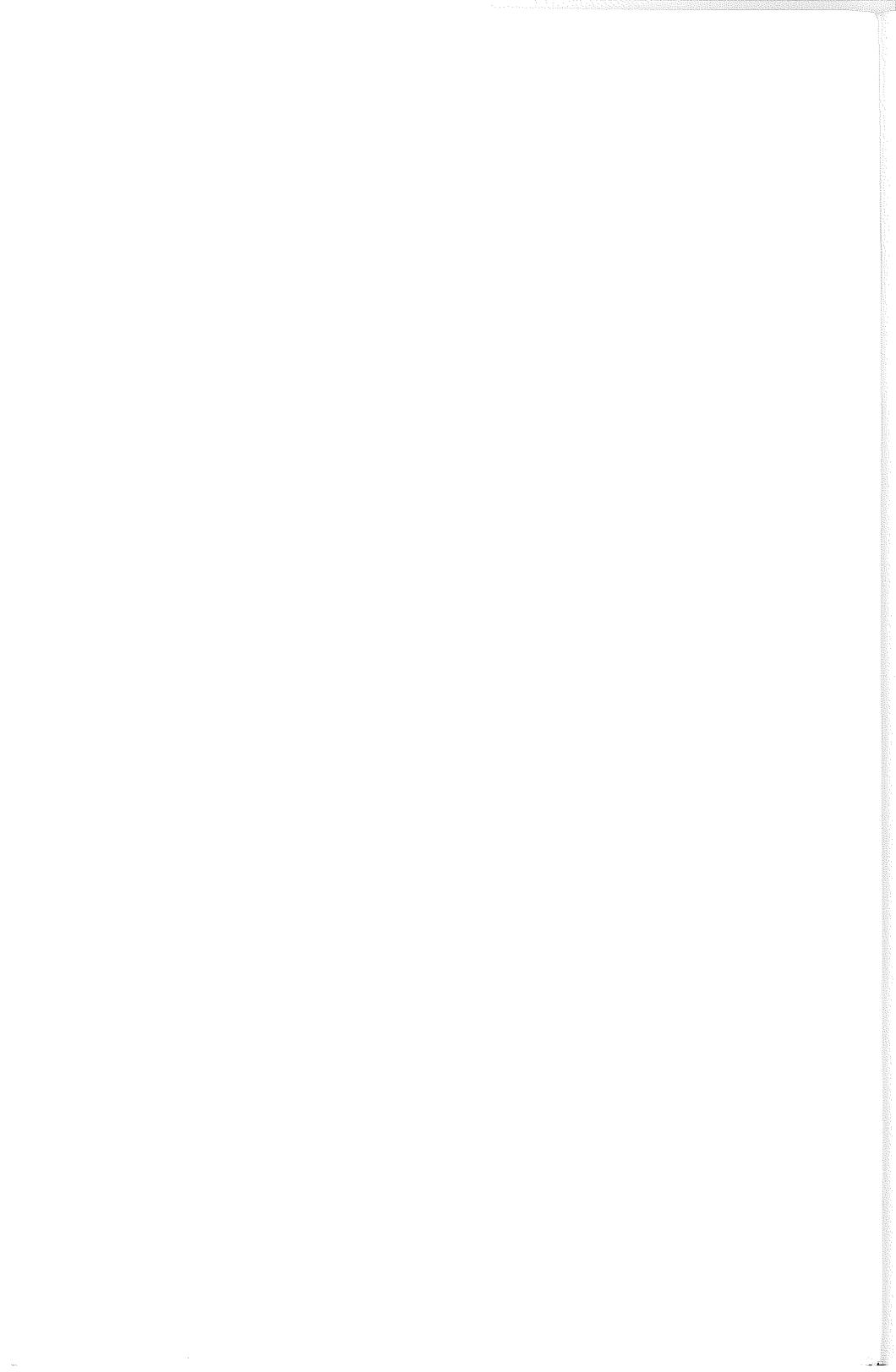
ICR FutureSoft shall have no responsibility or liability for any loss or damage caused or alleged to be caused directly or indirectly by use of its computer software and/or documentation. This includes, but is not limited to, the implied warranty of merchantability and fitness for a particular purpose.

You may use the program for your own personal use. You may not copy or transfer the program or any modification, copy or merged portion without separate written agreement.



QUIKPRO + software programs are protected under the Copyright laws of the United States. All rights reserved. Reproduction of any part of any program is forbidden without the expressed written permission of ICR FutureSoft.

All ICR FutureSoft Programs are licensed on an "as is" basis without warranty. ICR FutureSoft or its affiliates shall have no liability or responsibility to customer or any other person or entity with respect to any liability, loss or damage caused or alleged to be caused directly or limited to consequential damages resulting from the use or operation of such computer equipment or programs.



PREFACE

This manual has been written to be used by programmers and non-programmers alike. Every attempt has been made to make this manual easy to follow, and special attention has been given to the explanation of computer terms which are unfamiliar to first-time computer users.

A special Quik Reference Section has been included at the end of the Manual to provide instant reference during program operation. Use this section often. It will help simplify program use.

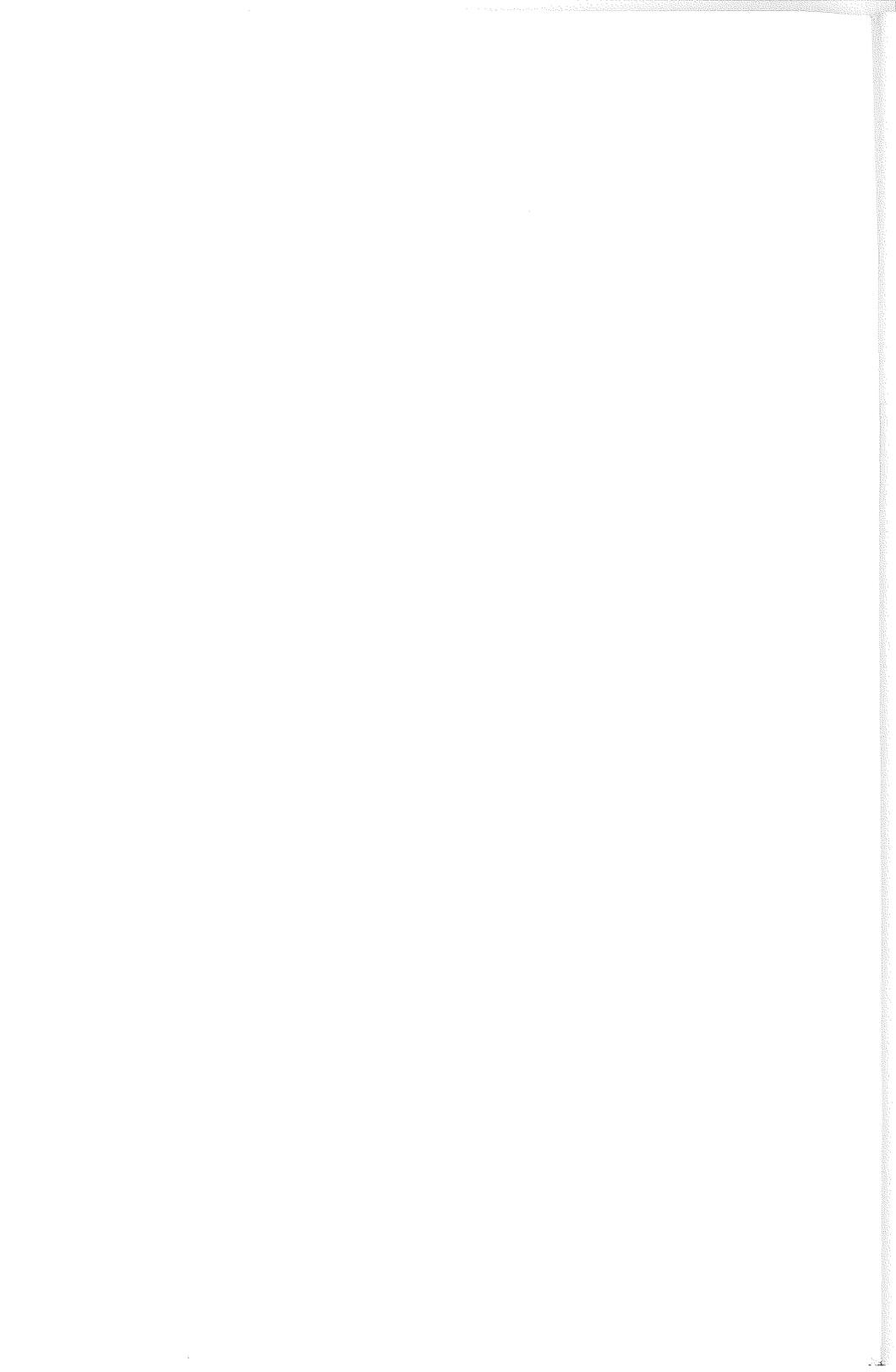


Table of Contents

Chapter 1 — Introduction	5
Chapter 2 — QUIKPRO+ Operation and Start-up .	8
Bringing Up the BASIC Language	8
Starting QUIKPRO+	9
Chapter 3 — Running QUIKPRO+	11
QUIKPRO+ Menu	12
Chapter 4 — QUIKPRO+ Filing Program	
Generator	14
Designing the Screen Layout	16
Literal Data (Title, Names, Labels)	16
Fields	16
Correcting Mistakes in a Line	18
Correcting Mistakes On an Entire Line	18
After Designing Your Screen	19
Assigning the Primary Key	20
Assigning Number Fields	22
Assigning the Form of a Number Field	22
Calculation and Accumulation Fields	25
How to Enter a Calculation	27
Entering Field Comments	30
Giving the Data File a Name	30
Giving Your Program a Name	31
Printing a Screen Work Sheet	32
Chapter 5 — Using Your New Program	33
Program Operation	33
Adding Records to Your New Program	34
Getting Records with Your New Program	35
Changing Records with Your New Program ...	36
Deleting Records with Your New Program	36
Searching for Records in Your New Program ..	37
Searching Anywhere in the File	37
Searching in a Field	38

Ending Your New Program	39
Chapter 6 — QUIKPRO+ Automatic Documentation	40
Chapter 7 — Using the QUIKPRINT Report Program Generator	42
Step 1 — Recalling Your Screen File	43
Step 2 — Report Type	44
(Free Form or Columnar)	44
Step 3a — Free Form Reports	46
Designing the Report	48
Editing the Report	50
Print Report Layout	53
Look at Record Layout	53
Step 3b — Columnar Reports	55
Eliminating Fields	55
Report Heading and Titles	56
Report Width	58
Number of Lines per Page	59
Total Fields	61
Step 4 — Naming Your Report Program	62
Chapter 8 — Using Your New Report Program	63
Selecting Records for Your Report	64
Sorting Your Report	66
QUIKPRO+ SORT Technical Information ...	69
QUIKPRO+ Sort Error Codes	72
Chapter 9 — QUIKINDEX File Indexing Utility Program	75
QUIK REFERENCE SECTION	80

* * * PLEASE READ THIS SECTION * * *

WHY IS THIS PROGRAM DIFFERENT?

QUIKPRO+ is one of the easiest programs to use. In minutes you'll be able to create programs for filing and data handling without knowing anything about programming. QUIKPRO+ is not like any other Program, Data Base, File Handler, etc. because you get a separate BASIC Program Everytime.

QUIKPRO+ gives you the complete and total flexibility to change any programs that you create even after you have created them. You get programs that are 100% Customizable.

You will find that after you have created a program using QUIKPRO+, you can easily modify your programs because each program contains many REMARK Statements to help you get your bearings.

QUIKPRO+ will save you hours of typing and debugging, because when QUIKPRO+ writes programs there are no typo errors and debugging. Your programs are error free BASIC Programs that are ready to RUN or can be easily modified.

1.0 INTRODUCTION

QUIKPRO+ is a complete File Maintenance/Data Entry Program Generator. A program generator actually writes the program for you. Almost every program which uses files to store data requires file maintenance. File maintenance generally refers to the addition to, updating of, or deletion from a file. Since file maintenance is a part of almost every program application, a great deal of time is used in the production of programs to do file maintenance. QUIKPRO+ is designed to eliminate the tedious task of hand writing this type of program.

Since file maintenance includes the ability to add data to a file, QUIKPRO+'s can produce a program which is suited for data entry. Data entry refers to the general task of adding data to a file but also includes special editing features which make entering data easier. These special editing features include the verification of data being entered by the operator. For example, a data entry program might ask the operator to input a Social Security Number. Since a number is the only information that should be entered for a Social Security Number, entering a letter would be incorrect. QUIKPRO+'s created Data Entry Programs have the ability to check data being entered by an operator to make sure that it is the proper type of information.

File maintenance programs produced by QUIKPRO+ produce all ASCII data files. ASCII data files contain information stored in its most literal form. Some files store data in abbreviated form; this makes transferring the information in these files very difficult. Abbreviated file types are

not standard from one computer system to another, which accounts for the difficulty in transferring. Since QUIKPRO+ files are ASCII and are not abbreviated, they may be easily transferred to other computer systems.

QUIKPRO+ is very easy to use. You merely design a form on the computer terminal screen which conforms to the data required. The QUIKPRO+ program itself will ask you while the program is being used to enter the information it needs to produce the desired program. You are instructed by the program. This reduces unnecessary and frequent looking up in this User's Manual.

QUIKPRO+ File Maintenance programs are unique in that each program created by QUIKPRO+ requires no other special programs or files to operate. Each program is a separate BASIC program which will run immediately. However, programmers will find QUIKPRO+ written programs easy to further modify due to extensive documentation (instructions) written right in the programs. These instructions are contained in Remark statements and will appear whenever a program is Listed. (List — refer to appropriate BASIC Manual for correct use List.)

QUIKPRO+ is self documenting. This means that after a program has been created by QUIKPRO+, you may produce an operator's manual for the program just written. The operator's manual is automatically written by QUIKPRO+. All that is required is a suitable printer attached to the computer system.

In QUIKPRO+ you have the added capability of including calculations and/or accumulations in your file records, and QUIKPRO+ can also write separate BASIC Programs for Reporting from your files or other files.

In addition, QUIKPRO+ includes a handy utility type program that allows you to access data from files that you might have created beforehand with another program. This means that you can write a program with QUIKPRO+ to access data that you already have, without having to re-enter the data.

This manual will provide you with instructions for QUIKPRO+ functions and features.

2.0 QUIKPRO + OPERATION AND START-UP

Before attempting to use QUIKPRO + , you should have some familiarity with the operation of the particular computer system you are using.

You should be familiar with:

- 1) How to start the computer system
- 2) How to insert Diskettes into the proper drive by knowing which disk drive is 1 or 2, A or B, etc.
- 3) How to care for diskettes.

2.1 Bringing Up the BASIC Language

If you are unfamiliar with the above then you should refer to the owner's and user's manuals which should contain the above type of information.

2.2 Bringing-Up or Starting QUIKPRO +

The following are the instructions for starting QUIKPRO + on your computer.

IBM-PC, XT, AT or Compatible with 2 Floppy Disk Drives

Insert your MS-DOS diskette with BASIC on it into Drive A. Insert the QUIKPRO + Disk into Drive B. At the A > type in B:QUIKMENU. Turn to section 3.1 of this manual.

IBM-PC, XT, AT or Compatible with Hard Disk Drive

Insert the QUIKPRO + Disk into Drive A. At the C > type in A:XTSETUP. QUIKPRO + will be installed on your hard disk. Type in QUIKMENU whenever you want to use QUIKPRO +. (Note: the XTSETUP Program only needs to be used once.) On certain compatibles this process may result in an error. Refer to the Addendum Sheet included.

Apple

Refer to Addendum Sheet included.

Commodore

Refer to Addendum Sheet included.

TRS-80 Model 4 or Model III

Insert your TRSDOS Disk with BASIC on it into Drive 0. (Note: Model 4 users must have a TRSDOS Version 6.01.02 or newer. Older versions of TRSDOS will cause errors.) Type in DO QUIKMENU. Go to section 3.1 of this manual.

Radio Shack Color Computer 2 & 3

Insert the QUIKPRO+ Disk into your Drive. Type in RUN "QUIKMENU" .

OSBORNE

Put your CP/M diskette with MBASIC into Drive A, and the QUIKPRO+ Disk in B. Type in B:QUIKMENU. Go to section 3.1 of this manual.

KAYPRO

Put your CP/M MBASIC Disk into Drive A, and your QUIKPRO+ Disk into B. Log to the B Drive by entering B: . Type QUIKMENU.

If starting up QUIKPRO+ was not covered in the above section, then you will have to follow the instructions below and bring up your BASIC language on your computer first, and then start up QUIKPRO+ .

Since QUIKPRO+ is available on many different types of computers, each computer requires a different method of starting the BASIC Language. Find your system as listed below and bring up your BASIC language as indicated:

CP/M Hardware CP/M (BASIC 80)

Log to Drive B by entering B: . Then
enter...A:MBASIC QUIKMENU /S:255

TRS-80 MODEL II TRSDOS 2.0

BASIC - F:3

3.0 RUNNING QUIKPRO +

After the BASIC language has been brought up on the computer, you are ready to begin using the QUIKPRO+ programs.

QUIKPRO+ has a Menu which displays the different functions that may be performed.

TO BRING UP THE QUIKPRO + MENU ON THE SCREEN ENTER:

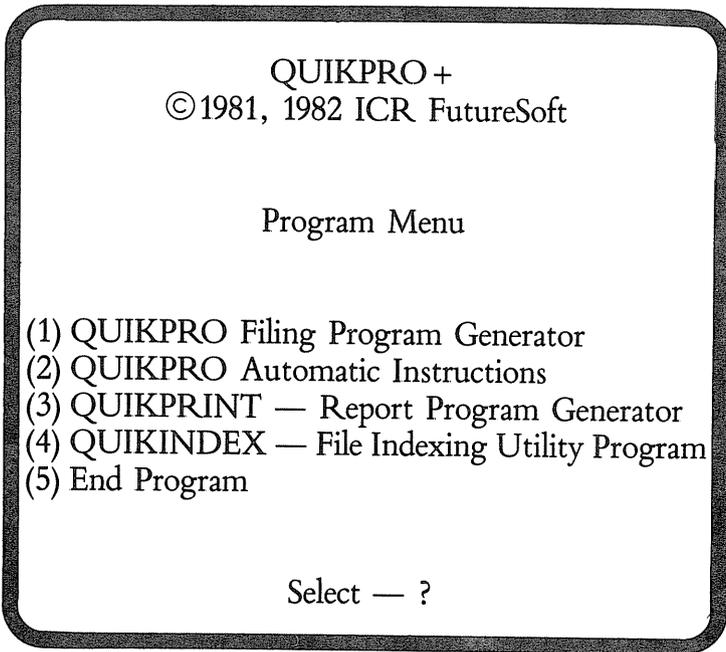
RUN "QUIKMENU"

The QUIKPRO+ Program Menu should then be displayed on the computer screen. If the menu does not appear on the screen, then check to see if the QUIKPRO+ diskette is mounted properly in the computer system. Some computers may display an error message which may indicate the reason for the failure of the menu to appear. Consult the

previous material in this manual to make sure that all steps up until this point have been followed correctly.

3.1 QUIKPRO + Menu

The QUIKPRO + Program Menu will display five options for you to choose from:



You make one of the choices from the Program Menu. The choices are 1, 2, 3, 4, or 5. The following are the descriptions of the programs that will RUN when you make your selection from the Program Menu:

Menu Option 1: Start the QUIKPRO + Filing Program Generator. This program is used to design your screen and create a complete BASIC Program to handle files, manipulate data, calculate and accumulate fields. This program should be RUN before any others on the Program Menu, because the other programs are dependent on the results of the Program you create using this option.

Menu Option 2: Print the Automatic Instruction Manual for a program that you created with the Program Generator above. This program option will print an operator's manual especially for each program you create.

Menu Option 3: QUIKPRINT — Report Program Generator. This option will let you create a separate BASIC Report Program from one of the filing programs that you might have created above in Menu Option 1.

Menu Option 4: QUIKINDEX — File Indexing Utility Program. You will only need to use this program if you want to use an existing Data File that you might have had previously with a program that you created with QUIKPRO + in Menu Option 1. You do not need to use QUIKINDEX at any other time.

Menu Option 5: End Program. Selecting this option will clear the Program Menu from your system and put your computer back into BASIC.

4.0 USING THE QUIKPRO + FILING PROGRAM GENERATOR

The QUIKPRO + File Maintenance Program Generator will begin after being selected from the QUIKPRO + Program Menu. The screen will display a form ready for you to lay out: See **Figure 4.0**.

You may design on the screen the particular form desired for entering data. Each line on the screen is marked with a letter in the far left column of the screen. You will see the following message at the bottom of your screen. . .

“Enter the letter of the line you want to work with — ?”

At this time, the cursor (solid block or flashing block) is displayed at the bottom of the screen immediately following the above message. You may move the cursor to the line you want by entering the letter of the line you want. The cursor will move to the line of the letter you entered. Anything that was on that line previously will be erased. Once the cursor is at the desired line, you can design (layout) the line with the information you want.

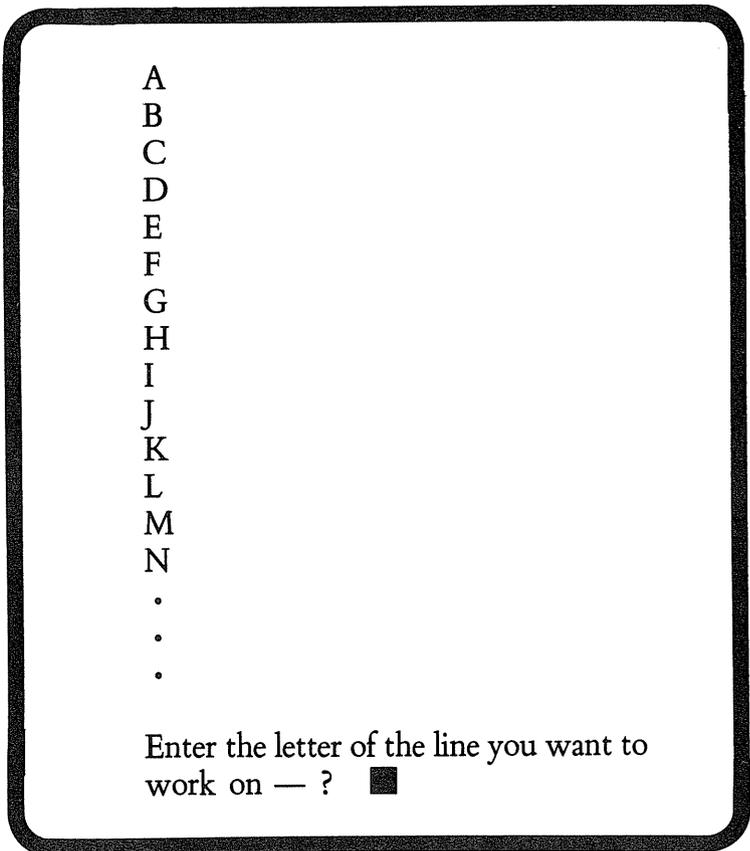


Figure 4.0 — QUIKPRO+ Screen with cursor (block) shown at bottom.

4.1 Designing the Screen Layout

Once the cursor has been positioned to the line you want, you may begin laying out the line. Two types of information may be entered on a line:

1. Literal Data (Graphics on IBM PC)
2. Fields

4.2 Literal Data

Literal Data consist of names, titles, field names, symbols or any characters that are not used to define input fields. **See figure 4.1 for examples.** Literal data will actually appear on the screen in the program you create exactly in the manner and position that you design.

4.3 Fields

Fields are those areas on the screen that will allow something to be entered into them in the finished program created by QUIKPRO+. Fields are identified by = (equal sign). Continuous groups of these characters define a single input field. **See figure 4.1 for examples.** The length of the field is determined by the number of continuous equal signs used. Notice in figure 4.1 that the Social Security Number input field on line B is =====. This means that the Social Security input field will allow a maximum of nine characters to be entered into it. You may put more than one input field on any line.

A	Employee File
B	Social Security Number =====
C	
D	Name =====
E	
F	Phone Number =====
G	
H	
I	
J	
K	
L	
M	
N	
.	
.	
.	

Enter the letter of the line you want to work on — ?

Figure 4.1 — QUIKPRO+ Screen showing Literal Data and three Fields, the first allowing ten characters maximum, the second 15 and the third 13.

Note: If any of the fields used to input data will be Numeric Only Fields (refer to Section 4.8) one extra “=” must be added to those fields. Notice that the Social Security Number has 10 equal signs.

4.4 Correcting Mistakes on a Line

Correcting mistakes on a line is a very simple matter. If you are typing information on a line, you may use the Backspace or left arrow key to correct mistakes. Some computers may use a different key to correct in-line errors. Consult your particular user's manual.

4.5 Correcting Mistakes on an Entire Line

Correcting mistakes after a line has been entered is also a simple process. If a line has already been entered, just re-enter the line by typing the line number that you wish to correct when the system displays the "Enter a line — ?" message at the bottom of the screen.

This will erase the contents of the current line and allow you to enter the line again in the way you wish.

4.6 After Designing Your Screen

As described earlier, the cursor is normally positioned at the bottom of the terminal screen. When you are designing the screen the “Enter a Line — ” message is displayed at the bottom of the screen.

When you have finished designing the screen, press the ENTER or RETURN key when the program requests “Enter a line — ”. The system will then display the following message:

“Are you done?”

If you respond by entering Y for “yes” then the QUIKPRO+ Program will continue to the next phase. Instructions for the next phase are in the next section of this user’s guide.

If you respond by entering N for “no” then the previous screen message will be displayed at the bottom of the screen.

4.7 Assigning the Primary Key

Programs created by QUIKPRO + will allow you to add to and update files. Before a record in a file can be updated, the record in the file must be located. Most files contain records that are keyed on a particular piece of information in the record for locating purposes. QUIKPRO + lets you decide what item in a file record will be used to locate or access the record in your finished program.

The message:

“Which field will be the primary key?”

will be displayed at the bottom of the screen. Each field is numbered on the screen.

Enter the number of the field which will be used as the primary key.

Remember that the Primary Key will be the Field in your finished program that will permit you to access information in your file very rapidly. (You will also be able to locate records in your file by searching for data other than that in the Primary Key, but fastest access to records in your files will come with the Primary Key.)

For example, suppose the records in your file contained the following data:

```
Social Security Number 1 =====  
Name 2 =====  
Address 3 =====  
City 4 =====  
State 5 == Zip 6 =====
```

Note: The numbers correspond to the field numbers.

If you select field number 1 as the primary key, then a special file will be created in your program allowing you to access information very rapidly when using this key field of information, in this case, the Social Security Number. In addition, your created program will allow you to search on any other information in the file.

4.8 Assigning Number Fields

After you have assigned the Primary Key, QUIKPRO+ will display:

“Which fields are numbers only?”

Some of the Fields which you have designed on your screen will only be used to enter data which are numbers. If you do not want an operator to be able to enter anything in a field that is not a number, then you may make a Field a Number (Numeric) Only Field.

The Program will ask you to enter the number of a Field that you want to be a Number or Numeric Only Field. Enter the field numbers one at a time.

For example, an input field which would contain a Social Security Number should contain only numbers. By defining the Social Security Number field as Numeric Only, you will prevent an operator from entering anything into that field that is not a number.

4.9 Assigning the Form of the Numeric Only Field

When you have identified a field as Numeric Only, you can specify the Format of that Numeric Only field. The format is the manner in which the number will be displayed.

Using Social Security Number again as an example, the Format of the Social Security Number Numeric Only field will be 10.

This means that the Social Security Number will be displayed as a whole number with no decimal and ten digits maximum.

Note: The Format of a Numeric Only Field may include decimals. **Examples:**

Format 7 represents a whole number with seven digits

Format 7.2 represents a decimal number with 7 digits to the left of the decimal and 2 to the right.

In assigning the Format of a Numeric Only Field, you should remember that the total length of your Numeric Field must equal the format that you are assigning to that field.

For example, if the length of your Numeric Only Field is 3 then the following Formats would be acceptable: 1.1, 3, and 2. Remember that the decimal must count as one of the digits in the total length.

The system will display the message:

“Enter the Format of the Number Field
— ” .

You should:

Enter the Format of the input field whose number is displayed.

After you have entered the Format, QUIKPRO + will display:

“Are any more fields Numeric Only?”

If you enter Y for “yes,” then QUIKPRO + will ask the number of the field that you want to be Numeric Only. (See section 4.8)

If you enter N for “no” then QUIKPRO + will go to the next phase of the program.

4.10 Calculation and Accumulation Fields

QUIKPRO+ permits the inclusion of calculations and accumulations. At this point in the program, you will be asked:

“Are any fields calculation fields?”

If you enter N for “no” then you will proceed to the next phase of the QUIKPRO+ Program in the next section.

If you enter Y for “yes” then continue with the instructions as follows:

You will be asked:

“Enter the field number of a calculated field
— ”

Enter the number of a field that you want to calculate. If you enter a field number that you did not identify as a number-only field as described in the previous sections, then you will not be able to make the field a calculating field, because calculated fields must always be number-only fields.

If you enter a valid field number, then the computer will display:

“Do you want this calculation to be
(S)to red or (D)isplayed Only — ”

Enter an S if you want the calculated field stored in your file or a D if you want the calculated field to be displayed only on the screen.

In many cases, calculations do not need to be saved in a file, but only displayed on the screen or in a report. The calculation itself does not need to be stored in the file because the information to produce the desired calculation is in the file already, and the calculation can be produced from the information in the file after it has been retrieved or entered. In other cases, you may want to update a total or number in a file. In this case you would use the (S)to^re option.

After you have indicated whether you want the calculation field Stored or Displayed Only, the screen will display the following question:

“Enter the Calculation — ”

At this point you may enter the calculation you want performed in the field number that you designated before. **Enter the Calculation as described in the next section.**

4.11 How to Enter a Calculation

When entering the calculation as requested above, you can Add, Subtract, Multiply or Divide numeric fields with one another and with other numbers. When entering a field in a calculation, the field must be entered as follows:

F#(n) — where n is the number of the field you want in the calculation.

Examples: F#(1) would be field 1 on your screen. F#(2) would be field 2 on your screen, etc.

Here are some examples of calculations with the explanation of each:

<u>Calculation</u>	<u>Description</u>
$F\#(1)/10 + F\#(3)$	Divide Field 1 by 10 then Add Field 3
$F\#(12) + 1000 / F\#(1) + 10.23$	Add Field 12 to 1000 then Divide the result by Field 1 then Add 10.23 to the result
$F\#(3) + F\#(4) + F\#(5) + F\#(6)$	Add Field 3 to Field 4 then Add Field 5 then Add Field 6
$10 * F\#(3)$	Multiply 10 by Field 3

After you enter the calculation for the field you desire, the program will delay for a second or two to test your calculation. If your calculation is invalid, then you will be requested to enter the calculation again. An invalid calculation is one in which there is an error in the syntax of the calculation that you entered. (Note: Brackets should not be used around calculations.) If more expanded calculations are needed, then they may be entered in your created BASIC program after it has been created by QUIKPRO+.

If you identified the calculated field as one that is being Stored, then you may make that stored field an accumulation field which is capable of giving running balances.

Example:

If you have designated Field 3 as a calculated field that is to be stored, then these examples will show you how to accumulate a field. Field 3 is the field we will use for the calculation field in this example.

Calculation for Field 3 Description

$F\#(3) + F\#(2)$

This calculation will take the contents of Field 3 and Add Field 2 to it with the total being saved in Field 3. To state in another way, Field 3 keeps a running total of itself plus Field 2.

After you enter a field calculation, then you will be asked again if any other fields are calculating fields. You may continue to enter calculation fields until you respond N for “no” to the question “Are any fields calculation fields?”

You may change the calculation for a field at any time by re-entering the field number and another calculation.

4.12 Entering Field Comments

The program will ask you to enter a Field Comment for each field that you have created on your screen. A Field Comment allows you to describe in detail just what information is contained in a particular field. You may type up to 30 characters to describe each one of your fields.

The description you enter for field comments will appear in the Program Listing that QUIKPRO+ will create for you. The field comment will help you to locate particular parts of your program.

4.13 Giving the Data File a Name

After you have entered a Field Comment for each field, QUIKPRO+ will ask you to enter the Name of your Data File. Since QUIKPRO+ produces programs for filing and data entry, you must have a file to store your data. QUIKPRO+ gives you the option of naming the file for your data; on some versions this is done for you automatically.

Enter a Data File Name —

Data File Names may be a maximum of 8 characters and contain no numbers.

EXAMPLES:

<u>Good Data File Names</u>	<u>Bad Data File Names</u>
DATA	DATA 1 2 3 4 5
FILEDATA	File Te
GOODDATA	Bad*Data

4.14 Giving Your New Program a Name

Following the step above, QUIKPRO+ will ask you to give your new program a Name. The Name that you give to your program follows the same rules as the Name that you have given to your Data File above.

The Name that you give to your program will also be used by QUIKPRO+ to create a special screen file that you will use to produce the automatic instructions in a later portion of this manual.

For Example:

If you give your program the Name “MYPROG” then QUIKPRO+ will create. . .

“MYPROG” — which is the actual BASIC Program that was created,

“MYPROG/SCR” — a special file that will be used for your Automatic Documentation. (You may also use this file to produce other programs if you like.)

4.15 Printing a Screen Worksheet

If you have a printer, then QUIKPRO+ can print out a copy of the screen that you have created on your computer terminal. QUIKPRO+ will ask you if you want to print out a screen worksheet. You may answer Y or N for “yes” or “no” respectively.

If you respond Y for “yes” then a copy of the Screen you designed with QUIKPRO+ will be printed on your printer.

NOTE: If you do not have a printer attached, and you attempt to print out a screen worksheet, then you may have to start your program all over again.

The Screen Worksheet will help you to see the specific locations of your data as it is displayed.

After you have completed the Screen Worksheet phase, then QUIKPRO+ will begin to process some information and you will experience a slight delay. You will not need to enter any other information. QUIKPRO+ will return to the Program Menu by itself.

At this time, your new BASIC Program has been completed. You may LOAD, RUN, LIST, or COPY it, as you would any other BASIC Program. Consult your own BASIC Manual to find out just how to RUN a BASIC Program.

5.0 USING YOUR NEW PROGRAM

After all the steps in the previous sections have been completed, you now have a new program.

To use your new program, simply run it as you would any other BASIC Program. Refer to your BASIC User's Manual for the correct way to RUN a BASIC Program on your computer system, or follow any special instructions given by QUIKPRO + .

NOTE: IBM and Compatible users, if you bring up BASIC manually be sure to access BASIC as follows. Type in BASIC /S:255 exactly as shown, before you RUN programs created with QUIKPRO + .

5.1 Program Operation

Your new program will allow you to Add, Update or Delete Data from a Data File which you named when you first generated the program.

When your new program begins running, you will see the input form which you designed in the beginning. At the bottom of the terminal screen will be displayed the functions you can perform with your new program. The display will be:

“(A)dd Record, (G)et Record, (S)earch,
(E)nd Program”

You should enter either an A, G, S or E. Make sure that you have the shift on your keyboard on so that all letters will be entered as capitals. You have to press ENTER when entering one of the above letters.

5.2 Adding Records to Your New Program

(A)dd Record will let you do just that. After entering the A, the cursor will position itself to the first input field and wait for you to enter data into that field. Pressing the ENTER or RETURN keys will move the cursor to the next field until you have passed through all fields on the screen. Enter data into each field that you pass. Those fields which you defined as Numeric Only when you created the program using QUIKPRO+ will only allow you to enter numeric data into them. Notice that if you try to put characters other than numbers into a Numeric Only field, they will not be accepted. When you have entered the last field on the screen, the program will write the record you are adding to the file which you defined. You may backup to a previous field by entering the < or ← character and pressing ENTER. Remember that one of the fields on the screen is the key field.

QUIKPRO+ will permit the use of keys that are the same.

After your record has been added to the file, the terminal will display the message indicated in Section 5.1.

5.3 Getting Records with Your New Program

(G)et Record will let you locate a record for examination or updating. When the letter G has been entered, the program will ask you for the key of the record you wish to access.

Enter data which matches the primary key you assigned.

If the record is not in the Data File, then a message will be displayed on the screen telling you that the record was not found.

If the record has been located, then the entire record will be displayed on the screen.

The program will display:

“(C)hange, (D)elete — ”

You may:

Enter C to change a record or D to delete the current record. Pressing the ENTER or RETURN Key without entering C or D will return the screen to the display described in Section 5.1.

5.4 Changing Records with Your New Program

If you have entered C for change, then pressing the ENTER Key will move the cursor to each field in the record as displayed on the screen. If you do not want to change that field, then press the ENTER Key again. This will leave the field unchanged. If you do want to change a field, then enter the new data into the field when the cursor is positioned in that field. After you have passed the last field, the current record will be updated and written back to your Data File with your changes.

5.5 Deleting Records with Your New Program

If you have entered the D for Delete Record, then the record which is displayed on the screen will be deleted from the Data File.

Following either of the above functions, the screen will display the messages described in Section 5.1.

5.6 Searching for Records in Your New Program

If you pick the S for Search, then you will have the choice of Searching in the following ways:

Search for Something Anywhere in the File (commonly called a String Search)

or

Search for something in a particular Field of the File.

You can Search by Field by entering the letter F, or you can Search for Something Anywhere in your File by entering a letter A.

Searching for Something Anywhere in Your File (String Search)

If you Search for Something Anywhere in your File (String Search) then the next message you will get on your screen will ask you what you want to Search for.

Simply type in whatever it is you want to look for. If what you type in is found anywhere in your file, then the entire record will be displayed on your screen.

Searching for Something in a Field

If you Search for something in a Field, then you will be instructed to move the cursor to the field that you want to Search on. When the cursor is at the field that you want, type in whatever it is that you want to Search for in that field.

If what you type in is found in the correct field anywhere in your file, then the entire record will be displayed on your screen.

5.7 Ending Your New Program

(E)nd Program will stop the current program and put you back in BASIC.

6.0 QUIKPRO + AUTOMATIC DOCUMENTATION

QUIKPRO+ will print out an Instruction Manual for each and every program that you create. To do this, select the option from your QUIKPRO+ Program Menu to print the Automatic Instructions.

QUIKPRO+ will ask you if you have a printer attached and turned on. If you do not, then you should enter N for “no” and you will return to the Program Menu.

If you answer Y for “yes”, then QUIKPRO+ will ask you for:

The Name of the program that you want to print Automatic Instructions for.

If the program does not exist, then you will be told on the screen. Remember that QUIKPRO+ uses the Screen File that it automatically creates for you when you name your program. If the Screen File for the program name that you enter above is not on your diskette, then you will not be able to print instructions.

Example:

You enter program name for instructions as MYPROG.

QUIKPRO+ will look for MYPROG/SCR to produce your instructions.

If you have not erased the Screen File, then it should be on your diskette.

You do not need to enter the /SCR after your program name, just the program name itself.

If QUIKPRO+ finds your program name, then you will get a complete set of operator instructions on how to use the particular program that you specified.

7.0 USING THE QUIKPRINT REPORT PROGRAM GENERATOR

This is the third option of the QUIKMENU, QUIKPRO + Program Menu.

PURPOSE:

This program will let you create a separate BASIC program that will print reports. These reports may be used to list information that you have in files from programs that you created with the QUIKPRO + Filing Program Generator.

In order to create Report Programs, you will need to have available the Screen (SCR) File of the original Filing or Data Entry Program that you designed using the Data Entry and Filing Program Generator.

When your Filing or Data Entry Program was created, an additional file, which we call the Screen File, was also created on your disk automatically. This File has the same name as your created program, but has a file extension of SCR. (A file extension is that part of the file name which appears at the end of the name and is separated from the first part of the name by either a slash mark / or period .).

EXAMPLE: If you created a Filing or Data Entry Program and you named it PROGRAM, then the Screen File for your Program would have the name PROGRAM.SCR or PROGRAM/SCR.

7.1 Step 1 — Recalling your Screen File

After you have selected the QUIKPRINT Report Program Generator from the QUIKMENU, you will be asked if you want to return to the Menu or continue.

If you continue, you will then be asked to enter the Name of the Filing Program that you originally created (as explained above).

Enter the Name.

After you have entered the Name, specify which drive the Screen File you will need is on. If your Screen File is not located on a diskette currently in one of the drives, then a message will appear telling you that your Screen File cannot be found.

7.2 Step 2 — What Kind of Report?

Columnar or Free Form

Once your Screen File has been found, you will see the Screen/Record Layout that you designed when you created your original filing program. All of the Fields will be numbered.

You will then be asked what kind of report program you want to create.

The program will display the question. . .

“Do you want to Create a (F)ree Form
or (C)olumnar Report Program?”

You may enter either a C if you want to create a Report Program that will print out in columns, or you may enter an F if you want to create a Free Form Report Program.

A Free Form Report will let you design a form of your choosing on your screen. On this form you may enter Text and also include Fields from your File in your report.

If you want to create. . .

Form Letters, Mailing Cards, Labels or any other Form. . .

then you would pick the Free Form Report option.

If you want to print out a report in Columnar Form, then you should choose the Columnar Report Program option. If you are going to create a Columnar Report Program, then skip the next sections of this guide and go to Section 7.9 titled Columnar Reports.

7.3 Step 3-a — Free Form Reports

If you picked the Free Form Report option, then you will be asked several questions about your form, and you will actually be able to design your Form right on the computer screen.

Report Length

The next question you will be asked is . . .

“How many lines do you want this report to use?”

Your answer to this question can be any number between 1 and 99. The number of lines that you enter will be the maximum number of lines that could be printed on your letter, form or label.

The following examples indicate the number of lines you should enter for some of the more common paper sizes:

$8\frac{1}{2} \times 11$ " standard letter size paper has 66 lines per sheet

$8\frac{1}{2} \times 14$ " legal size paper has 84 lines per sheet

$\frac{7}{8}$ " or 1" label has 6 lines per label

#10 envelope has 25 lines.

Report Width

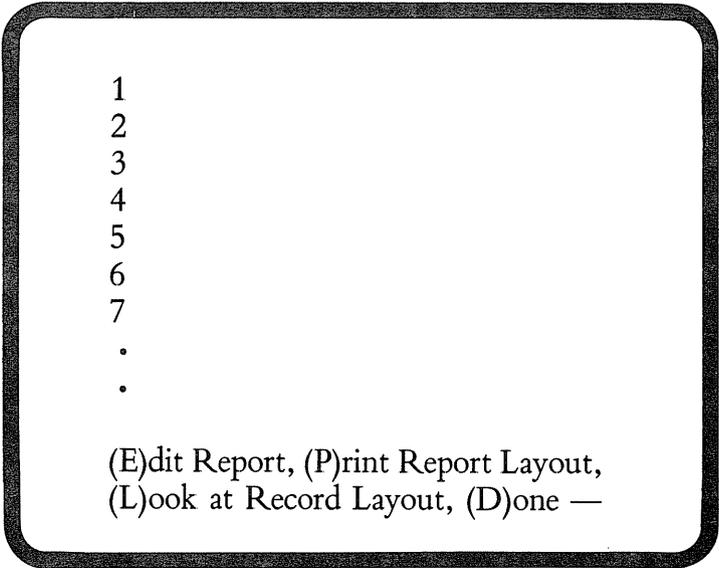
Next, you will need to enter the Width that you want for the report in your created program. This Width is expressed in characters per line. (The maximum permitted is different from computer to computer, and will be displayed on the screen.) This will permit you to design Free Form Reports on forms that are the Width of a letter size, i.e. 8½ inches wide.

Of course, you may enter a Width that is less than the maximum.

7.4 Designing the Report

Next, you will be able to Design your Report. You will use a method similar to the one you used to Design your Screen when creating your Filing Programs.

You will see a form appear on the Screen that looks like this:



(We show only 7 lines in the above example. Actually, there are as many as your screen will permit.)

Each number displayed down the left hand side of your screen corresponds to the same line number on your report.

The options at the Bottom of the Screen are:

- E — Edit the Report
- P — Print the Report Layout
- L — Look at Record Layout
- D — Done (Finished Report Design)

7.5 Option 1 Editing Report Layout (Form)

If you choose E, then you will be able to Edit the Report Layout. After you Enter E, then you will see the message:

“What Line do you want to work on
(1-n)”

. . . displayed at the bottom of your screen. (The letter “n” is the number of lines that you entered previously as the maximum number of lines for the report.)

You may enter any number between 1 and n. When you do, you will see the cursor go to the number of the line that you entered, or you may press ENTER and the options will be displayed again at the bottom of the screen.

Once you are on the line that you entered, you may type in anything that you want printed on that line in your report. Whatever you type will appear in your report just as you type it. You will be in what we will call the Text Mode.

Of course, you will want to enter some Fields of data from your files into the reports that you create.

To do this, simply press the <CTRL> F key on your keyboard whenever you are ready to enter a Field at the spot that you want it. (If your computer keyboard does not have a <CTRL> Key on it, then press the <SHIFT> Key and the DOWN ARROW together and the F Key. This will be equivalent to <CTRL> F.)

You will then be asked. . .

“What Field Number do you want on the line.”

The Field Number you enter would be the Field Number of the Field that you want from your Screen/Record Layout. (If you need to refer to the Screen/Record Layout to get information on your fields, simply press the ENTER Key until you return to your choice of options at the bottom of the screen. Then pick the L for (L)ook at Record Layout. This option is explained in a subsequent section.)

When you enter a good Field Number, that field will be displayed on your screen at the point on the screen where you were editing the line. If you specify a Field Number that is too large to fit on the line, then a message will be displayed for you at the bottom of the screen.

You may continue Editing your Report Form until you have designed it just the way you want it.

When you have finished, simply press the ENTER or RETURN Key when you are asked the question,

“What line number do you want to work on...”

You will then be given your options as listed previously. ((E)dit Report, (P)rint Report Layout, (L)ook at Record Layout, (D)one —)

7.6 Option 2 Print the Report Layout

This option will let you print out a copy of the Report Layout that you are designing on your screen. You may print the Report Layout at anytime during your edit session. Then you may continue editing if you want. Printing the Report Layout will help you see exactly what your report form will look like on paper. In fact, you might want to print out a Report Layout before you actually begin Editing your layout on the screen. This will give a blank worksheet that you can use to help you design the form you want on paper.

7.7 Option 3 Look at the Record Layout

This option will let you re-display the Screen/Record Layout that you are using to generate your Report. This is the Screen that you saw when you first started the program. You would use this option whenever you need to refer to your Record for information about the Fields. You can look at your Screen Layout while you are editing and then you may continue editing.

7.8 Option 4 Done

When you have finished, simply enter the letter D for Done when you are asked to enter your options. If you enter D, then you will continue on to the next phase of the program.

NOTE: You should skip the next section of this manual which applies to Columnar Reports Only, and go to Section 7.15, Naming your Report Program.

7.9 Step 3b — Columnar Reports

If you picked the Columnar Report as your choice for the type of Report you want, then you should follow this section. If you are designing a Free Form Report then you should consult the previous section on Free Form Reports.

7.10 Eliminating Fields (Data) From the Report

Once your Screen File has been found, you will see the Screen/Record Layout that you designed when you created your original filing program. All of the fields will be numbered.

You will then be asked if you want to eliminate any Fields from the Report. This means that if you eliminate a Field, it will not be printed on your reports. You should enter the Field numbers that you want to eliminate one by one. As you eliminate a Field, the screen will display the ‘*’ character in the Field that you picked to let you know that it has been eliminated.

When you are done, simply enter the letter N for No when you are asked the question:

“Do you want to eliminate any more Fields from the Report?”

7.11 Report Headings & Titles

Each Report should have Headings at the top of each page to identify those items listed in the Report. In this step, you will enter a Heading for each Field in your Report. This Heading will appear at the top of each column on your printed reports.

Example:

List of Friends

Page 1 Date 01/01/87

<u>Name</u>	<u>Address</u>	<u>Phone</u>
JIM	Box 1	333-3344
BOB	Box 2	334-1234
TOM	1st Street	456-1234

The words Name, Address and Phone in the example above are the Field Headings. The Heading will be printed at the top of each page on your printed reports.

In addition to a Heading for each Field column that you will be printing, you may enter a Report Title. This Report Title will appear above the Field Column Headings. The Report Title is a name or description of what the Report contains.

In the example shown above, the Report Title is "List of Friends."

You will notice a page number and date also appear in the example between the Report Title and Field Headings. The page number and date are automatically included in your report programs for you. (Date will only be included if your computer has the proper date function.) The page number will be incremented automatically as your created program is printing. The date that will be displayed is the System Date.

When you are ready to enter the Report Title, press ENTER when asked to at the bottom of the screen. Then type in the Report Title that you want.

7.12 The Report Width

At this point in the program you will be asked:

“What is your Report Width?” (i.e.
Max. No. of characters per line) Default
80

You may enter a number between 1 and 131. If you do not enter a number and you press the ENTER Key then the default value of 80 will automatically be used. The number you enter will be the maximum width (line length) permitted on any line of your report. Most 8½" wide paper would permit a maximum line length of 65. This would leave a nice right hand margin, although you may print a full 80 characters across on an 8½" wide paper and there would be no margin. Most 14" wide computer printout paper would permit a maximum width of 131 characters.

Remember, though, that you can choose any width between 1 and 131, or simply press ENTER and 80 will be assigned automatically.

PLEASE NOTE: We have supplied a chart in the next step which will tell you how to set your width for different sizes of paper and labels.

7.13 Number of Lines per Page

The next step permits you to specify how many lines you want your Report Program to print on each page of your report.

Most $8\frac{1}{2} \times 11$ " paper will permit 66 lines to be printed. If you should be using 11" long paper, you would not normally want to specify 66 lines as the number you want to print, because some room on the page will be needed to print your Report Title and Column Headings. For 11" paper you should specify 50 lines as your page length. This will give you a nice top and bottom margin and provide adequate room for your Title and Field Headings at the top of the report.

When the message...

“How many lines do you want to print on a page?”

...appears on your screen, simply enter the number of lines that you want to print on each page. Don't forget that there will be a Title and Heading. If you do not enter a number and simply press the ENTER Key, then the default value of 50 lines per page will be used.

The following chart will tell you how to answer the questions for Report Width and Length for various sizes of paper.

Chart for Printing a Report with Title and Headings.

If Your Paper is . . .		Then YOU ENTER this . . .	
Width (inches)	Length	Width (char.)	Length (lines)
$8\frac{1}{2}$	× 11 (letter size)	65	50
$8\frac{1}{2}$	× 14 (legal size)	65	65
14	× 11 (print out paper)	131	50

7.14 Total Fields

Your Report programs may contain totals of numbers. These totals will be printed at the end of your report programs. You may get totals on any Numeric Only Field.

To specify for which fields you want to print totals, simply answer Y for Yes to the question:

“Do You want to Total any Fields
(Y/N) —”

... then enter the Field Numbers of those Fields for which you want totals. When you have selected a Field to be Totaled, the letter “T” will be displayed in the Field. If you choose a Field that is not a Numeric Only Field, then you will get a message telling you that the Field that you picked can't be totaled because it is non-numeric.

When you have finished picking the Fields that you want totaled, simply press the ENTER Key when you are asked to enter a Field Number. You will then be asked...

“Are you Done (Y/N)?”

If you answer Y for Yes then you go to the next step. If you answer N for No then you will be able to continue entering more Field Numbers for totaling.

7.15 Step 4 — Naming Your Report Program

At this point you will be asked to give your Report Program a name just as you did when you created your Filing and Data Entry Programs before. The Name may contain a maximum of 8 characters.

When you have entered the Name, then enter the drive code that you want to use to create your program on. You may be asked on the Screen to enter the Drive Code.

8.0 USING YOUR NEW REPORT PROGRAM

The Report Programs that you created with the QUIKPRINT Report Program Generator operate in much the same way as do the Filing Programs that you created with QUIKPRO+. Report Programs let you print an entire report, i.e. all information you have in a file, or only certain records from a file.

Remember that your report program will print data that you have stored in a file you prepared previous to running the report. The report program cannot print anything if the File does not exist or you have no information in the File. The File that your report uses is the same File of Data that you used in the original QUIKPRO+ Filing Program that you created.

To use your Report Program, simply go into BASIC, then RUN your program as you would any other BASIC program by typing RUN followed by the program name in quotes.

NOTE: IBM/Compatibles start up your BASIC Language like this BASIC /S:255.

When the report program starts you will see the following options at the screen bottom:

“(G)et, (S)earch, Sort, Select, (E)nd”

If you specify (G)et, then you will be asked for the Key that you want for records to be printed in your report. Your report will only contain those records which have as their Key the key you specified. Your Key is the key that you specified in your original QUIKPRO+ Filing Program.

8.1 Selecting Records For Your Report

If you specified (S)earch, Sort, Select then you may:

1. Print only those records in the file containing the information you want to Search for. (String Search)
2. Print only those records in the file where a PARTICULAR FIELD contains the information you want to Search for. (Field Search)
3. Print only those records where a numeric field is Less Than, Greater Than, or Equal To a number that you enter. (Select or Relational Search)
4. Print ALL the records in your file.
5. Any of the above printed in Sorted order either numerically or alphabetically.
6. Any of the above printed in the order the records appear in the Master File.

After you have entered "S" for "Search" you will be asked:

"Do you want to Search for something in a (F)ield or (A)nywhere in the file —"

Searching “(A)nywhere” in the File

If you enter “A” for “(A)nywhere in the file” you will be asked:

“Search for ? — ”

You may enter any characters or numbers that you want to Search for, then press ENTER. This will Select all records that contain the numbers or characters that you entered. If you simply press ENTER instead of entering characters to Search for, you will be asked:

“Print All Records? (Y/N) — ”

If you reply “Y” for YES, all records will be selected. If you reply “N” for NO, you will be returned to the Report Program Menu.

Searching a “(F)ield”

If you enter “F” for “(F)IELD”, you will be asked to:

“Press ENTER to get to the Field you want to Search on. . .”

“When you are at the Field you want, type in what you want to Search for.”

For example, if you wanted to Print all records that contain “SMITH” in the name field, then press ENTER until the cursor is at the name field and type in “SMITH.” You may notice that while pressing ENTER to get to a particular field, that the cursor will skip “Display Only” calculation

fields. This is because you cannot Select on Display Only fields. See NOTE at the end of the next section. If the field you select is a Numeric field, then you will only be able to type in numbers. If the field is a numeric field you will be told:

“The Field you are Searching is a
Number Field. . . ”

“You may Select Records that are. . . ”

“(E)qual, (L)ess or (G)reater than the
number you entered (Pick E, L or G) — ”

By replying “E,” “L” or “G,” only those records whose Field you selected is Equal To, Less Than or Greater Than the value you typed in will be selected.

8.2 Sorting Your Report

After Selecting the records you want to print in your Report you will be asked:

“Do you want your Report in sorted
order? (Y/N) — ”

If you reply “N” for NO, then your Report will be printed in the order of the Master File. If you reply “Y” for YES, then your Fields will be numbered automatically on your screen. You will then be asked:

“What Field do you want to Sort on? — ”

Simply enter the number of the field you want to Sort on. If the field is a numeric field, then your Report will be Sorted in numeric order. If the field is not a number field, then your Report will be in alphabetical order. You will notice that if your file contains Display Only fields, the fields will not be numbered on the screen. This is because you cannot Sort on Display Only fields. See NOTE at end of this section.

After entering the Field number you want to Sort on, your program will load and run the QUIKPRO + Sort. When the Sort has been completed, it will reload your Report program and print your Report. While your Report is printing you may:

“(P)ause, (A)bort, (R)edo . . .”

Pressing the corresponding letter will PAUSE the printing of your Report, ABORT the printing of your Report or REDO your Report from the top. This is especially convenient if you have a paper jam or other printer problems.

When the Report has completed printing you will be asked:

“Do you want to Print another copy?
(Y/N) — ”

If you reply “Y” for YES, then another copy of your Report will be printed. If you reply “N” for NO, then you will be returned to the Report Program Menu.

NOTE: You may only Sort and Select on fields that are STORED in the Master File, that is, fields that are not defined as Display Only fields when creating a program with QUIKPRO+. If you want to Sort or Select on a calculation field, then you must define it as (S)tored when creating your program with QUIKPRO+.

8.3 QUIKPRO + SORT Technical Information

Sort Operation

The following information is technically oriented and is provided to give the user a general view of the Sort Error Codes and Parameter file. Reading this section is not required to use QUIKPRO + or its created programs.

The QUIKPRO + Sort program is written onto your disk when your Report program is created. The Sort consists of two files. These files are "SORT.V10" and "SRTOV3.V10." These files are, respectively, the Sort program and the machine language Sort module. Both of these files must be present on the Report program disk if the Sort is to be used. If "SORT.V10" is not present on the disk, the Report program will not ask, "Do you want your Report in sorted order? (Y/N) - ".
NOTE: The Sort and Report programs must be on the DEFAULT or CURRENTLY LOGGED Drive in CP/M and MSDOS systems to run properly!

QUIKPRO + Sort Parameter File

After using the "(S)earch, Sort, and Select" option in the Report Program and replying "Y" to the Sort option, the Report program will write files to the disk that pass information to the Sort. One of these files is called the Sort Parameter File. The file name is your Report program name with the extension ".SRT" or "/SRT". This parameter file contains information that the Sort needs to

function properly. All the parameters are defined automatically when your Report programs are created. Some of these parameters can be modified in your created program to suit your particular sorting needs. The Sort parameters are defined beginning at Line 45315 in the created Report Program. The parameters are:

1. REPORT PROGRAM NAME
2. MASTER FILE NAME
(with drive spec)
3. WORKSPACE DRIVE
4. SORTED KEY FILE DRIVE
5. PROMPT CURSOR POSITION
6. RECORD LENGTH
7. SORT FIELD RECORD
POSITION
8. SORT FIELD LENGTH
9. ALPHA OR NUMERIC SORT
10. DECIMAL PRECISION

Most parameters are best left unmodified. The parameters that will be dealt with here are the DRIVE and PRECISION parameters. Any further modification may produce unpredictable results.

Workspace Drive Parameter

Before the Sort actually sorts and selects records from your Master File, it must read and load sort fields from selected records into memory. The Sort will allocate as much memory as possible to sort your file. If you do not have enough memory to sort all the selected records, the Sort must perform a Sort/Merge. That is, read and sort a block of records, write them out to a temporary file, read

and sort another block of records and merge them with the sorted block of records on the disk. In order for this to occur, the Sort will need a disk drive for this temporary workspace. The drive it uses is defined by this parameter. You may change Line 45325 to use any on-line drive for workspace. This parameter is normally set to Drive A or Drive 0 in your created Report Program. In most cases, a Merge is not necessary. The Sort can handle about 1500 records with a 15 or 20 byte Sort key on a 64k CP/M or MSDOS system or a 48k TRSDOS system without doing a Merge. If a Merge is necessary, it will take significantly more time to accomplish the sort. If there is not enough workspace on the Drive, then a "Disk Full" error will occur and you will be returned to the Report Program.

Sorted Key File Drive Parameter

The Sorted Key File is the file that contains the record numbers of the selected records in sorted order. The Report Program uses this file to print your report. The Sort program writes this file to the drive indicated by this parameter. You may change this parameter in Line 45330 to suit your disk space needs. It is normally set to Drive A or Drive 0 in your created Report Program.

If your QUIKPRO+ created programs are on Drive A or Drive 0 with space to spare, and your Data File is on Drive B or Drive 1, then it will be unlikely for a "Disk Full" error to occur. If your Programs and Data File are all on Drive A or Drive 0 and there is not ample work space on the disk, then changing these parameters to use another drive may be necessary.

Decimal Precision Parameter

This parameter is used only if the QUIKPRO + Sort is performing a numeric sort. This parameter defines how accurate the sort is to the right of the decimal point. This parameter may be set from 0 to 4. If "0" is specified, all digits to the right of the decimal point are ignored during the sort. This parameter is normally set for 2. This is the normal setting for "dollars and cents" sorting (0000.00). You may change this parameter to 0, 1, 2, 3 or 4 by changing Line 45360 in your created Report program.

8.4 QUIKPRO + Sort Error Codes

The QUIKPRO + Sort will return to its own Error Code if any problems occur during the Sort that inhibit its successful completion. When an error occurs, the Sort will display the Error Code on the bottom of the screen with a general explanation of the problem. If an undefined error occurs, then the Sort will return a BASIC error code. BASIC error codes are displayed with a DASH or "-" preceding the code number. Most errors will return you to the Report program.

ERROR CODE	EXPLANATION
1	Bad Sort Field Position or Length parameter.
2	Bad Sort Mode parameter. This parameter must be set to zero or one. 1 = numeric 0 = alpha

- 7 Bad File Name. This may be a bad Master File name or Program name.
- 8 Bad Drive Specification. Specifying an invalid drive or appending an invalid drive to a file name such as the Report Program name, Master File name, etc.
- 17 The machine language Sort Module "SRTOV3.V10" is not on your disk.
- 18 Master File Not Found or there are no records in your Master File. Make sure your Master File Disk is in its proper drive.
- 19 Insufficient Memory. This error should not occur. This will only happen if there is not enough memory available to accomplish a sort.
- 20 Calling Program Not Found. The sort could not find your Report Program. If this error occurs, the Sort will not be able to return to the Report Program. Make sure the Report Program is in the default, or currently logged drive.
- 21 Disk Full while writing the sorted Key File. Delete unnecessary files from your disk, or change the sorted Key File Parameter in your Report Program.
- 22 Disk Full while using temporary workspace during a Merge. Delete unnecessary files from your disk or change the Workspace Drive Parameter in your Report Program.

- 23 Disk Full while writing the KEYCMD file to your disk. This file tells your Report Program which sorted Key File to use and reports any error incurred during the Sort. Delete unnecessary files from your Report Program Disk.
- 24 Bad Master File or Parameters Do Not Match Master File.
- 25 BASIC not opened with 3 file buffers. When bringing up BASIC under TRSDOS, type "BASIC - F:3v" . CP/M and MSDOS default to 3 file buffers.
- 26 I/O Error. This is caused by a disk read or write error. This is usually caused by a bad disk or disk drive problems.
- 255 No Selected Records. No records were selected based on the selection criteria you defined in the Report Program.
- xx Undefined Error. Any errors not handled by the sort will return a BASIC error code, preceded by a dash or "-" .

9.0 QUIKINDEX FILE INDEXING UTILITY PROGRAM (Optional — Not Required)

If you already have file Data that you have created from a program other than one you wrote using QUIKPRO+, then the QUIKINDEX Utility Program can be used to make your data accessible by programs that you create with QUIKPRO+.

In order to use the Data that you already have in some other file, you must put that Data File in your computer system, and run the QUIKINDEX Utility Program.

After you have selected the QUIKINDEX Utility Program from the Program Menu, the QUIKINDEX Program will ask you to:

“Enter the Name of the File that you want to Index — ”

Enter the Name of the File.

If QUIKINDEX cannot find your file, then a message telling you that your file cannot be found will be displayed. Remember that in order to produce the Index for a File, the File must be in the system at the time the QUIKINDEX Utility is being used.

If you have entered a good File Name and QUIKINDEX finds the File, QUIKINDEX will ask you the starting position for the index in the File.

Next you will be asked to enter the ending position for the Key in your File.

HOW DO YOU KNOW WHERE THE KEY IS IN YOUR FILE???

You must know what your record layout is like in the File that you are using to create your index. For example, if your Record contains an account number in it and the first number in the account number starts at position 1 in your File Record, then 1 would be the starting position of your Key, if you were using the account number as the Key. If the account number in your file ended at position 5 in your File Record, then you would enter position 5 as the ending position for the Key. So, in other words, if you want a particular item in your File Record to be used as the Key using the QUIKINDEX Utility, you must know where the item you want to use as the key is positioned in your File Record.

After you have entered the starting and ending position of the Key, then you will be asked to:

“Enter the length of the File Record”

You should enter the length of your file's record at this point. The length you should enter is the total length of one record in your file. If your file has three fields of information:

Name Field is 10 characters long in your Record

Age Field is 5 characters long in your Record

Sex Field is 1 character long in your Record

...then the total length of your record in the above example is 16.

You must know the length of the File Record to proceed with the Index Utility Program.

NOTE: THE QUIKINDEX UTILITY PROGRAM IS ONLY PROVIDED FOR THE PURPOSE OF BEING ABLE TO MAKE OTHER FILES COMPATIBLE WITH PROGRAMS WRITTEN WITH QUIKPRO+. QUIKINDEX IS NOT REQUIRED FOR NORMAL QUIKPRO+ PROGRAM OPERATION AS DISCUSSED IN PREVIOUS SECTIONS OF THIS MANUAL.

Files which are indexed using the QUIKINDEX Utility Program must be non-compressed ASCII Files. No numeric compression variables are allowed.

QUIK REFERENCE SECTION (APPENDIX)

Follow the Steps Listed Below:

1. Bring up BASIC in your Computer.
2. Enter RUN "QUIKMENU"
3. Design Screen using == (equal signs) to indicate input fields and backspace or left arrow (<) to correct mistakes.
4. Specify Prime Key by entering the field number of the desired field.
5. Specify which fields are to be Numeric (Number) Only by entering the field number. Assign the Format for each Numeric Only Input Field. Enter Field Comments.
6. Give your Data File a name.
7. Give your new Program a name.
8. Your new Program is ready to use.
9. To run your new Program, simply follow the instructions for running BASIC Programs in your own BASIC Manual supplied with your computer.

In most cases, you can run your new Program by typing in RUN and your program name.

Example: RUN "MYPROG" will run the Program named MYPROG.



ICR FutureSoft

P. O. Box 1446
Orange Park, FL 32067