

Expands VisiCalc®
to state of the art
functionality

StretchCalc™

REFERENCE MANUAL

- GRAPHICS
- SORTING & REARRANGING
- KEYSAYER™ COMMANDS

Available only with VisiCalc®

Hardware: IBM PC or XT with at least one drive, 128K user memory or more. For screen graphics: IBM Color/graphics Adapter and compatible color or monochrome graphics display. For printer graphics, Color/graphics Adapter and IBM or Epson-compatible printer with GRAFTRAX or GRAFTRAX-PLUS option.

Software: DOS 1.1 or 2.0, VisiCalc Versions 177, 202 or 204; or IBM VisiCalc Version 1.1 or 1.2.

Version 1.3

StretchCalcTM
REFERENCE MANUAL

REFERENCE MANUAL

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StretchCalc Reference Manual

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CHAPTER 1. INTRODUCTION

This chapter serves several purposes:

- o It introduces you to the StretchCalc program.
- o It tells you what equipment you must have to run the StretchCalc program.
- o It explains how to use the rest of the manual.

WHAT IS THE StretchCalc PROGRAM?

In general terms, the StretchCalc program is a turbocharger for the VisiCalc® program. Working with VisiCalc, the StretchCalc program provides you with new commands to manipulate your electronic spreadsheets -- commands not provided by VisiCalc alone. For example, one StretchCalc command allows you to sort the rows of your spreadsheet.

And that's not all. The StretchCalc program also lets you create your own custom commands from individual VisiCalc or StretchCalc commands. This allows you to run frequently used sequences of operations with fewer keystrokes and less chance for error.

And there's still more. The StretchCalc program lets you quickly graph information from your spreadsheet. And you can print these graphs on your Epson-compatible printer or display them on your graphics monitor.

Specifically, the StretchCalc program provides three kinds of features -- Advanced Graph commands, Advanced User commands, and Advanced Move commands. The following few paragraphs briefly introduce you to each of these.

ADVANCED GRAPH COMMANDS

The StretchCalc program creates graphs directly from the information in your VisiCalc spreadsheet. You do not need to convert the information to the DIF™ format. The StretchCalc program works directly with the information stored within VisiCalc. This means you can graph your data without explicitly leaving the VisiCalc program.

You have a wide range of display options. If you have a color graphics monitor, you can display the information in color. If you have a monochrome graphics monitor, you can display it in monochrome. And, if you have an IBM- or Epson-compatible dot-matrix printer, you can generate hard copy (horizontally or vertically, large or small size, black on white or white on black) on your printer.

The StretchCalc program provides eight different kinds of graphs, including pie graphs, line graphs, bar graphs, scatter graphs, and area graphs. So whatever your format, StretchCalc graphics has it.

ADVANCED USER COMMANDS

The StretchCalc program stretches the power of VisiCalc by letting you create your own custom commands. Because you, the user, create these commands, they are called User commands.

User commands let you assign any sequence of keystrokes to a function key. After creating a User command, you can use it whenever you want by just pressing the function key.

These User commands save you time and effort, and reduce the likelihood of mistakes. With one keystroke, you can have the StretchCalc program run a long sequence of VisiCalc and StretchCalc commands. And after you have created your User commands, you don't need to worry about accidentally typing the wrong command. Your User command remembers the correct sequence of keystrokes.

And you're not limited to only 10 function keys. By using the [Alt], [Shift], and [Ctrl] keys, the StretchCalc program allows you to create 40 function-key User commands.

But that's not all. The StretchCalc program also allows you to assign keystroke sequences to each letter on your keyboard. To run one of these 26 User commands, you need only type /U followed by the single-letter name of the command. For example, to run the User command named A, you need only type

/UA

and the StretchCalc program enters the sequence of keystrokes for you.

If you find yourself frequently re-keying the same lengthy sequence of keystrokes, User commands can save you a great deal of effort. You can create a User command for each of your frequently used sequences. Then, whenever you want to run one of your sequences, you need only press the associated function key. The StretchCalc program does all the rest.

CHAPTER 1 INTRODUCTION

ADVANCED MOVE COMMANDS

The StretchCalc program provides new commands that you can use along with the VisiCalc commands. These Advanced Move commands allow you to quickly sort the rows of your spreadsheet or move collections of columns at one time. These commands are faster and more powerful than the VisiCalc Move command.

EQUIPMENT NEEDED

To use this StretchCalc program, you must have the following software and hardware.

SOFTWARE

- o IBM's Disk Operating System (DOS)
- o VisiCorp's VisiCalc, Extended Memory Version
or IBM's VisiCalc Version 1.1 or greater
- o The StretchCalc program

HARDWARE

- o An IBM Personal Computer or a Compaq computer
- o One or more disk drives
- o 128K or more bytes of memory (Depends upon which version of DOS you are using. See bottom of license agreement for specifics.)
- o Any monitor (screen) compatible with the IBM Personal Computer and capable of displaying 80 characters per line or, if you have a Compaq computer, the standard screen
- o A printer (needed if you want to print your spreadsheets).
- o Diskettes to store your spreadsheets and User commands
- o If you want to run the graphics commands, you must have an IBM graphics adapter board and a graphics monitor (either monochrome or color), unless you have a Compaq computer. Any Compaq with standard equipment can run the graphics commands.
- o If you want to generate hard-copy of your graphs, you must have an IBM- or Epson-compatible dot matrix printer, and the printer must be equipped with Grafix or Grafix-plus.

USING THIS MANUAL

This manual is designed to help you understand and use the StretchCalc program. But, to keep the manual as brief as possible, we at MultiSoft assume several things about StretchCalc users. We assume:

- o You are an experienced VisiCalc user.
- o You have a VisiCalc User's Guide for the IBM Personal Computer.
- o You have IBM's Disk Operating System reference manual.

Based on these assumptions, this manual does not provide extensive exercises. Instead, it provides very detailed reference material along with some tutorial information and examples. It relies on your familiarity with VisiCalc, and it occasionally refers to the VisiCalc User's Guide and to the Disk Operating System reference manual.

ORGANIZATION OF THIS MANUAL

This manual consists of three chapters and an appendix. Chapter 1, which you are currently reading, introduces the features of the StretchCalc program and tells what equipment is needed to run the program.

Chapter 2 explains how to run the StretchCalc program.

Chapter 3 is a bit like an encyclopedia. It provides detailed descriptions for each of the following StretchCalc features:

- o Advanced Graph Commands (/AG)

These include the following commands:

- Area Graph (/AGA)
- Bar Graph (/AGB)
- Component Graph (/AGC)
- Dot Graph (/AGD)
- High/low/close Graph (/AGH)
- Line Graph (/AGL)
- File Graph (/AGF)
- Scatter Graph (/AGS)
- Options (/AGO)

- o Advanced Move Commands (/AM)

These include the following commands:

- Install Permanently (/AMI)
- Move Options (/AMO)
- Rearrange Columns (/AMR)
- Sort Rows (/AMO)
- Undo Sorting or Rearranging (/AMU)

CHAPTER 1 INTRODUCTION

o Advanced Option Commands (/AO)

The Advanced Option commands allow you to control how the StretchCalc program expects you to enter your commands.

There are two Advanced Option commands:

Advanced Option Menu	(/AOM)
Advanced Options Off	(/AOff)

o Advanced User Commands

These include the following commands:

Define User Command	(/AUD)
Edit User Command	(/AUE)
Forget Keystrokes Command	(/AUF)
Recall Keystrokes Command	(/AUR)
Store or Load User Commands	(/AUS)
Run User Command	(/AUR or /U)

In addition to the commands, the StretchCalc program has one command that lets you use both a monochrome adapter and a graphics adapter simultaneously. This command is

Adapter Specification Command (/AA)

and it, too, is in Chapter 3.

The descriptions in Chapter 3 are arranged in alphabetical order, so you can look them up quickly. The upper outside corner of each page contains the name of the command described on the page. Each description explains a feature in detail and tells you where you can look for additional information. Most of the entries include detailed examples.

When you are ready to start reading Chapter 3, start with the entries for Advanced Graphics (/AG), Advanced Move (/AM), and Advanced User (/AU) commands. Then read the detailed descriptions of the commands within each of these families. Finally, after you are somewhat experienced with the other StretchCalc commands, read the Advanced Option command (/AO) entry.

The appendix is for people who are really in a hurry. It discusses a demonstration and some sample User commands that are provided on your StretchCalc diskette. If you want to see what the StretchCalc program can do before you labor through Chapter 3, read Chapters 1 and 2 and then the appendix.

SPECIAL NOTATION

This manual uses some special notation to identify the keys that you must press. The following table explains most of this notation. The left column shows the keystroke's name. The center column shows the notation used in examples. The right column tells how the keystroke is displayed on your monitor.

NOTATION FOR SPECIAL CHARACTERS

KEYSTROKE NAME	NOTATION IN EXAMPLES	StretchCalc DISPLAY
PERIOD	[Period]	Displayed as a period (.).
BACKSPACE	[Bksp]	Displayed on screen only within definition of a User command. Shown as a small, filled-in square.
HOME	[Home]	Shows up in the edit line as a small circle with emanating rays, a cartoon sun.
ENTER	[Enter]	Displayed on the screen only when used within the definition of a User command. Shows up as a left-pointing, filled-in triangle.
COMMA	[Comma]	Displayed as a comma (,).
RIGHT ARROW	[Right Arrow]	Displayed on the screen only within the definition of a User command. Shows up as a small arrow pointing right.
LEFT ARROW	[Left Arrow]	Displayed on the screen only within the definition of a User command. Shows up as a small arrow pointing left.
UP ARROW	[Up Arrow]	Displayed on the screen only within the definition of a User command. Appears as a small arrow pointing up.
DOWN ARROW	[Down Arrow]	Displayed on the screen only within the definition of a User command. Appears as a small arrow pointing down.

CHAPTER 1 INTRODUCTION

INSTALLATION INSTRUCTIONS

In addition to the special notation shown in the table, this manual uses braces {...} to represent a collection of keystrokes from which you must choose one. For example,

{any letter}

means that you must enter one letter.

Some of the Advanced User commands (AUX) require that you hold down the control key [Ctrl] and simultaneously press the [Enter] key. The manual shows this combined keystroke as

[Ctrl-Enter]

Remember to first press the [Ctrl] key and then, while holding down the [Ctrl] key, press the [Enter] key.

INTERRUPTING A StretchCalc COMMAND

If, at any time, you want to abort a StretchCalc command that you have started running, press either the [Scroll Lock] key in the upper-right corner of the keyboard or [Ctrl-Scroll Lock]. The StretchCalc program will stop running the command and will allow you to enter another command.

LOADING THE StretchCalc PROGRAM AND VISICALC FROM SEPARATE DISKETTES

This procedure tells you how to load the Visicalc and StretchCalc programs from separate diskettes. If you want, rather than the StretchCalc program on the Visicalc diskette, don't bother reading this procedure. Instead, go to the section of this chapter entitled "Loading the Visicalc Program Self-Installing and Running Visicalc".

This procedure requires at least one diskette drive, a diskette containing Visicalc, a diskette containing Visicalc, and a diskette containing the StretchCalc program.

In addition, the special notation shown in the table, this manual uses a special notation to represent a collection of key strokes. For example,

Press the [Enter] key.

Press the [F1] key.

Press the [F1] key and then, while holding

down the [Ctrl] key, press the [F1] key. This notation is used to indicate that you must hold down the [Ctrl] key and then, while holding down the [Ctrl] key, press the [F1] key.

Remember to first press the [F1] key and then, while holding

down the [Ctrl] key, press the [F1] key.

INTERRUPTING A StarOffice COMMAND

If, at any time, you need to interrupt a StarOffice command that you have started, simply press either the [Esc] key or the [F1] key. The system will stop the command and will allow you to enter another command.

APTER 2. INSTALLATION INSTRUCTIONS

This chapter serves several purposes:

- o It tells you why you should back up your StretchCalc diskette, and it tells you how to back it up.
- o It tells you how to load VisiCalc and the StretchCalc program without modifying your VisiCalc diskette.
- o It tells you how to add the StretchCalc program to your VisiCalc diskette, making the pair of programs easier to load. It also tells you how to load from this modified diskette.
- o It tells you how to start using the StretchCalc program after you have loaded it into memory.
- o It tells how to prepare diskettes for storing User commands.

IMPORTANCE OF BACKING UP YOUR StretchCalc DISKETTE

The MultiSoft Corporation encourages you to make one or two backup copies of your StretchCalc diskette. By backing up your diskette, you reduce the frustration that you suffer if you accidentally damage the diskette that you bought.

If you wish to copy your StretchCalc diskette, use the DISKCOPY command provided by the Disk Operating System. For instructions about using the DISKCOPY command, refer to IBM's Disk Operating System reference manual.

LOADING THE StretchCalc PROGRAM AND VISICALC FROM SEPARATE DISKETTES

This procedure tells you how to load the VisiCalc and StretchCalc programs from separate diskettes. If you would rather copy the StretchCalc program to the VisiCalc diskette, don't bother reading this procedure. Instead, skip to the section of this chapter entitled Making the StretchCalc Program Self-Loading, and resume reading there.

This procedure requires at least one diskette drive, a diskette containing DOS, a diskette containing VisiCalc, and a diskette containing the StretchCalc program.

This procedure consists of three steps:

1. This step loads DOS into your system.

If your system's power is already on, place the DOS diskette into drive A and close the door, hold down the [Ctrl] and [Alt] keys, and press [Del]. This causes the computer to load the DOS from the diskette. Skip to step 2.

If your system's power is not already on, place the DOS diskette into drive A, close the door, and turn on the system's power. This causes the computer to run some diagnostic tests and then load DOS from the diskette. This process may take as much as several minutes if your system has a lot of memory.

2. This step ensures that DOS is completely loaded.

Whether the power was on or off, wait for the computer to read the DOS diskette. When the red light on the diskette drive stops flashing, look for the

A>

prompt on your monitor. This means that DOS is ready to accept your instructions. Remove the DOS diskette from the drive.

3. This step causes DOS to load the StretchCalc program and VisiCalc into memory. The actions you must perform for this step depend upon how many drives you have in your system.

- a For systems with two or more diskette drives...

Insert the VisiCalc diskette in drive A and close the door. Insert the StretchCalc diskette in drive B and close the door. Type

B:BSTRETCH

and press [Enter]. When the spreadsheet appears on your screen, both programs have been loaded. Start reading the section of this chapter entitled USING THE StretchCalc PROGRAM.

- a For systems with one diskette drive...

As you follow this procedure, keep reading your system's monitor. DOS will tell you when to place each diskette in your drive. When DOS asks for the "Drive A" diskette, place the VisiCalc diskette in the drive and close the door. When DOS asks for the "Drive B" diskette, place the StretchCalc diskette in the drive and close the door.