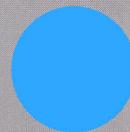
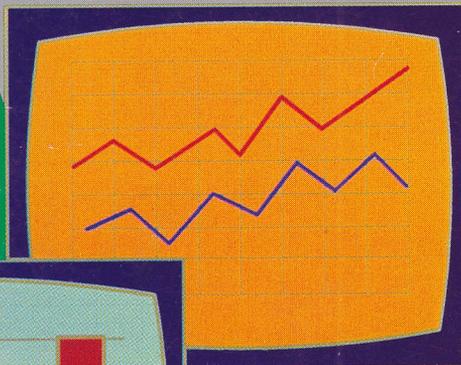
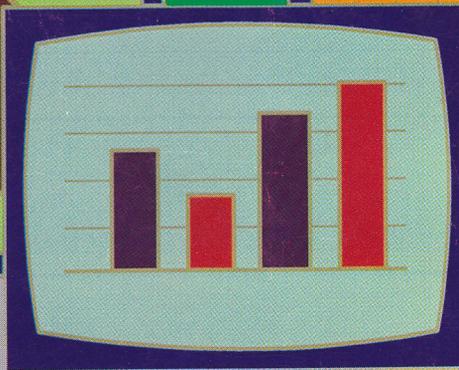
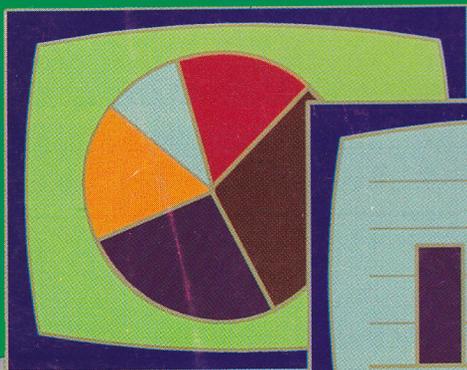




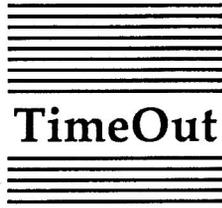
TIMEOUT GRAPH™

URNS YOUR SPREADSHEETS INTO GREAT LOOKING
GRAPHS FROM INSIDE APPLEWORKS™!



TIMEOUT GRAPH Copyright © 1987 by Rob Renstrom

TimeOut Graph is a trademark of Beagle Bros, Inc. Apple and AppleWorks are trademarks of Apple Computer, Inc.



TimeOut Graph™

Professional Graphs for AppleWorks™
by Rob Renstrom

Published by
BEAGLE BROS, INC.
6215 Ferris Square, Suite 100
San Diego, CA 92121
(619) 296-6400

Copyright © 1987 Beagle Bros, Inc.

This manual and the software described in it are copyrighted with all rights reserved. Under the copyright laws, this manual or the software may not be copied, in whole or part, without written consent of Beagle Bros, except in the normal use of the software or to make a backup copy of the software. This exception does not allow copies to be made for others, whether or not sold, but all of the material purchased (with all backup copies) may be sold, given or loaned (but not rented) to another person. Under the law, copying includes translating into another language or format. You may use the software on any computer owned by you, but extra copies cannot be made for this purpose.

LIMITED WARRANTY ON MEDIA AND REPLACEMENT

If you discover physical defects in the manuals distributed with a Beagle Bros product or in the media on which a software product is distributed, Beagle Bros will replace the media or manuals at no charge to you, provided you return the item to be replaced with proof of purchase to Beagle Bros during the 90-day period after you purchased the software.

All implied warranties on the media and manuals, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to ninety (90) days from the date of the original retail purchase of this product.

Even though Beagle Bros has tested the software and reviewed the documentation, Beagle Bros makes no warranty or representation, either express or implied, with respect to software, its quality, performance, merchantability, or fitness for a particular purpose. As a result, this software is sold "as is," and you the purchaser are assuming the entire risk as to its quality and performance.

In no event will Beagle Bros be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect in the software or its documentation, even if advised of the possibility of such damages. In particular, Beagle Bros shall have no liability for any programs or data stored in or used with Beagle Bros products, including the costs of recovering such programs or data.

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



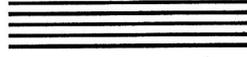
Contents

Chapter 1	Welcome to TimeOut Graph 1
	About this Manual 2
Chapter 2	Installing TimeOut 5
	TimeOut Compatibility 6
	Installation 7
	Sorting the TimeOut Menu 7
	Location of TimeOut Applications 8
	Location of AppleWorks 8
	Re-installing TimeOut 9
	Copying Applications to the TimeOut Application Disk 9
	Starting up AppleWorks with TimeOut 10
	Accessing TimeOut Applications 11
	Memory usage 12
Chapter 3	Graph Tutorial 13
	Lesson 1: Graphing a Sample Spreadsheet 14
	Starting TimeOut Graph 15
	Selecting the Graph Type 15
	Selecting the Graph Data 16
	Viewing the Graph 18
	Enhancing the Graph 18
	Adding a Graph Title 19
	Adding Axis Labels 20
	Re-Graphing Spreadsheet Changes 21
	Changing Graph Types 22
	Adding More Data Ranges 24
	Adding Legends 26
	Adding Grid Lines 26
	More Graph Types 27
	Saving Graph Settings 29
	Printing Graphs 30
	Leaving TimeOut Graph 31
	What's Next 31
	Lesson 2: Enhanced Pie Graphs 32

	Resetting Graph Settings	32
	Making a Simple Pie Graph	33
	Shading Pie Graphs	34
	Exploding Pie Graphs	35
	Lesson 3: XY Graphs and Linear Regression	36
Chapter 4	Graph Reference	39
	Creating a Graph	40
	Defining Data Ranges	40
	Selecting a Graph Type	42
	Bar Graphs	42
	Line Graphs	44
	XY Graphs	45
	Pie Graphs	46
	Stacked Bar Graphs	47
	Area Graphs	48
	Hi-Lo Graphs	49
	Viewing a Graph	50
	Re-Graphing Spreadsheet Changes	50
	Printing a Graph	50
	Saving and Loading Graph Settings	51
	Clearing Graph Settings	52
	Saving and Loading Graph Pictures	53
	Titles	54
	Legends	55
	Formatting Lines and Symbols	55
	Grid Lines	56
	Changing the Scale	56
Appendix A	TimeOut Utilities	59
	Using the Utilities	60
	Configure	60
	Load to memory	61
	Dump from memory	61
	Change memory status	62
	Change name	62
	Sort Menu	62
Appendix B	Configuration Options	63
	Configuring Graph	63
	Printer Problems	66
Appendix C	Data Converter	67
Help!	Customer Support Information	69
	Index	71



Chapter 1



Welcome to TimeOut Graph

TimeOut Graph™ is part of the TimeOut AppleWorks™ enhancement series. All of the products in this series work inside of AppleWorks and are easily selected from a single menu.

With TimeOut Graph you can create a wide variety of business charts and professional graphs from your AppleWorks Spreadsheet and Data Base data.

Because TimeOut Graph is integrated with AppleWorks, you can graph your spreadsheets fast. It's easy. Just highlight the spreadsheet data and choose the type of graph you want and TimeOut Graph does the rest, instantly drawing your graph on the screen; all without leaving AppleWorks. Compare this to other graph programs where you must save your files, quit AppleWorks, then transfer your data to another program.

TimeOut Graph offers several graph types including Bar, Line, Pie, XY (Scatter), Stacked Bar, Area, Hi-Lo, Exploded Pie, and Point. There are also a number of enhancement options that let you fine-tune your graphs by adding titles, labels, legends, and grid lines to name a few.

Once you've created a graph, you can print it in a variety of sizes on most dot-matrix printers, directly from inside AppleWorks.

About this Manual

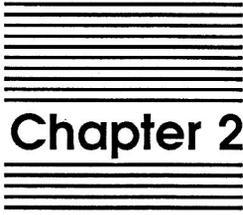
This manual is divided into three main sections: Installing TimeOut, Graph Tutorial, and Graph Reference.

If you have not already installed TimeOut on your AppleWorks STARTUP disk, you will need to read all of chapter 2 "Installing TimeOut". If TimeOut is already installed, read only the section called *Copying Applications to the TimeOut Application Disk* on page 9.

After installing TimeOut Graph, you can read the Tutorial section which leads you through the process of creating several sample graphs, or you can go directly to the Reference Section which describes each TimeOut Graph feature in detail.

If you're not already familiar with the AppleWorks Spreadsheet, you may want to refer to the AppleWorks Tutorial and Reference Manuals before starting.

Note: This manual assumes that you are familiar with AppleWorks and the AppleWorks method of doing things (e.g. selecting menu options, answering questions, loading files, escaping, etc.) If you're not, then refer to the appropriate sections of your AppleWorks manuals.



Chapter 2

Installing TimeOut

TimeOut Graph is provided on both 5.25-inch and 3.5-inch disks. Before using your *TimeOut Graph* disk, please take a moment to make a backup copy of the disks you will be using. Since the disks are not copy-protected, you may use any standard disk duplication program such as *Filer*, *System Utilities*, *Copy II Plus*, or Beagle Bros' *TimeOut FileMaster*. Be sure to write-protect and safely store your original disk so you don't accidentally overwrite it. (Use the backup copy when using TimeOut Graph). Please do this now.

Beagle Bros software isn't copy-protected. That makes it easier for you to use and easier to make backup copies. Please support us in our commitment to supply friendly, easy-to-use software by not giving away copies to your friends.

TimeOut Compatibility

TimeOut is the controlling program that modifies AppleWorks and makes it possible for you to use applications like TimeOut Graph from *inside* AppleWorks. TimeOut applications are actually integrated into the AppleWorks environment, unlike other AppleWorks enhancements you may be familiar with. This revolutionary advancement makes them more powerful, faster and easier-to-use.

TimeOut is compatible with AppleWorks versions 2.0 and later. If you have an earlier version, contact your dealer about getting an update from Apple. You must also have the USA version. TimeOut does not work with foreign language versions of AppleWorks.

TimeOut is compatible with most enhancements to AppleWorks including *Super MacroWorks*, *AutoWorks*, *Applied Engineering's desktop expander*, *Checkmate's desktop expander*, and the *Pinpoint accessories*.

If you are installing TimeOut with other AppleWorks enhancements, we recommend that you install TimeOut last. The only exception is if you are also using the Pinpoint desktop accessories. Always install Pinpoint last.

Installation

Once your backup copy has been made, boot your *TimeOut Graph* disk by placing it in your boot drive and turning your computer off and back on or by pressing Control-Open-Apple-Reset.

Soon the title screen will appear. The menu contains three options:

1. Update AppleWorks
2. Read NOTES
3. Quit

Select Read NOTES. This will inform you of any changes to TimeOut Graph that have been made since this instruction manual was printed.

After you have read the NOTES, you will return back to the TimeOut startup screen. This time select Update AppleWorks.

Sorting the TimeOut Menu

You must now specify whether or not you would like TimeOut to sort the list of TimeOut applications in the TimeOut menu. The names will be sorted alphabetically if you specify Yes. Otherwise, they will appear in the same order as they do in the disk catalog. By specifying No, you decide the order of the names in the TimeOut menu by placing them on your TimeOut applications disk in the order that you want.

Location of TimeOut Applications

The next step is to indicate where TimeOut should look for the TimeOut applications. All of the TimeOut applications must be placed on the same disk. This can be a hard disk, a RAM disk, a floppy disk, or any ProDOS disk device. (See *Copying Applications to the TimeOut Application disk* on page 9.) The choices you have are:

1. AppleWorks STARTUP disk
2. Slot and Drive
3. ProDOS directory

The simplest approach is to place the TimeOut applications on your *AppleWorks STARTUP* disk. By doing that, you never have to search for a separate TimeOut applications disk. If you have a hard disk or a 3.5-inch disk, you can place them in the same directory or subdirectory with your AppleWorks STARTUP program (APLWORKS.SYSTEM).

If you have more than one disk drive, you may want to dedicate one drive to your TimeOut applications. You may specify either `Slot and Drive` or `ProDOS directory` to indicate where the TimeOut applications disk will be. For more information on ProDOS directories, see the section in your AppleWorks manual called *ProDOS, prefix for filenames*.

Location of AppleWorks

The next step is to indicate where your AppleWorks STARTUP program is so TimeOut can be installed. You may specify either `Slot and Drive` or `ProDOS directory`. After indicating the location of AppleWorks, press a key and your AppleWorks STARTUP program will be updated with TimeOut.

Note: This is a one time modification. If you add more TimeOut applications later, you don't need to modify AppleWorks again.

Re-installing TimeOut

After you have already installed TimeOut, if you need to change the applications disk location or the order of the menu, you can re-install TimeOut by following the same steps for initial installation. This will only work if you have not installed any other AppleWorks enhancement programs since you installed TimeOut. If you have then you may need to completely reconfigure AppleWorks.

Copying Applications to the TimeOut Application Disk

If you are using other TimeOut applications, you will need to copy Graph to your TimeOut applications disk. Otherwise, you have the option of using the TimeOut Graph disk as your TimeOut applications disk or any other disk (i.e. the AppleWorks Startup disk, a RAM disk, or a hard disk).

If you need to copy the applications to another disk, you can use any standard file copy program such as the *Filer*, *System Utilities*, *Copy II Plus*, or *File Master*. You will need to copy the following files:

TO.GRAPH

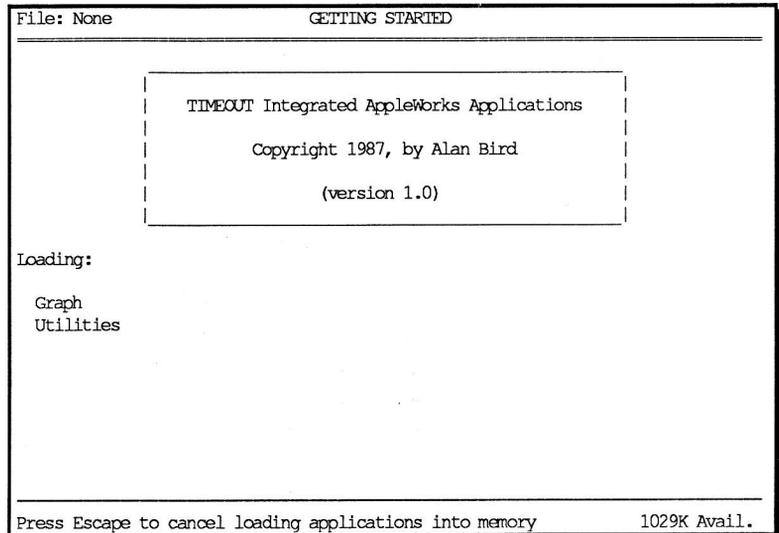
TO.UTILITIES

TO.CLIPBOARD

Note: You may not need to copy the file TO.UTILITIES or TO.CLIPBOARD if they're already on your TimeOut application disk.

Starting up AppleWorks with TimeOut

When you start up AppleWorks with TimeOut installed, you should see the TimeOut title screen before you reach the AppleWorks main menu. TimeOut will scan your TimeOut applications disk looking for TimeOut applications.



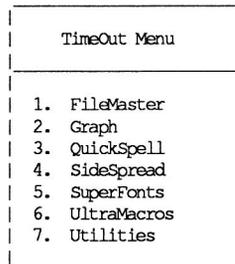
Note: If you receive a message indicating that TimeOut is getting errors trying to load the TimeOut applications, it means that TimeOut is unable to find the applications. At this point you must insert your applications disk if you have not already done so. If you have inserted your applications disk and are still getting errors, you either do not have any applications on the disk or your disk has been damaged. You will need to create a new applications disk.

If you do not see a TimeOut title screen, you have not installed TimeOut correctly. Go back to page 5 and start over.

As TimeOut identifies each TimeOut application, they are listed on the screen. An asterisk ("*") before the application name indicates that it is memory-based. You may press Escape at any time to prevent memory-based applications from loading into memory (see pages 61, 62 for an explanation of memory-based applications). This doesn't affect your ability to use them, it just makes them disk-based.

Accessing TimeOut Applications

While you are using AppleWorks, you may call up the TimeOut menu at any time by holding down the Open-Apple key and simultaneously pressing the Escape key. A menu similar to the following will appear (you may have fewer or more applications than this):



Use the up and down arrow keys or type a number to select an application, then press Return (press Escape if you don't want to make a selection). If your applications are not memory-based, be sure your TimeOut applications disk is in the drive when you press Return. Otherwise, you will be prompted to insert your TimeOut application disk.

Memory usage

You will notice with TimeOut installed that you have less desktop memory for your AppleWorks documents. TimeOut itself takes up some of the memory. Graphics applications and memory hungry applications (like Graph) will take up an additional 8K of memory.

Memory-resident TimeOut applications also take up desktop memory. If you are short on desktop memory, reconfigure your applications so they are disk-based.

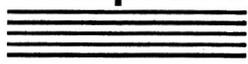
However, for maximum speed, make your TimeOut applications memory-based or run them from a RAM disk. If your computer has more than 128K of memory, we highly recommend that you configure TimeOut Graph as a memory-resident application. This will improve the speed when graphing.

Control-Reset Patch

When you install TimeOut on your AppleWorks Startup disk, TimeOut makes a patch to AppleWorks so that Control-Reset will take you to the Main Menu instead of the machine-language monitor.



Chapter 3



Graph Tutorial

The following section of the manual is devoted to a step-by-step tutorial that leads you through the process of creating several sample graphs. This section includes three lessons: Graphing a Sample Spreadsheet, Enhanced Pie Graphs, and XY Graphs and Linear Regression.

We recommend that first time AppleWorks users carefully read this section. Advanced users may want to just browse through the lessons, noting the various samples, then read the Reference Section.

Lesson 1: Graphing a Sample Spreadsheet

If you haven't already started AppleWorks, do so now. Load the sample file *Bicycle Company* from the *TimeOut Graph* disk.

The spreadsheet looks like this:

File: Bicycle Company		REVIEW/ADD/CHANGE				Escape: Main Menu
A	B	C	D	E	F	G
1						
2	The Bicycle Company					
3	1986 Sales by Department					
4						
5						
6	Department	1st	2nd	3rd	4th	
7						
8	Bikes	42	68	20	92	
9	Accessories	29	43	38	59	
10	Safety Gear	12	18	15	22	
11	Clothing	21	31	25	41	
12						
13	Total	104	160	98	214	
14						
15						
16						
17						
18						
A1						
Type entry or use A commands						A-? for help

This file shows The Bicycle Company sales for each department (bikes, accessories, safety gear, and clothing) over a period of four quarters.

There are several informative graphs that can be made from this data. For now, suppose that you want to make a bar graph showing the bike sales for all four quarters. Using TimeOut Graph, this task is simple.

Starting TimeOut Graph

To start TimeOut Graph, you must select Graph from the TimeOut menu. Press OPEN APPLE-ESC to bring up the menu, then select Graph from the list of applications. If Graph doesn't appear in the menu, see *Installation* on page 7.

The Graph main menu will appear at the bottom of the screen with the Type option highlighted.

```
-----  
TimeOut GRAPH V1.0      Copyright 1987, Rob Renstrom
```

```
Graph?  Type Data View Options File Reset Print
```

From this menu you can quickly access every TimeOut Graph feature with just a few, simple keystrokes.

Selecting the Graph Type

You must first choose the type of graph you want to make. For this example you want a bar graph.

1. Select the highlighted Type option by pressing RETURN.

The Type menu appears, replacing the Graph menu.

```
Type?  Bar Line Pie XY Stacked-Bar Area Hi-Lo
```

This menu offers seven graph types. Several variations of these types are available, such as Exploded Pie graphs, by using options explained in the Reference Section.

2. Since `Bar` is already highlighted, press `RETURN` to select it.

TimeOut Graph will return to the Graph main menu.

Selecting the Graph Data

Next, you need to tell TimeOut Graph which spreadsheet values you want to use in creating the graph. For now, you want to graph the bike sales in each quarter.

1. From the Graph main menu, select `Data`.

The Data menu replaces the Graph menu.

```
Data? X A B C D E F
```

This menu allows you to select as many as six data ranges, A through F. A data range is simply a group of numbers in the spreadsheet that will be used to create the graph. This can be any group of cells in the spreadsheet: a partial row or column, or a block of cells.

To graph the Bike sales, you want to choose cells B8 through E8:

2. Select `A` to choose the first data range.

The following prompt appears at the bottom of the screen, replacing the Data menu.

```
A Range  
Move cursor to beginning of data range and press  
Return
```

3. Move the spreadsheet's cursor to the cell B8, the number of bikes sold in the first quarter, then press `RETURN`. This cell becomes the start of the data range.

TimeOut Graph then asks you to:

Use cursor moves to highlight data range, then press Return

4. Press the RIGHT ARROW key three times to highlight the remaining numbers.

With the data range highlighted, cells B8 through E8, your screen looks like this:

File: Bicycle Company		SELECT RANGE			Escape: Select Range Start	
A	B	C	D	E	F	G
1						
2	The Bicycle Company					
3	1986 Sales by Department					
4						
5						
6	Department	1st	2nd	3rd	4th	
7						
8	Bikes	42	68	20	92	
9	Accessories	29	43	38	59	
10	Safety Gear	12	18	15	22	
11	Clothing	21	31	25	41	
12						
13	Quarter Totals	104	160	98	214	
14						
15						
16						
17						
18						

E8: (Value) 92
A Range
Use cursor moves to highlight data range, then press Return

If your screen looks different, press ESC to go back one step, then re-select the data range.

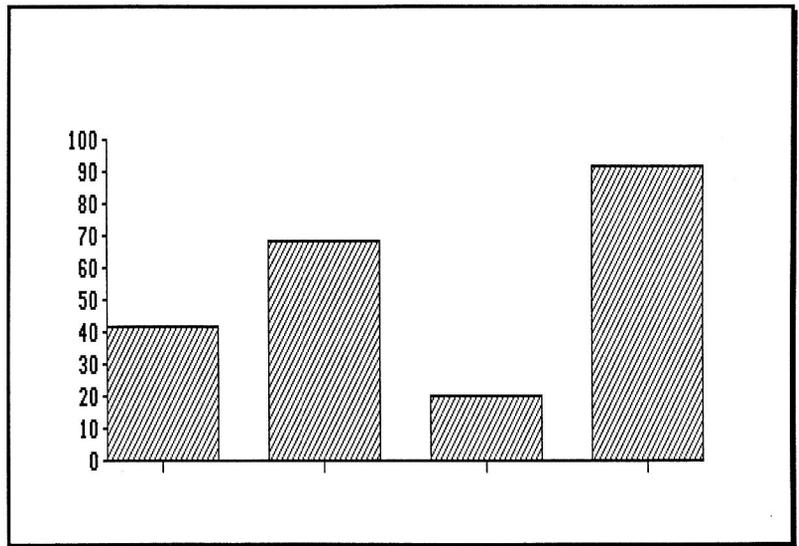
5. To accept the highlighted range, press RETURN.
6. Then press ESC to return to the Graph main menu.

Viewing the Graph

So far you have used two simple options to select the graph type and the data you want to graph. The final step is to display the graph.

Choose the `View` option and TimeOut Graph will instantly draw the graph on the screen. Notice that the vertical axis (y-axis) is automatically scaled to the numbers that were chosen.

When you're through admiring your first graph, press the `SPACE` bar to continue.



Enhancing the Graph

To complete this graph you can add titles, labels, and a variety of other items that will enhance its appearance.

Adding a Graph Title

1. Choose `Options` from the Graph main menu.

A new menu will appear:

```
Options? Legend Titles Format Grid Scale
```

The `Options` menu allows you to tailor various aspects of the graph's appearance, such as adding `Legends`, `Titles`, or `Grid lines`.

Since you want to add a title:

2. Choose `Titles` by pressing `T`.

The `Titles` menu appears.

```
Titles? Main Sub X-Axis Y-Axis
```

This menu allows you to add a title above the graph (`Main` and `Sub`), below the `X-Axis`, and along the `Y-Axis`.

3. Choose `Main`.

`TimeOut Graph` asks you to enter the main graph title:

```
Type the main title: _
```

4. Type `THE BICYCLE COMPANY`

5. Press `RETURN`.

To add a second title, below the first.

6. Choose `Sub`.

7. Type `1986 Sales by Quarter`, then press `RETURN`.

8. Press `ESC` once to return to the `Options` menu, then once more to go back to the Graph main menu.

Adding Axis Labels

You may also add labels along the horizontal axis (or x-axis) that identify each bar in the graph. These labels are entered by pointing to a range of cells in the spreadsheet, just as you did when you selected the first data range.

Since you want the Quarters to appear along the axis, you need to select the cells containing 1st, 2nd, 3rd and 4th.

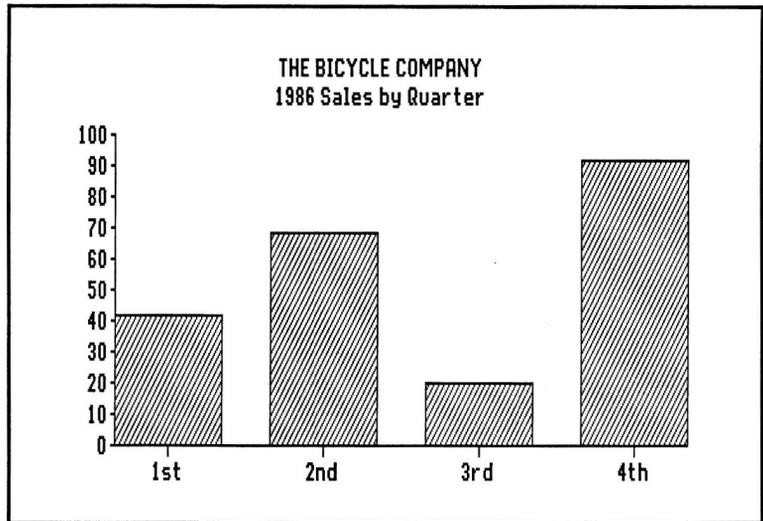
1. Select the **Data** option.
2. Select **x** to specify the **X Range**.

Unlike the **A** through **F** ranges that are used to select data for the graph, the **X** range is used to select labels for the x-axis. **TimeOut Graph** uses the contents of the cells in this range as labels.

3. Move the cursor to cell **B6**, then press **RETURN**.
4. Press the **RIGHT ARROW** key three times to highlight the other quarters.
5. To accept the highlighted range, press **RETURN**.
6. Press **ESC** to go back to the **Graph** main menu.

To see the modified graph, select **View**.

Notice that TimeOut Graph automatically centers the title above the graph and the labels along the x-axis.



When you're ready to continue, press the SPACE bar.

Re-Graphing Spreadsheet Changes

One of the most powerful features of TimeOut Graph is the ability to quickly redraw any changes made to your spreadsheets.

For instance, suppose that the number for the third quarter bike sales is incorrect. The correct amount should be 60. Using the spreadsheet you can change this number, then instantly redraw a new graph, reflecting this change (without having to re-select the data range).

1. From the Graph main menu, press ESC to leave TimeOut Graph and return to the spreadsheet.
2. Move the cursor to cell D8, the third quarter bike sales.

3. Type 60.
4. Press RETURN.
5. Press OPEN APPLE-ESC to bring up the TimeOut menu and then press RETURN to select Graph, which is already highlighted.
6. Type v to select the View option.

TimeOut Graph redraws the graph, using the new amount in the third quarter. Notice that TimeOut Graph *remembered* the data range, labels, and titles you selected previously, using them to create the new graph. Because of this feature, you can redraw a graph immediately after making a change to the spreadsheet.

Compare this process to stand-alone graphics packages where the you must save your spreadsheet, exit AppleWorks, start another program, transfer the data, then finally draw the changed graph.

Changing Graph Types

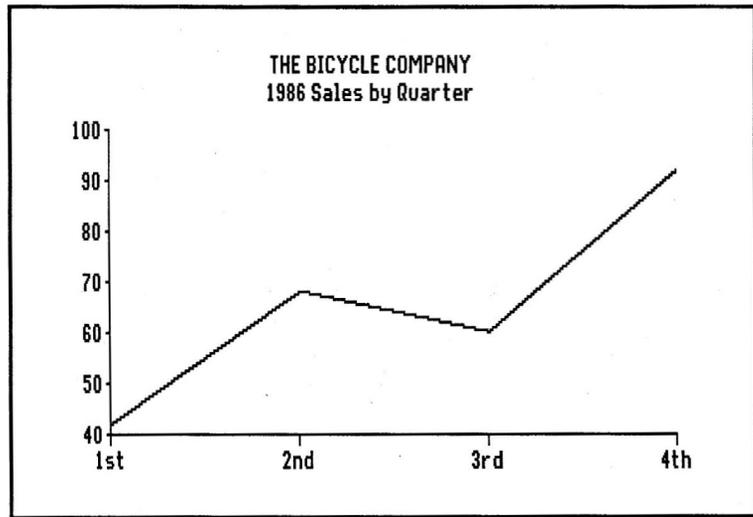
Before going on to some of the other options, let's see how easy it is to view the same data as a different type of graph. This is another significant feature of TimeOut Graph.

To view the data as a Line chart:

1. If you haven't already done so, press the SPACE bar to return to the Graph main menu.
2. Type T L V to select Type, Line, and View.

The Line chart shows trends better than Bar charts. From this chart, you can see that the sales trend for The Bicycle Company is definitely heading up!

3. Press the SPACE bar to go back to the Graph menu.



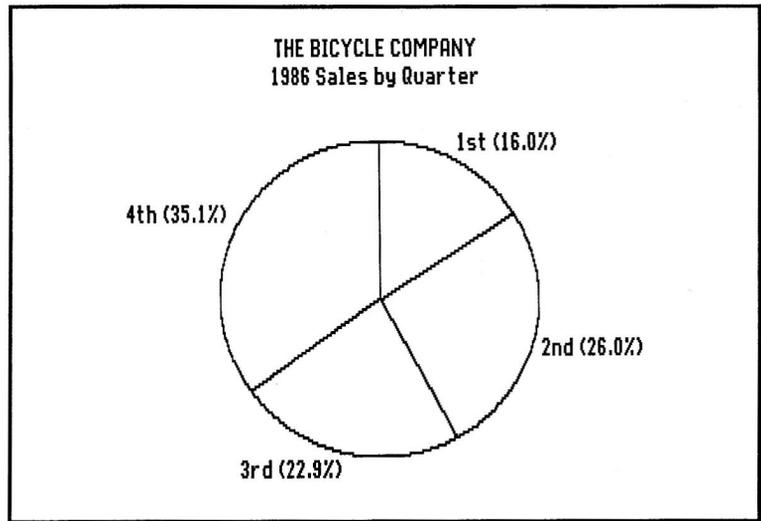
To see the data as a Pie Chart:

1. Type **T P V** to select Type, Pie, and View.

This Pie chart shows the percentage of the bike sales in each quarter. TimeOut Graph automatically calculates the percent for each data item based on the total of all the items. As you can see, more than a third of the bike sales occurred in the forth quarter.

2. Press the SPACE bar.

3. Type **T B** to select bar graphs again.



Adding More Data Ranges

You can make a more complex graph by including the sales data for the other departments. This is done by defining a separate data range for each department. Since you have already chosen one data range, the bike sales, you must start with the second data range, Range B.

1. Type **D** to select the **Data** option.
2. Choose range **B**, by typing **B**

Highlight the Accessories sales:

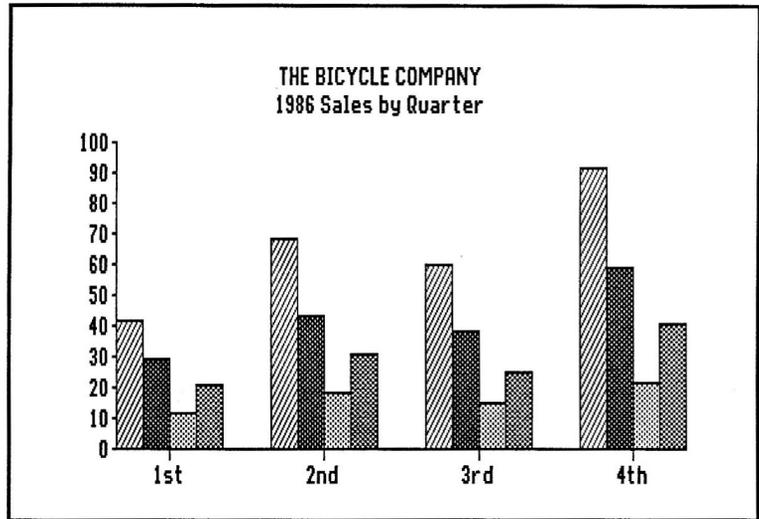
3. Move the cursor to the beginning of the second data range, cell **B9**, then press **RETURN**.
4. Press the **RIGHT ARROW** key three times to highlight the other cells.
5. Press **RETURN** to accept the highlighted range.

The other two ranges are defined in the same manner.

6. Select C from the menu and highlight cells B10 through E10.

7. Select D from the menu and highlight cells B11 through E11.

After defining the data ranges, press ESC to return to the Graph menu, then select View to see the new graph.



You'll notice that the bars now have four different patterns, representing the four data ranges. And that each group of bars corresponds to the data items in each range. For instance, the first group of bars correspond to the first data item in each range, the second group corresponds to the second item in each range, and so on. This makes it easy to compare the different ranges.

Adding Legends

Since the bars now have more than one pattern, you should identify the category each pattern represents. In this case the patterns represent the different departments: Bikes, Accessories, Clothing, and Safety Gear.

1. Select `O`ptions from the Graph menu.
2. Type `L` to select Legend.
3. Type `A` to enter the legend for range `A`.

TimeOut Graph asks you to enter the legend for the first data range:

Type legend for A range: `_`

4. Type `Bikes`
5. Press `RETURN`.

Enter the legends for the other ranges as follows: `Accessories` as the `B` range; `Safety Gear` as the `C` range; `Clothing` as the `D` range.

After you enter the legends, press `ESC` to return to the Options menu.

Adding Grid Lines

Grid lines can make a graph easier to read. To add grid lines to the sample bar graph:

1. Select `G`rid from the Options menu.

The Grid menu appears, with the default `C`lear option highlighted.

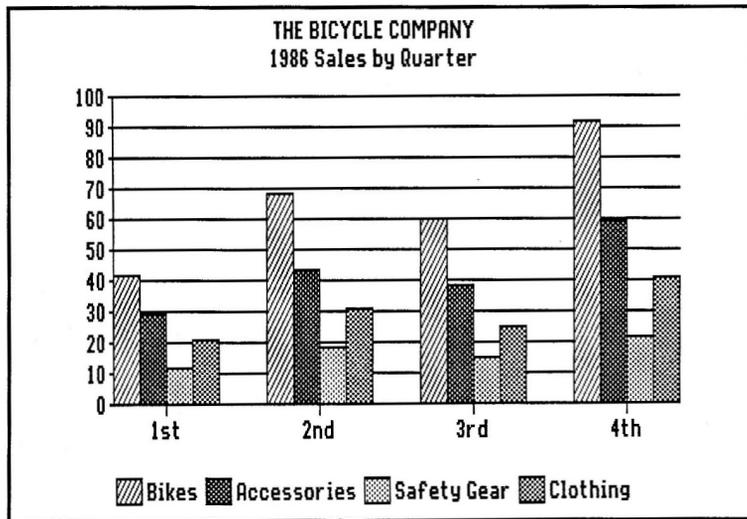
Grid? `H`orizontal `V`ertical `B`oth `C`lear

2. Type **H** to add horizontal grid lines over the graph.

The **V**ertical option adds vertical lines; **B**oth adds both horizontal and vertical lines; **C**lear removes any grid lines.

3. Press **ESC** to return to the Graph menu.

To see the enhanced graph, select **V**iew from the Graph menu.



Press the **SPACE** bar to go back to the Graph menu.

More Graph Types

Now that the sample graph has more than one data range, you can take a look at two of the other graph types.

To see the data as an Area graph:

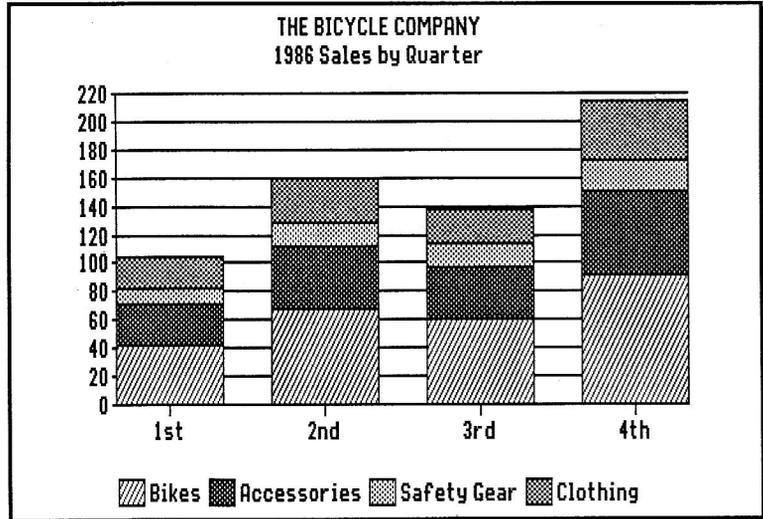
1. Type **T A V** to select **T**ype, **A**rea, and **V**iew.

The Area graph is similar to the stacked bar graph, showing the total of the items and the contribution of each item. But, like the line graph, it shows the trend of the data.

2. Press the SPACE bar.

To view the data as a Stacked Bar graph:

1. Type T S V to select Type, Stacked Bar, and View.



The Stacked Bar graph stacks the bars on top of each other, showing the total of the items in each range. From this graph you can easily see the total sales for each quarter and the contribution of each department to the total.

2. Press the SPACE bar to go back to the Graph menu.

Saving Graph Settings

You already know that if you exit TimeOut Graph and return to the Spreadsheet, TimeOut Graph will *remember* any options or data ranges you have chosen, allowing you to switch between TimeOut Graph and the Spreadsheet without reselecting these graph settings. However, if you want to create a different graph of another spreadsheet file, or leave AppleWorks, these settings will be lost. That is, they will be lost, unless you save them.

Just as you save your spreadsheet files before leaving AppleWorks, you need to save the graph settings. By saving the settings, you can later recall them to create the same graph without reselecting the data ranges or any other options. The File option lets you save and load graph settings.

1. Select File from the Graph main menu.

The File menu appears.

```
File?  Graph Settings  Pic
```

These two options allow you to save and load graph settings or pictures.

The Graph Settings option saves any TimeOut Graph options you have chosen: data ranges, titles, legends, labels, grid lines, etc.

The Pic option allows you to save a graph as a picture file for use with another program, or load a background picture for the graph.

2. Type G to select Graph Settings.

The Graph Settings menu will appear.

```
Graph Settings?  Save  Load
```

3. Choose Save.

TimeOut Graph will ask you to type the filename for saving the settings.

Type filename: Bicycle Comp.GF_

TimeOut Graph offers a suggested filename. You can either accept the suggested filename or you can type your own. GF in the suggested name stands for Graph File.

4. Press RETURN to accept the filename.

The graph settings will be saved on the AppleWorks current data disk.

Printing Graphs

As you have probably guessed by now, the Print option lets you print your graphs. Before you can use this option, you need to configure TimeOut Graph for your printer and printer interface card. If you haven't already done this, see Appendix B.

To print the last graph displayed with the View option:

1. Select Print from the Graph menu.

The Print menu appears, showing one or more Size options.

Print? Size 1 Size 2 Size 3

Make sure your printer is turned on and ready to go.

2. Select the first size option, Size 1.

TimeOut Graph will start printing the graph. If the graph doesn't print properly, see "Printer Problems" in Appendix B.

Leaving TimeOut Graph

To exit TimeOut Graph, and return to the Spreadsheet:

1. Press ESC from the Graph main menu.

You can re-enter TimeOut Graph anytime, by pressing OPEN APPLE-ESC to call up the TimeOut menu, then select Graph.

What's Next

You've now learned the basics of using TimeOut Graph: choosing menu options, defining data ranges, entering information, adding enhancements, creating different graph types, saving graph settings, and printing graphs.

With what you've learned, you can start making you own graphs, using the Reference Section as a guide; or you can go on to the next two lessons.

Lesson 2: Enhanced Pie Graphs

This lesson shows you how to create a Pie graph with shaded and exploded slices that let you emphasize one or more of the slices.

Load the *Computer Sales* file.

```
File: Computer Sales          REVIEW/ADD/CHANGE          Escape: Main Menu
-----A-----B-----C-----D-----E-----F-----G-----
1|
2|MiddleTown Computer Shop - July Computer Sales
3|
4|
5|Apple IIGS          27
6|Macintosh          23
7|Apple IIE          16
8|Apple IIC          12
9|
10|
11|
12|
13|
14|
15|
16|
17|
18|
-----
A|
Type entry or use A commands          A-? for Help
```

This file shows the number of Apple computers sold by the MiddleTown Computer Shop in July. From this data, you can create a Pie graph that shows the percent of sales for each computer.

Resetting Graph Settings

Before you can begin, you need to clear out any previous graph settings from the last graph.

1. If you're not already in TimeOut Graph, press OPEN APPLE-ESC to bring up the TimeOut Menu. Then select *Graph*.

2. Select **Reset** from the **Graph** main menu.

The **Reset** menu appears.

Reset? X A B C D E F **Graph**

3. Select **Graph** to clear the previous graph settings.

Making a Simple Pie Graph

To create a pie graph showing the percent sales of each computer:

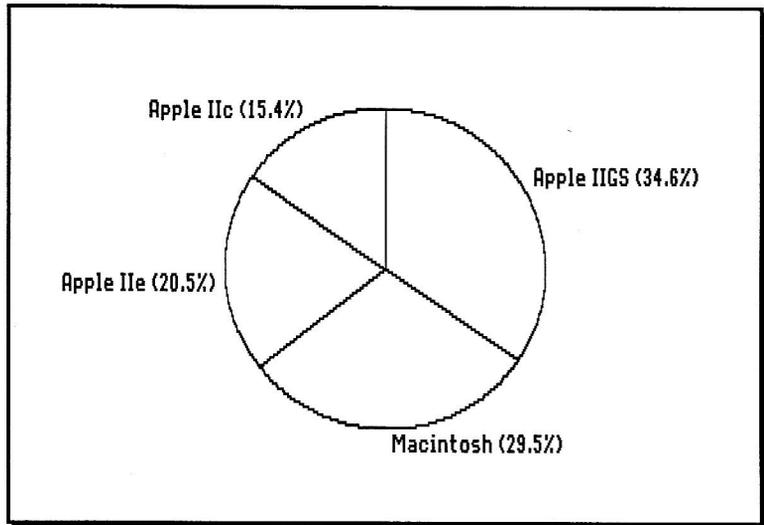
1. Select **Type** and then choose **Pie** as the graph type.

From the **Data** menu:

2. Choose **A** and define cells **B5** through **B8** as the **A** range. These are the values for the pie slices.

3. Choose **X** and define cells **A5** through **A8** as the **X** range. The contents of these cells will appear as the labels next to each slice.

4. Press **ESC** to return to the **Graph** main menu. Then select **View** to create the graph.



5. Press the SPACE bar to go back to the Graph menu.

Shading Pie Graphs

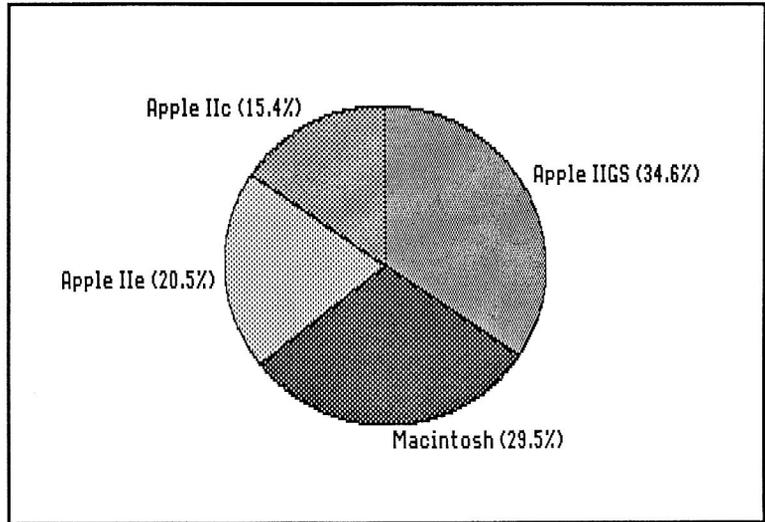
You can enhance the appearance of this graph by shading one or more of the pie slices. Use data range B to indicate the shading for each slice. This range can be any block in the spreadsheet that is the same size as the A range. The value of each cell in the B range determines the shading pattern for the corresponding pie slice in the A range.

Here's how to add shading:

1. From the Graph main menu, press ESC to return to the spreadsheet.
2. Enter the following numbers in cells C5 through C8: 11, 8, 9, and 10.

These numbers are the shading patterns that will be used for the corresponding pie values in cells B5 through B8.

3. Press OPEN APPLE-ESC to bring up the TimeOut Menu. Then select Graph to re-enter Graph.
4. From the Data menu, choose B and define cells C5 through C8 as the B range. This tells TimeOut Graph to use these values as the shading pattern numbers.
5. Press ESC to return to the Graph main menu. Then select View to see the new pie graph.



6. Press the SPACE bar to go back to the Graph menu.

Exploding Pie Graphs

You can also create exploded pie graphs that have one or more of the slices shifted away from the center of the pie. You indicate that you want an exploded slice by adding 100 to the pattern value that corresponds to the slice. For example, try changing the value in cell C5 to 111 (that's 11 + 100) and see what you get.

Lesson 3: XY Graphs and Linear Regression

This lesson gives an advanced example of how to create an XY graph with a linear regression line that can be used to predict data values.

If Linear Regression doesn't sound interesting to you, just skip this lesson and go on to the Reference Section.

XY graphs are commonly used to show the relationship, if any, between two sets of data, like age and income, high school grades and college grades, advertising and sales, etc. Linear regression allows you to determine if there is a linear correlation between two data sets. If there is a correlation, you can use the regression line to predict one value based on the other.

Load the sample file *Regression* from the TimeOut Graph disk.

File: Regression		REVIEW/ADD/CHANGE				Escape: Main Menu		
A	B	C	D	E	F	G	H	I
1	Linear Regression using Method of Least Squares							
2								
3		n=	7	sum(x*y)=	2991	a=	-2.57	
4		sum(x)=	64	sum(x^2)=	680	b=	4.64	
5		sum(y)=	279	sum(y^2)=	13417	r=	.94	
6								
7								
8		Ads	Sales					
9		x	y	x*y	x^2	y^2		Best Fit
10								
11		4	15	60	16	225		15.99
12		5	17	85	25	289		20.63
13		7	39	273	49	1521		29.91
14		10	33	330	100	1089		43.83
15		11	52	572	121	2704		48.47
16		12	58	696	144	3364		53.11
17		15	65	975	225	4225		67.03
18								
A1: (Label) Linear Re								
Type entry or use A commands								A-? for Help

This spreadsheet shows the number of advertisements and corresponding sales for a seven month period. These are the x and y

data values in columns A and B. The first month, for example, had 4 ads and 15 unit sales.

The other values in the spreadsheet are statistical functions calculated from the x and y values. These are used to produce the regression line that best fits the data. The most important of these values is the correlation coefficient (referred to as r), which represents the mathematical relationship between the two sets of data. The value of the correlation coefficient is always between -1 and 1. When this value is close to -1 or 1, it indicates a high correlation (or linear relationship) between the data sets. A value close to 0 indicates that there is not a linear relationship. Notice that this data has a very high correlation coefficient of .94, which indicates a linear relationship between ads and sales.

To create an XY graph of this data and the regression line:

1. Press OPEN APPLE-ESC to bring up the TimeOut Menu. Select Graph.
2. Choose Reset from the Graph main menu. From the Reset menu, select Graph to clear the previous graph settings.
3. Select Type and then choose XY as the graph type.
4. From the Data menu: choose X and define cells A11 through A17 as the X range; choose A and define cells B11 through B17 as the A range; choose B and define cells I11 through I17 as the B range.

Unlike the other graph types, XY graphs require at least two data ranges, one for the x values, and one (or more) for the y values. This is the only graph type that actually plots the cells in X range as values; the other graph types use the cells in X range as labels for the x-axis.

In this example, data ranges A and B, the y values, are plotted against range X, the x values. Data range B is the regression line.

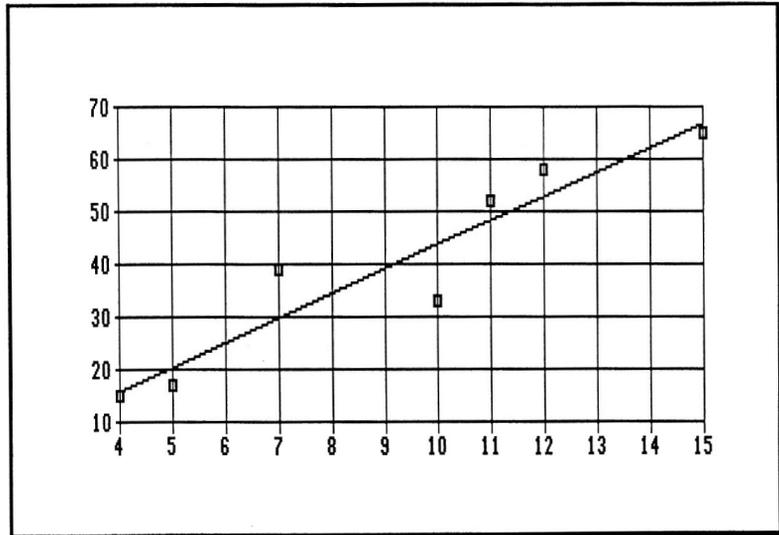
5. Press ESC to go back to the Graph menu, then select Options.
6. Select Grid from the Options menu, then select Both to add both horizontal and vertical grid lines.

7. Select `Format` from the `Options` menu. From the format menu, select `A`, then select `Symbols` to format range `A` as symbols only.

The `Format` option allows you to choose whether you want each data point plotted with connecting lines, or with symbols only.

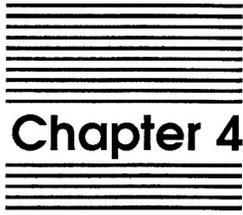
8. Press `ESC` twice to return to the `Graph` main menu.

7. Choose `View` to create the graph.



The x-axis shows the number of advertisements and the y-axis show the number of sales. The symbols are plotted at each x,y data point according to the data values. From the regression line, you can predict one value based on the other. For instance, if there are 9 ads, there would be about 40 unit sales.

You may use this spreadsheet as a template to perform regression analysis on your own data.



Chapter 4

Graph Reference

This section contains reference information that describes every TimeOut Graph feature in detail.

Creating a Graph

Perform these steps to create a graph:

1. Select the spreadsheet data you want to graph by defining one or more Data Ranges.
2. Choose the type of graph you want.
3. Enhance the graph with titles, labels, legends, etc.
4. View or Print the graph.
5. Save the Graph Settings.

Defining Data Ranges

Before you can create a graph, you must tell TimeOut Graph which spreadsheet cells contain the data you want to graph. This is done by defining data ranges.

A data range is a continuous series of cells in the spreadsheet, either a group of cells from a row or a column, or a block of cells.

TimeOut Graph can plot up to six data ranges, A, B, C, D, E, and F; each may contain as many cells as you wish, giving you the capability to graph a virtually unlimited number of data values.

The X range specifies the labels that appear along the horizontal axis or x-axis, except with Pie and XY graphs. With Pie graphs, the X range specifies the labels that appear beside each pie slice.

The XY graph is the only graph type that doesn't use the X range as labels; it uses the X range as data.

Defining a Data Range

To define a group of cells in the spreadsheet as a data range:

1. Use the Data option to select the range you want to define, X, A, B, C, D, E, or F.
2. Move the cursor to the starting cell in the range, then press RETURN.
3. Using the arrow keys, highlight the cells in the range.
4. Press RETURN to accept the highlighted range.
5. Choose another range or press ESC to back to the Graph main menu.

Recalling a Selected Range

If you select a range that has already been defined, it will appear highlighted in the spreadsheet.

You can accept the previous range by pressing RETURN.

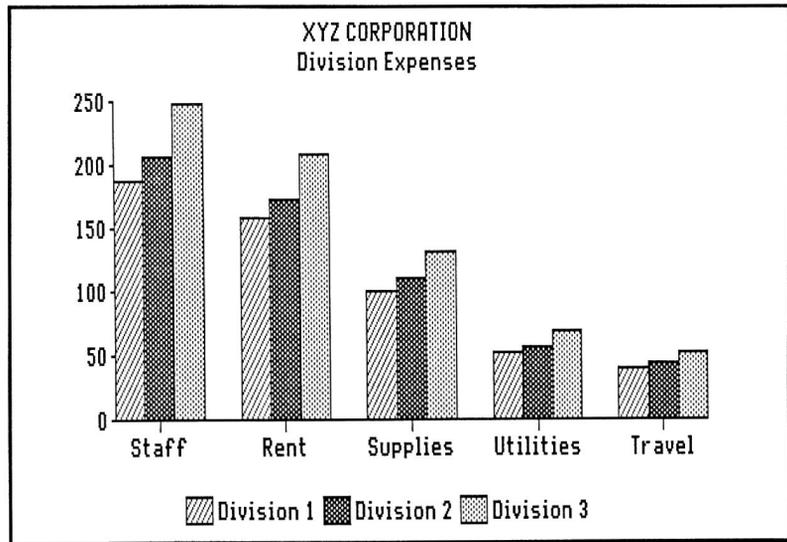
Or, you can change the previous range by using the arrow keys to highlight a new ending cell. To select a new starting cell, press ESC once, then start with step 2 above.

Selecting a Graph Type

TimeOut Graph offers seven basic types of graphs. In addition, several variations of these types are available, such as Exploded Pie Graphs.

Use the Type option to select the type of graph you want.

Bar Graphs



Bar graphs typically show the value of an item over a period of time, or compare the values of different items.

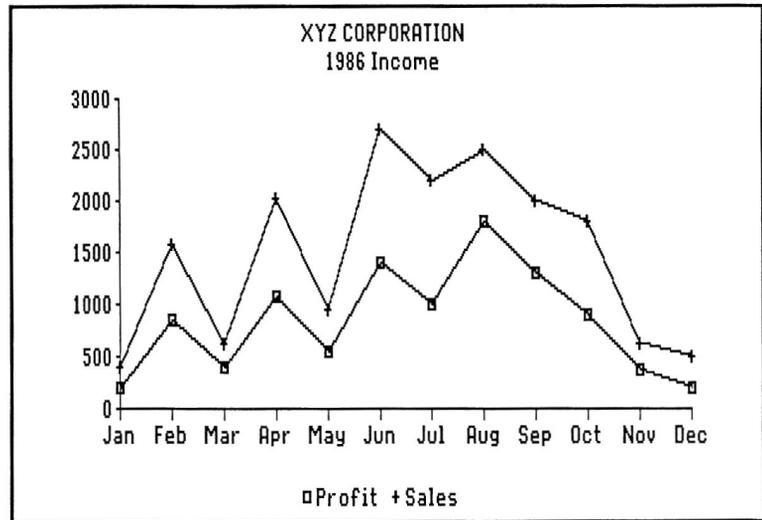
Data ranges A through F specify the values that are used to create the graph. If you select more than one range, the bars will appear in groups; each group shows one value from the selected ranges at each interval. (The number of bars in a group is equal to the number of data ranges you have defined.) This allows easy comparisons between the values in the data ranges.

With more than one range, the bars are shaded with different patterns to distinguish between the ranges. You may want to add a legend that identifies each range with its pattern. See the Legend option. If you don't like the patterns TimeOut Graph assigns to the ranges, you may select a different set of patterns. See "Configuration Options" in Appendix B for details.

Range X specifies the labels that appear at each interval on the horizontal axis or x-axis.

Graph Tip: If you have a lot of data items, switch to a line graph, or create a series of separate graphs that show just a few items at a time. If you try to cram too much information into a single graph, it will look overcrowded and make it more difficult to understand. This simple rule applies to the other graph types as well.

Line Graphs



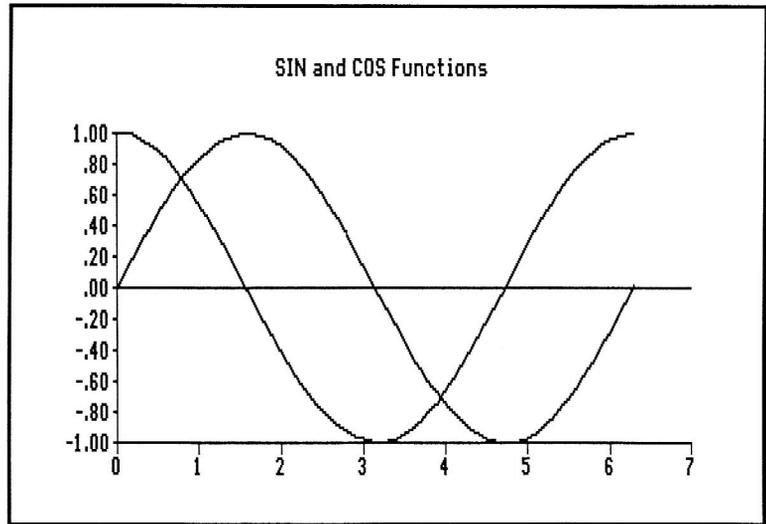
The line graph is ideal for presenting large amounts of data in a format that allows you to quickly determine trends and relationships.

Data ranges A through F specify the values that are used to produce the graph. Each range is plotted with a separate line. If you choose more than one range, you may want to use the `Format` option to add symbols at each data point to distinguish the separate lines. Use the `Legend` option to identify the symbols in the graph. If you wish to change the symbols used in the graph, see "Configuration Options" in Appendix B.

Range X specifies the labels that appear along the horizontal x-axis.

With the `Format` option you can select three variations of the standard line chart. You can choose to have the data points shown with connecting lines (creating a line chart); with symbols (a point chart); or with both lines and symbols.

XY Graphs



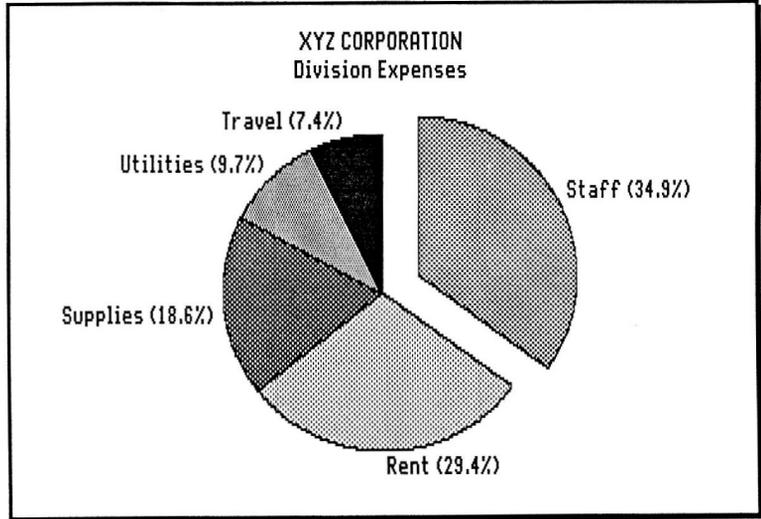
XY graphs (also known as scatter plots) show relationships and correlations between data. They can also be used to plot mathematical functions.

The y values, from data ranges A through F, are plotted against the x values, from range X. This is the only graph type that actually plots the cells in the X range as values; the other graph types use the cells in the X range as labels for the x-axis. You must define a minimum of two data ranges: range X, for the x values, and at least one other range, A, B, C, D, E or F, for the y values.

TimeOut Graph will plot the data points with connecting lines, unless you use the `Format` option to select point symbols, or a combination of lines and symbols.

Graph Tip: If you connect the data points with lines, use the AppleWorks `arrange` command to sort the X or Y values in ascending order. This will prevent overlapping lines in the graph.

Pie Graphs



Pie graphs show the relative percentages of parts that make up the whole. Each slice in the pie represents its portion of the total.

Data range A specifies the values that are used for the pie slices. Unlike the other graph types, the pie graph can only represent one data range. The number of slices in the pie is equal to the number of cells in this range. Negative values in the data range will not be plotted.

The X range specifies the labels that appear next to each pie slice. TimeOut Graph automatically calculates the percentage of each value based on the total of all the values and places the percentage along side each label.

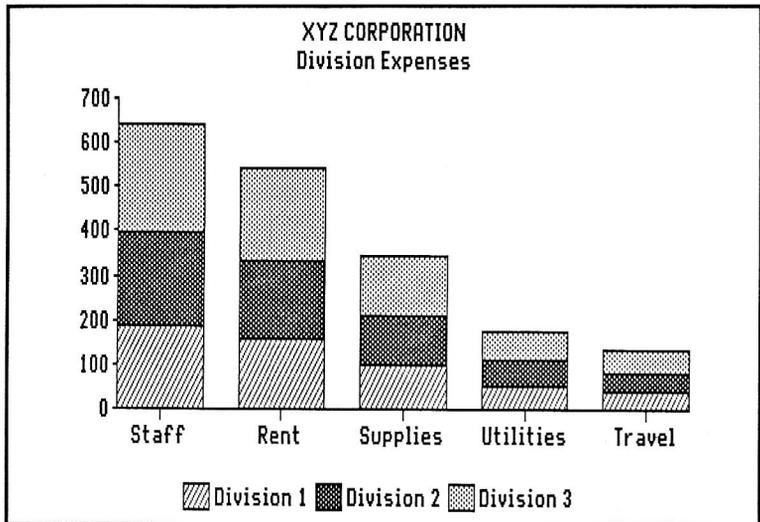
TimeOut Graph will also create Exploded/Shaded Pie graphs that let you emphasize one or more pie segments.

Data range B indicates whether the segments should be shaded and/or exploded. This range can be any block in the spreadsheet that is the same size as the A range. The value of each cell in the B

range determines the shading pattern for the corresponding pie segment in the A range. See Appendix A for the pattern values. Adding 100 to the pattern value will make an exploded slice.

Graph Tip: Usually, pie graphs should have less than ten slices to prevent overcrowding. If you have more than ten values, try combining some of the smaller values in an "Other" or "Miscellaneous" category. You may also want to create a second pie chart that shows the breakdown of this combined category.

Stacked Bar Graphs



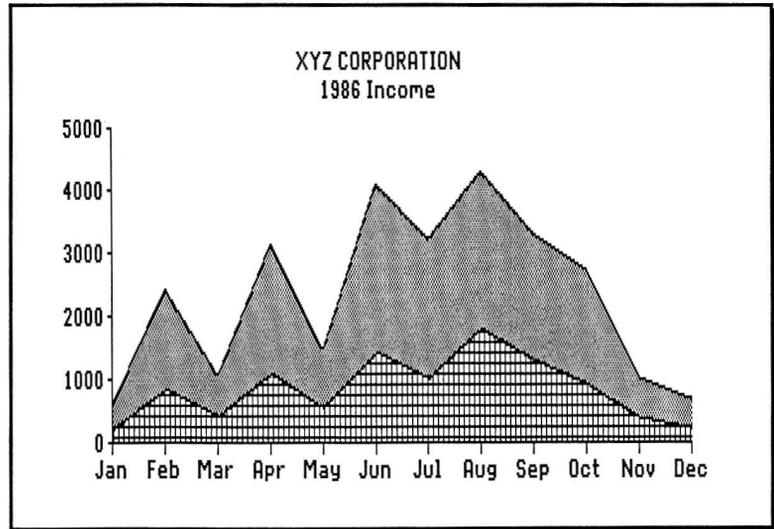
The stacked bar graph shows each values relative contribution to the total. The values from each data range are stacked on top of values from the previous range, making it easy to see the total of the ranges and how much each value contributes to the total.

Data ranges A through F specify the values used to create the graph. Of course, you would only use this graph type if you have two or more data ranges to stack.

As with bar graphs, you may want to add a legend to identify the bar patterns in the graph.

Range X specifies the labels that appear below the horizontal axis at each interval.

Area Graphs



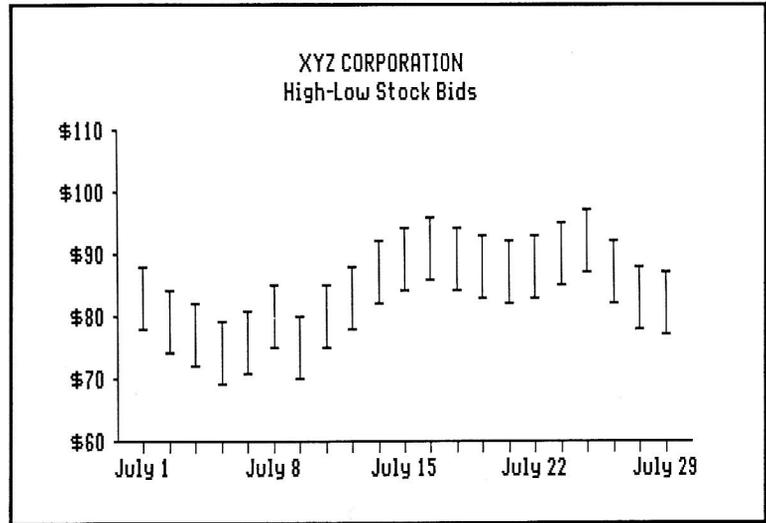
The area graph is a line version of the stacked-bar graph. It shows each values relative contribution to the total, while making it easy to determine trends. The values from each data range are added to values from the previous range.

Data ranges A through F specify the values used to create the graph.

The area between the lines is shaded with a different pattern to distinguish the ranges. Use the Legend option to identify the patterns in the graph. To select a different set of patterns, see "Configuration Options" in Appendix B.

Range X specifies the labels that appear below the horizontal axis at each interval.

Hi-Lo Graphs



The Hi-Lo graph is sometimes called the Hi-Lo-Open-Close graph, because it is frequently used to graph stock market data. It shows the difference between a high value and a low value. Each high-low value is plotted with a connecting vertical line.

You must define both the A and B ranges. Data range A specifies the high values. Data range B specifies the low values. Each value in the B range must be less than the corresponding value in the A range; otherwise, the value will not be plotted.

Data ranges C through F specify any values between the high and low values. These will appear as point symbols on the hi-lo lines. Any data values outside the hi-lo range are not plotted.

Use the Legend option to identify the symbols in the graph.

Range X specifies the labels that appear along the horizontal x-axis.

Viewing a Graph

Once you have defined the data range(s) and selected a graph type, you can view the graph with the View option.

Re-Graphing Spreadsheet Changes

One of the most powerful features of TimeOut Graph is the ability to quickly redraw any changes made to your spreadsheets. You can exit TimeOut Graph, modify your spreadsheet, then return to Graph and use the View option to instantly redraw a new graph, reflecting the changes.

Printing a Graph

TimeOut Graph can print your graphs in several sizes on most dot-matrix printers. If you haven't already configured TimeOut Graph for your printer and interface, see "Configuration Options" in Appendix B.

The Print option will print the last graph that was displayed with the View option.

When you select the Print option, a menu of print sizes will appear:

```
Print?  Size 1  Size 2  Size 3
```

The number of sizes will vary depending on your printer. Some printers may only have one size, while others have many. The actual printed sizes also vary depending on the printer. Size 1 is

the smallest, Size 2 is the next smallest, and so on. Try each Size option to determine the actual sizes with your printer.

After choosing a size, TimeOut Graph will start printing the graph.

If the graph does not print correctly or if nothing happens, make sure that you have configured TimeOut Graph for the correct printer and interface, and that your printer is powered-on and selected.

While the graph is printing you may press ESC to stop printing and return to the menu, or the SPACE bar to pause.

NOTE: Every effort has been made to provide print sizes that accurately display the proportions of the graph as shown on the screen (ie., a pie chart appears as a perfect circle); however, this is not possible with a few of the printers.

Saving and Loading Graph Settings

Graph settings are any options you've chosen to create a graph, such as data ranges, titles, legends, labels, grid lines, scale formats, etc. These settings can be saved on disk and later recalled to produce the same graph without reselecting the options.

When using recalled graph settings, you must make sure that you're using the same spreadsheet file that was used when you saved the settings; otherwise, the data ranges may not point to the correct cells in the spreadsheet.

Here's how to save and load the graph settings:

1. Select `File` from the Graph main menu.
2. Select `Graph Settings`.

From the Graph Settings menu:

3. Choose Save or Load

TimeOut Graph will ask you to enter the name of the file that will be used to save or load the settings. A suggested filename is offered.

4. You can accept the suggested name by pressing RETURN. Or, you can enter a different file name, then press RETURN.

If you choose *Save*, the graph settings will be saved in the specified file at the current disk location. The current location is usually your AppleWorks data disk, unless you specify a different location.

If you choose *Load*, the graph settings will be loaded from the current disk location. Be sure to load the corresponding spreadsheet file, otherwise the graph settings are useless.

Clearing Graph Settings

Use the *Reset* option to clear the previous graph options you've selected. You can reset all the graph settings, or just selected data ranges.

From the *Reset* menu:

Select *Graph* to reset all the graph settings.

Select *X*, *A*, *B*, *C*, *D*, *E* or *F* to reset the corresponding range; you may then select another range, or press *ESC* to return the *Graph* main menu.

Saving and Loading Graph Pictures

TimeOut Graph lets you save your graphs as pictures for use with other programs, such as Triple-Dump, Beagle Graphics, Dazzle Draw, and TimeOut SuperFonts. The graphs are saved as standard double hi-res files. You can also load double hi-res pictures into TimeOut Graph to be used as backgrounds for the graphs.

Here's how to save and load graphs as pictures:

1. Select **File** from the Graph main menu.
2. Select **Pic**.

From the Pic menu:

3. Choose **Save** or **Load**

TimeOut Graph will ask you to type the name of the file that will be used to save or load the graph picture. If you previously entered a filename, TimeOut Graph will supply this name as a default.

4. Press **RETURN** if you want to use the default name. Or type a new filename, then press **RETURN**.

If you choose **Save**, the last graph that was plotted will be saved in the specified file at the current disk location. The current location is usually your AppleWorks data disk, unless you specify a different location with the AppleWorks "Change current disk drive or ProDOS prefix" option.

If you choose **Load**, the picture file you specify will be loaded from the current disk location. You won't see the picture, until you select the **View** option. The graph will then be plotted on top of the picture.

NOTE: Background pictures may cause problems with the pattern shading in Area and Pie graphs.

Graphs in Word Processor Documents

With TimeOut SuperFonts, another program in the TimeOut series, you can print your AppleWorks Word Processor documents in a wide variety of high-quality Macintosh fonts and mix text with pictures. This allows you to print saved graphs inside your word processor documents.

Titles

You may add up to two titles above the graph, one below the x-axis, and one along the y-axis. To add titles:

1. Select **Titles** from the Options menu.
2. Select **Main** or **Sub** if you want to add a title above the graph; **X-Axis** to add a title below the x-axis; or **Y-Axis** to add a title along the y-axis.

TimeOut Graph will ask you to type a title.

3. You may press **RETURN** to accept the previous title. Or type a new title and press **RETURN**. Remember that you can use **DELETE** and **CONTROL-Y** to edit the previous title.
4. Select another title, or press **ESC** to return to the Options menu.

Try to keep your titles short and informative. You don't need to use axes titles if the units of measurement or labels along each axis are self-explanatory (or explained in the main or sub title).

Legends

Use legends to identify the shading patterns used in Bar and Area graphs, or the symbols used in Line and XY graph. You may add a legend for each data range you have defined. To add legends:

1. Select **Legend** from the Options menu.
2. Choose a data range, A through F.

TimeOut Graph asks you to enter the legend for the data range.
3. Press **RETURN** to accept the previous legend. Or type a new legend and press **RETURN**.
4. Select another range, or press **ESC** to return to the Options menu.

Formatting Lines and Symbols

With Line and XY graphs you can choose whether you want lines and/or symbols. You may choose lines and symbols for each data range or the entire graph (all ranges). Here's how:

1. Select **Format** from the Options menu.
2. Choose the range you want to format A through F, or choose **Graph** to format all ranges.

TimeOut Graph will offer three options.
3. Select **Lines** to connect the plotted data points with lines, **Symbols** to plot a symbol at each data point, or **Both** to add both lines and symbols.
4. Select another range, or press **ESC** to return to the Options menu.

Grid Lines

Grid lines can be added to make a graph easier to read. You may add both horizontal and vertical grid lines. To add grid lines:

1. Select `Grid` from the Options menu.
2. Select `Horizontal` to add horizontal grid lines, `Vertical` to add vertical lines, `Both` to add both horizontal and vertical line, or `Clear` if you don't want any lines.
3. Press `ESC` to return to the Graph menu.

Changing the Scale

TimeOut Graph automatically sets the scale (the upper and lower limits, and the increment) to fit the data in your graphs. This feature makes it easy to quickly create graphs. However, in some cases you may want a different scale than the one chosen by TimeOut Graph.

Manual Scaling

Here's how to select manual scaling:

1. From the Options menu, select `Scale`.

The `Scale` menu gives you the choice of changing the scale for the x and y axes, and setting the skip factor for the x-axis labels. The `X Scale` option applies only to XY graphs.

2. Choose `Y Scale` or `X Scale`.

TimeOut Graph will offer the following options:

Automatic is the default setting; TimeOut Graph will automatically adjust the scale to fit the data. (You'll notice that, unlike a lot of other graphing programs, TimeOut Graph always picks nice numbers when automatic scaling is turned on.)

Manual selects manual scaling.

Format lets you specify the format of the numbers that appear along each axis. See "Formatting Scale Numbers."

3. Choose **Manual** then select the **Upper**, **Lower**, and **Increment** options to set the maximum scale value, the minimum scale value, and the scale increment.

If you set the scale limits too low or high for your data, TimeOut Graph will show as much of the data as possible; lines and bars may be clipped to fit within the graph space.

Formatting Scale Numbers

The **Format** options lets you specify the following formats for the numbers that appear along each axis:

Fixed: Sets a fixed number of decimal places, 0-7.

Dollars: Same as commas except with a dollar sign before each amount.

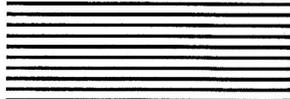
Commas: Sets a fixed number of decimal places, 0-7; provides commas between thousands; negative amounts are in parentheses.

Percent: Displays the numbers with a percent sign and a fixed number of decimal places, 0-7. This format multiplies the scale numbers by 100.

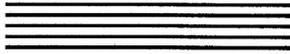
Appropriate: This is the default setting. Decimal places are displayed as necessary, without trailing zeros.

Skipping Scale Increments

The `Skip` option tells TimeOut Graph to use only every n th cell in the X data range for the labels along the x-axis. This prevents the labels from overlapping if you have a lot of labels, or if the labels are exceptionally long. A skip factor of 2 will skip every other label, which is usually sufficient to avoid overlapping.



Appendix A

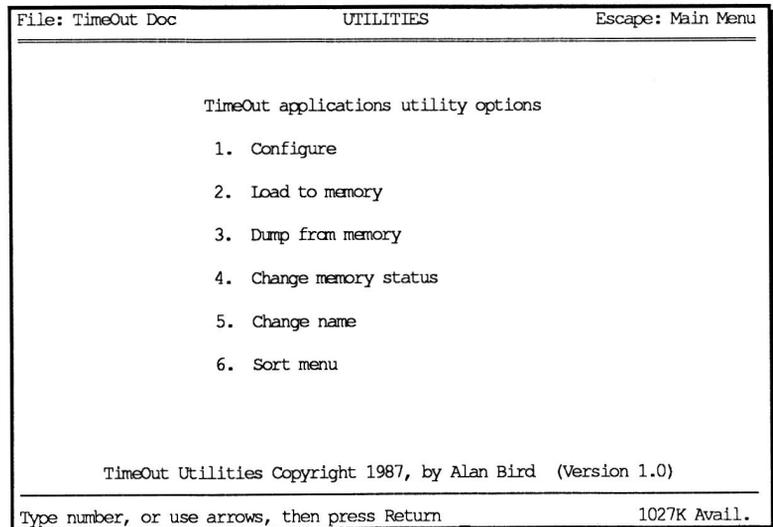


TimeOut Utilities

The TimeOut Utilities application is provided with all TimeOut products. It has several functions that give you a lot more flexibility in using your TimeOut applications.

Using the Utilities

To use the TimeOut Utilities, make sure that the file *TO.UTILITIES* has been copied to your TimeOut applications disk. Start up AppleWorks and press Open-Apple-Escape to call up the TimeOut menu. Select *Utilities*. You will see the following screen:



Configure

The *Configure* option allows you to set new defaults for your TimeOut applications. Configurable options might include printer type, default font, location of files needed by the application, etc. Not all TimeOut applications have configurable options.

To configure an application, select `Configure` from the Utilities menu. Then select the application you want to configure. You will then see a menu indicating what options may be configured for that particular application. You should also see the current value for each option in brackets [].

Select an option that you would like to change. Enter or select the new value for that option. Make sure that the TimeOut applications disk is in a drive so that the application can be updated with the new value. The next time you use the application, it will use the new value that you have supplied.

After you are finished updating configurable options, press `Escape` to return to the Utilities main menu.

Load to memory

TimeOut applications are either disk-resident or memory-resident. If an application was configured as disk-resident when you started up AppleWorks, you can load it into memory using the `Load to memory` option. Just select the option from the Utilities menu and select which application you would like to load.

Dump from memory

If you receive a message from AppleWorks indicating that it was unable to complete an option because of insufficient desktop memory, you may need to dump one or more TimeOut applications that are memory-resident. Select `Dump from memory` from the Utilities menu and select which application you would like to dump. Notice that the amount of free memory indicated in the lower right hand portion of the screen increases with each application you dump. Applications that are *dumped* are returned to disk-resident status for the remainder of the AppleWorks session.

Change memory status

This option allows you to indicate whether a TimeOut application is disk- or memory-resident. Note that this only indicates how the application will be treated when you start up AppleWorks. To load an application into memory or to return it to the disk for the current AppleWorks session, you will need to use the `Load to memory` option or the `Dump from memory` option.

Change name

This option allows you to change the name of the application as it appears in the TimeOut menu. The Beagle Bros staff carefully selects a good name for each application. However, you have the flexibility of renaming it if you wish.

If the new name you enter is longer than the old name, the name change will not be reflected in the TimeOut menu until the next time you start up AppleWorks.

Sort Menu

When you apply TimeOut to your *AppleWorks STARTUP* disk, you are given the option of indicating whether or not you want the TimeOut menu automatically sorted by application name. If you choose not to have the menu sorted, you can still sort it after starting up AppleWorks by selecting `Sort` menu from the Utilities menu.

Appendix B

Configuration Options

Configuring Graph

Use the TimeOut Utilities application (see Appendix A), to select the following configuration options.

Printer

The `Printer` option will display a list of printers supported by TimeOut Graph. If your printer is not listed, check to see if it's compatible with one of listed printers, or try a few of the more common printers, such as EPSON FX or APPLE IMAGEWRITER. If none of these work, contact Beagle Bros Technical Support for assistance.

Interface

This option will display a list of the supported printer interface cards. If your interface is not listed, try APPLE PARALLEL or APPLE SUPER SERIAL.

Interface Slot Number

This is the slot number for your interface card, usually slot 1. If you are using the Apple //c or Apple IIGS serial port, set the slot to 1.

Needs Line Feed after Return

This option indicates whether or not your printer needs a line feed after every carriage return. This should be set to **Yes** for most printers, however, you may want to refer to your printer manual.

Pattern Order

These options indicate the shading patterns that are used in the Bar, Stacked-Bar, and Area graphs. The order of the patterns, 1 through 6, corresponds to data ranges A through F. You can enter any of the following pattern numbers:



Symbol Order

These options indicate the symbols that are used in Line, XY, and Hi-Lo graphs. Symbols 1 through 6 correspond to data ranges A through F. Symbols 7 and 8 apply only to Hi-Lo graphs. They are used as the high and low symbols. You can enter any of the following symbol numbers:

□	+	○	△	▽	x	+	+	□	+	*	.	+	+	+	◇
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Graph Box

The `Graph Box` option specifies whether you want a box drawn around your graphs, in addition to the x and y axes.

Printer Problems

If you are unable to print a graph, make sure that you have configured TimeOut Graph for the correct printer, interface, and interface slot number. If nothing happens when you print, make sure the printer is powered-on and selected (on-line). If you are still unable to print, contact Beagle Bros Technical Support for assistance.



Appendix C



Data Converter

The TimeOut Data Converter allows you to quickly and easily transfer data between spreadsheet and data base files.

To transfer data from a spreadsheet to a data base file, use the Open-Apple-C command to copy some spreadsheet rows to the clipboard. Press Open-Apple-Escape and select `Data Converter` from the TimeOut menu. The data on the clipboard will instantly be converted into data base data.

Create a new data base file or load one in from disk. Place the cursor where you would like to insert the spreadsheet data, press Open-Apple-C and select `From clipboard`. Each spreadsheet row will now be inserted into your data base file. Each column from the spreadsheet will become a data base category.

To transfer from a data base file to a spreadsheet file, copy from the data base file to the clipboard, call up the TimeOut menu, select `Data Converter`, and copy from the clipboard to the spreadsheet file. Each category from the data base will become a spreadsheet column.



Customer Support Information

If you have questions or problems, you can contact the Beagle Bros Technical Support Staff for expert assistance.

Before calling, check the instruction manual to see if it contains the information you need. Write down a complete description of the problem, the version number of the software, and the names and version numbers of any other AppleWorks enhancement programs you're using.

If you have a modem, you may also receive Tech Support on our 24-hour Customer Support System. The system provides an electronic mail and conferencing system, along with the latest information about product updates and changes.

Technical Support:

(619) 296-6400 8 am to 5 pm, weekdays (pacific time)

Modem Tech Support:

(619) 296-6490 24 hours, everyday

Or, you can write to:

Beagle Bros, Inc.
6215 Ferris Square, Suite 100
San Diego, CA 92121

Downloaded from www.Apple2Online.com



Index

Accessing TimeOut 12
AppleWorks Startup disk 2, 8
Area graphs 48
Axes Labels 20
Backup 6
Bar graphs 21, 25, 27, 42
Bicycle Company 14
Change memory status 62
Change name 62
Compatibility 6
Configuration Options 63
Configure 60
Control-Reset 12
Copying applications 9
Creating a graph 40
Data Base files 67
Data Converter 67
Data range 16, 24, 40, 41
Desktop expanders 6
Dump from memory 61
Enhancement programs 6
Errors 10
Exploded pie graphs 35
Formatting 38, 55, 57
Graph box 65
Graph data 16
Grid lines 26, 56
Help 69
Hi-Lo graphs 49
Installing TimeOut 6, 7
Interface 63
Legends 26, 55
Line feed 64

Line graphs 44
Linear Regression 36
Load to memory 61
Loading 29, 51, 53
Location of applications 8
Memory-based 11, 12
NOTES 7
Pattern order 64
Picture 29, 53
Pie graphs 32, 34, 35, 46
Printer 63
Printer problems 66
Printing 30, 50
Quitting 31
Re-graphing changes 21, 50
Re-installing TimeOut 9
Saving 29, 51, 53
Scale 56, 58
Settings 29, 32, 51, 52
Shading graphs 34
Skip 58
Slot 64
Sorting the menu 7, 62
Stacked Bar graphs 28, 47
Starting Graph 15
Starting up AppleWorks 10
Symbol order 65
Technical support 69
TimeOut 6
TimeOut menu 11
Titles 19
TO.CLIPBOARD 9
TO.GRAPH 9
TO.UTILITIES 9
Troubleshooting 69
Type 15, 22, 27, 42, 54
Updating AppleWorks 7
Utilities 60
Version 6
View a graph 18, 50
Word processor documents 54
XY graphs 36, 45

BEAGLE BROS DISKS

are carried by most Apple software stores. Or, if you live in the Boonies, buy directly from Beagle Bros by phone or mail.

To order, phone **619-296-6400** (Mon-Fri, 9am-4pm Pacific Coast time)

- ALPHA PLOT** Hi-Res Graphics Utility (includes Apple Tip Book #4) **\$39.50**
- BEAGLE BAG** Twelve Apple Games on One Disk (a bargain these days!) **29.50**
- BEAGLE BASIC** Applesoft Enhancer (req. 64K, includes Tip Book #6) **34.95**
- BEAGLE GRAPHICS** 16-Color 560-wide Double Hi-Res Graphics (req.128K) ... **59.95**
- BIG U** ProDOS File-Mover and Many More Utilities (req. 64K) **34.95**
- D CODE** Applesoft Program Compactor and De-Bugger **39.95**
- DISKQUIK** DOS 3.3 Disk Drive Emulator (requires 128K) **29.50**
- DOS BOSS** Disk Command Editor (includes Apple Tip Book #2)..... **24.00**
- DOUBLE-TAKE** Two-Way Scroll/Multiple Utility (includes Tip Chart #1) **34.95**
- EXTRA K** Puts Your Extra 64K to Work! (requires 128K) **39.95**
- FATCAT** DOS 3.3/ProDOS Multiple-Disk Catalog and Filename Sorter **34.95**
- FLEX TYPE** Flexible Hi-Res Text Utility..... **29.50**
- FONT MECHANIC** 30 Hi-Res Fonts and Utilities for Shape Mechanic **29.95**
- FRAME-UP** High-Speed Presentation Utility **29.50**
- GPLE** Global Program Line Editor (includes Apple Tip Book #7) **49.95**
- I. O. SILVER** Hi-Res Action/Strategy Game **29.95**
- MACROWORKS** AppleWorks Enhancement Disk **34.95**
- MINIPIX DISK #1** 200 Pictures on Disk for Print Shop and Other Programs ... **29.95**
- PRO-BYTER** ProDOS/DOS 3.3 Disk Zapper (includes Apple Tip Book #8) **34.95**
- PRONTO-DOS** Triple-Speed DOS 3.3 / DOS-Move Utility **29.50**
- SHAPE MECHANIC** Hi-Res Shape Editor (includes Apple Tip Book #5) **39.95**
- SILICON SALAD** 100+ Utilities (includes Command Chart)..... **24.95**
- TIP DISK#1** 100 Tip Book Programs on Disk (includes Command Chart) **20.00**
- TRIPLE-DUMP** Picture-Printer Utility **39.95**
- UTILITY CITY** 21 Useful DOS 3.3 Utilities (includes Tip Book #3)..... **29.50**
- _____
- _____

—ALL ORDERS SHIPPED IMMEDIATELY VIA FIRST CLASS MAIL—

YOUR NAME _____

ADDRESS _____

CITY, STATE, ZIP _____

Payment:

- Personal Check or Money Order
- COD (USA only)
- School or Company Purchase Order
- MasterCard or Visa (see below)

SUBTOTAL \$ _____
 +6% if California _____
 +\$3.00 if COD (USA only) _____
 +Shipping _____
Any size order: \$1.50 for USA or Canada (1st Class)
 or \$5.50 for Overseas (Air Mail)
 TOTAL \$ _____

Visa or MasterCard No. _____ Exp. _____

Daytime Phone (in case of problem with order) _____

Signature _____

Mail to: **BEAGLE BROS, DEPT. F**
3990 OLD TOWN AVENUE, SUITE 102C
SAN DIEGO, CALIFORNIA 92110



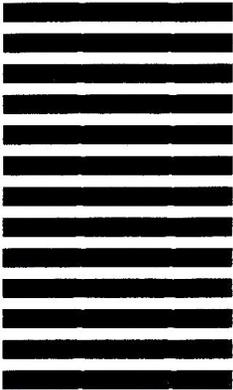
Rush—Software Order

BUSINESS REPLY MAIL

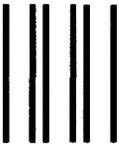
FIRST CLASS PERMIT NO. 200751 SAN DIEGO, CALIFORNIA

POSTAGE WILL BE PAID BY ADDRESSEE:

BEAGLE BROS INC.
Attn: Minnie Assembler, Order Dept.
3990 Old Town Ave., Suite 102C
San Diego, California 92110



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



Golly, more than anything, I hope that ALL Beagle Bros software purchasers mail me their Registration Cards...

Flo Chart, Beagle Bros Registration Desk

