



UNIPLEX

Business Software

Advanced Graphics System

USER GUIDE

Vol 5

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About this Guide**◆ About this Guide**

The five volume Uniplex V9 user guide set supersedes the V8.00 user guides plus the **V8.10 User Guide Supplement**. Additional supplementary and technical documentation is provided on-line with the software. The printed manuals include:

Guide Name	Contents
UBS Installation Guide & Supplemental Release Notes	Installation/upgrade directions plus platform-specific release notes.
Uniplex II Plus User Guide Volume 1	Introduction, filing, Word Processor, and Sketch Pad.
Uniplex II Plus User Guide Volume 2	File Manager, printing, and Spreadsheet.
Uniplex II Plus User Guide Volume 3	Database Forms, Database Query, Key Recorder, integration, menu maps, desk maps, ring menus, glossary, and topic index.
Advanced Office System User Guide (Volume 4)	Electronic Mail, Time Manager, Card Index, Personal Organizer, Report Writer, Formfill, printing, integration, menu maps, desk maps, glossary, and topic index.
Advanced Graphics System User Guide (Volume 5)	Presentation Graphics, Presentation Editor, printing, integration, menu maps, desk maps, clip art, glossary, and topic index.



About this Guide

◇ Version Information

Some of the material in these guides will not apply to users of Uniplex releases prior to V9.00. Please contact your Uniplex supplier or Uniplex directly for information about upgrading to the current release. Users upgrading from V8.00 or earlier should consult the **File Manager** chapter for information about a new method for carrying out all folder and file-related operations.

◇ Useful Shortcut Keys

These shortcut keystrokes can be used throughout Uniplex:

Cut and Paste		Insert	
mark top left	Esc (line/row	Ctrl o
mark lower right	Esc)	character	Ctrl e
paste insert	Esc *i	switch insert/overtyp	Esc i
paste overlay	Esc *o		
Delete		Quick Movements	
line/row	Ctrl x	top of screen/list	Esc Ctrl t
work/cell	Ctrl w	next screen/page	Ctrl d
character	Ctrl c	previous screen/page	Ctrl u
		start of line	Esc <-
		end of line	Esc ->
External Windows		Quit without Saving	
access Desk popup	F9 or Esc xd		Esc q
access Utility popup	F12 or Esc xu		
switch processes	Esc xs	Save Work	
list processes	Esc xp	save and continue	Esc w
		save and exit	Esc e
		save to new file	Esc sx
Format Paragraph	Ctrl fp	Undo Last Command	
			Esc u
Hard Return	Esc Return	Enter £ Sign	
			Esc % #
Help	Esc h	F10	
			Esc 0
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F11...F19	Esc Esc 1...9		Esc Esc 0



◇ **The Uniplex User Guide Set**

Uniplex II Plus User Guide

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Chapter 2: Filing Your Work

Chapter 3: Word Processor

Chapter 4: Sketch Pad

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Introduction



◆ Introduction

Welcome to the Uniplex Advanced Graphics System!

In the commercial world, information is one of the most important assets of any organization. When that information is passed on, it is vital it is well-presented and accurate. You can only absorb written information and tables of data at a certain rate and visual information is absorbed much faster than plain text. Graphs let you display large quantities of information clearly. They also allow trends and analyses to be strikingly illustrated.

You can create graphs for many different areas of communication. For example:

- o **Reports.** You can include graphs in any Uniplex report or document.
- o **Presentations.** You can produce slides from graphs and include them in presentations.

Traditionally, producing meaningful graphs was not only time-consuming but required an understanding of mathematics and graphic design. Anyone can produce effective, professional graphics using the Uniplex Advanced Graphics System.

Presentation Graphics lets you plot a wide range of graph types from any data source. When you have created a graph, you can enhance its appearance using the graph adjustment options. You can edit the graph, customize its appearance for a particular presentation, and produce it to professional standards, using the Presentation Editor.

The Presentation Editor lets you add text (using a variety of different fonts and effects), add color and types of shading, and rearrange the graphs on the screen or page.

Uniplex Advanced Graphics System is fully integrated with Uniplex II Plus and Uniplex Advanced Office System. You can create a



Introduction

graph from data in the spreadsheet, enhance it to professional standards using the Presentation Editor, then integrate it into a report you have created using the Word Processor. You can produce printed copies of documents which contain high-resolution graphics, providing you have a supported printer. You can also use the Presentation Editor to create diagrams and artwork. Uniplex offers a set of pre-designed images called clip art which can be integrated into your documents.

Uniplex Advanced Graphics System has the following set of applications:

- o **Presentation Graphics**

Intended for use on high-resolution terminals, this application lets you produce a wide range of graphs from any data source.

- o **Presentation Editor**

The Presentation Editor lets you further enhance the appearance of graphs produced using Presentation Graphics. It also allows you to edit any of the existing Uniplex clip art images.

Uniplex Advanced Graphics System maintains the consistent approach taken throughout the Uniplex suite. You can use many of the same commands that you are familiar with in the other Uniplex applications. For example, you use the same commands when you are editing a Presentation Graphics form as when you are editing data in Database Forms.

The extensive and consistent use of *softkeys* means complex operations can be carried out with one keystroke by following the on-screen menus.

The cut and paste facility works the same way throughout the product to easily transfer information between applications. For example, you can create a graph using Presentation Graphics, integrate it with a document, and then mail it to a colleague.



◆ Using this Guide

◇ Purpose of this Guide

The Uniplex Advanced Graphics System User Guide is intended for anyone who wants to use Uniplex Advanced Graphics. It contains instructions for those people new to Uniplex and the more experienced Uniplex user.

◇ Organization of each Chapter

Each chapter in this guide is organized as follows:

Table of Contents	The beginning of each chapter contains a detailed table of contents.
Overview	The overview provides an introduction to the purpose and major features of the application.
How to Access the Application	This section provides the instructions to access the application.
Worked Example	The worked example section leads you through a typical session of using the application. It provides detailed instructions for each stage of the session.
Reference Sections	The remainder of each chapter describes the full functionality of the application. The sections are organized into logical task units.
Index	A comprehensive index is included at the end of each chapter.



Using this Guide


◇ Organization of the Chapters

The Uniplex Advanced Graphics System User Guide (Volume 5) is organized into the following chapters:

- 1 Presentation Graphics** Create charts and graphs using high-resolution terminals.
- 2 Presentation Editor** Edit the graphs produced by Presentation Graphics to further enhance their appearance to professional standards and create simple graphic images.
- 3 Printing** Print your work in a variety of ways.
- 4 Integration** Use the consistent command structure and integration facilities of Uniplex.

◇ Conventions Used in this Guide

The following conventions are used in this guide:

Convention	Meaning
Uniplex	Used throughout this guide as an abbreviation of Uniplex Advanced Graphics System.
Text Like This	Output from Uniplex as seen on a terminal.
Text Like This	Enter this text exactly as shown.
<i>Text Like This</i>	Enter the appropriate parameter in this position in the command line (also shows notes and new terms).
	A short note or additional information.
Press a Key	Press and release the appropriate key.



Convention	Meaning
Pick and Point	Move between items with the arrow keys until the required option is highlighted, then press RETURN .
Press ESC key	Press the ESC key and then press <i>key</i> (i.e., ESC e). Do not press RETURN .
Press CTRL key	Hold down the CTRL key and press <i>key</i> (i.e., CTRL x). Do not press RETURN .
Press Fx	Press the appropriate function key.
[parameter]	An optional expression in a command line or sequence, for example: <p data-bbox="410 688 907 710">create database [with log in "filename"]</p> <p data-bbox="410 752 910 836">The clause within the square brackets is optional, but requires a valid file name between the quotation marks; you can enter:</p> <pre data-bbox="410 884 604 899">create database</pre> <p data-bbox="410 940 434 955">or</p> <pre data-bbox="410 997 874 1012">create database with log in "db.log"</pre> <p data-bbox="157 1059 208 1074">...</p> <p data-bbox="410 1055 923 1110">Additional parameters or values can be entered, for example:</p> <p data-bbox="410 1151 918 1173">create table tablename (column_name,...)</p> <p data-bbox="410 1215 934 1270">You can enter more than one column name, separated by commas, for example:</p> <pre data-bbox="410 1311 874 1326">create table table1 (col1,col2,col3)</pre>



Using this Guide

Convention	Meaning
------------	---------

{param|param}

Shows the list of available options (parameters) in a command, for example:

grant privilege to {public|user_list}

You can enter:

```
grant connect to public
```

or

```
grant connect to john,karen
```

Chapter 1

Presentation Graphics

Presentation Graphics

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Presentation Graphics

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◆ Overview

Presentation Graphics lets you quickly and simply plot a wide range of graph types from any data source. You can adjust many aspects of the graph's appearance.

You create and draw a graph by following a sequence of steps. These steps mainly involve completing forms with your requirements. Uniplex leads you through the steps by displaying the required forms in sequence. You can subsequently change the settings specified on these forms by returning directly to the form.

Presentation Graphics has different types of graphs which plot the same data in different formats. Use the graph type of your choice to create a graph, then further enhance its appearance with the graph edit options. For example, you can set grid lines behind the graph to help read the data. The last set of adjustment options you make for each of the different graph types is retained. This means you can switch between different types of graphs to compare the way the same data is shown without changing the display options.

You can modify the appearance of a graph using the Presentation Editor. See the **Presentation Editor** chapter.

You can display a graph in two dimensions (2D) which makes it look flat or with a three dimensional effect (3D) which makes it look solid. For example, a box drawn in 2D would look like a square and a box drawn in 3D would look like a cube. There is a gallery of graphs in *Types of Graphs* which shows both 2D and 3D styles with some of the display options available.

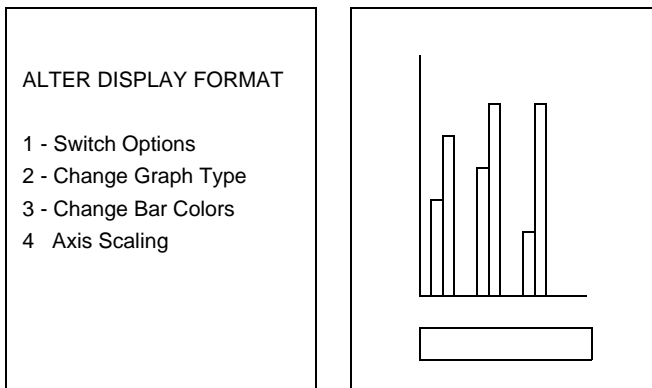


Overview



Terminals

You can use Presentation Graphics on any terminal. The resolution to which Uniplex can display the graphics depends on the capabilities of the terminal. A high-resolution graphics terminal is required to display graphs at high resolution. The graph and graph adjustment forms can be displayed at the same time if the terminal can display graphic characters and alphanumeric text simultaneously. For example:



You can redraw the graph using a softkey and see the effect of changing your entries in the form without losing it. Uniplex will automatically redraw the graph on the complete screen if the high resolution terminal does not have split screen capabilities.

You can still plot graphs on a character-based terminal, but the quality of the drawn graph on-screen is poorer than that on high resolution terminals. The graph printouts will be the same whichever type of terminal you use, since these rely on the capabilities of the printer.

Ask the System Administrator about the capabilities of the terminals on your computer system.

◇ Printers

You can print graphs on most laser printers and on some dot matrix printers. You can also draw graphs on plotters. Ask the System Administrator about the capabilities of the printers and plotters on your computer system.

◇ Graph Data

You enter the data for the graph as *groups* and *data series*. You enter the data for the graph in the *data series* fields. You can enter up to 200 fields of data. You can have more than one *group* of data series, up to a maximum of 200. You can enter negative as well as positive values.

For example, you could have data on the performance of three sales people, showing how they sell three different products. You can compare their performance with these three different products by grouping the products in the same way for each individual. For example:

	Widget	Wodget	Spanner	
John	3	9	20	— John's group
Sally	4	34	2	— Sally's group
Jeremy	1	99	3	— Jeremy's group

Uniplex plots each data series for the different groups in the same way.



Overview

	Widget	Wodget	Spanner
John	3	9	20
Sally	4	34	2
Jeremy	1	99	3

| | | |

Data Series Data Series Data Series
for Widgets for Wodgets for Spanners

◇ Graph Types

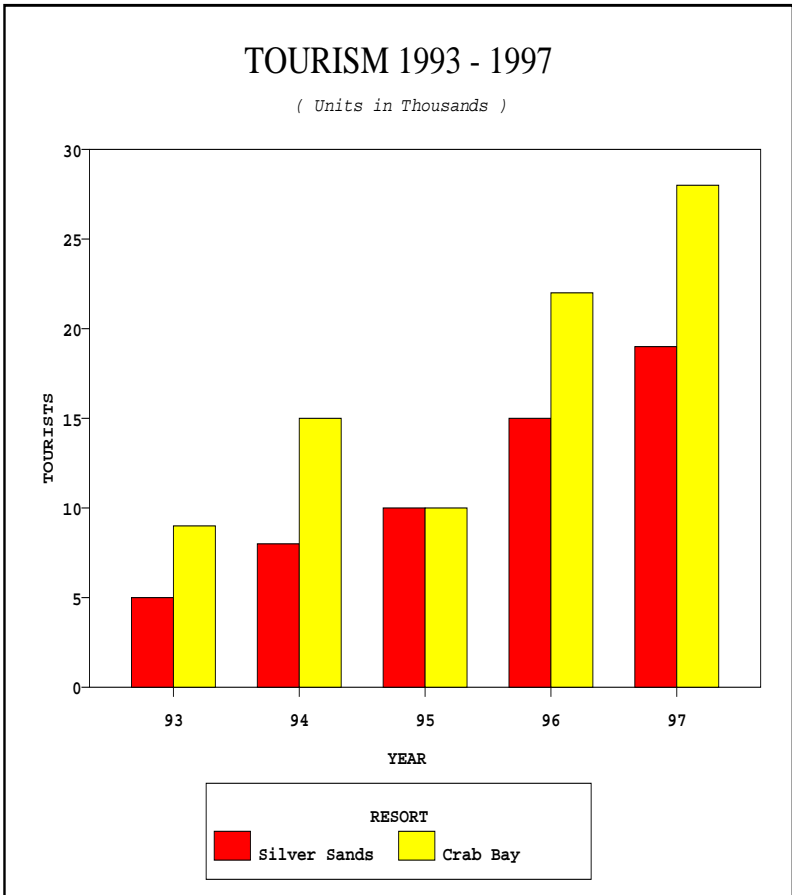
You can plot the following types of charts and graphs:

- o Vertical and Horizontal Bar Charts
- o Vertical and Horizontal Max-Min Bar Charts
- o Line Graphs
- o Pie Charts
- o Vertical and Horizontal Stacked Bar Charts
- o Area and Stacked Area Graphs
- o Scatter Graphs
- o Histograms

The following section shows examples of the different types of graphs and charts available with Presentation Graphics.

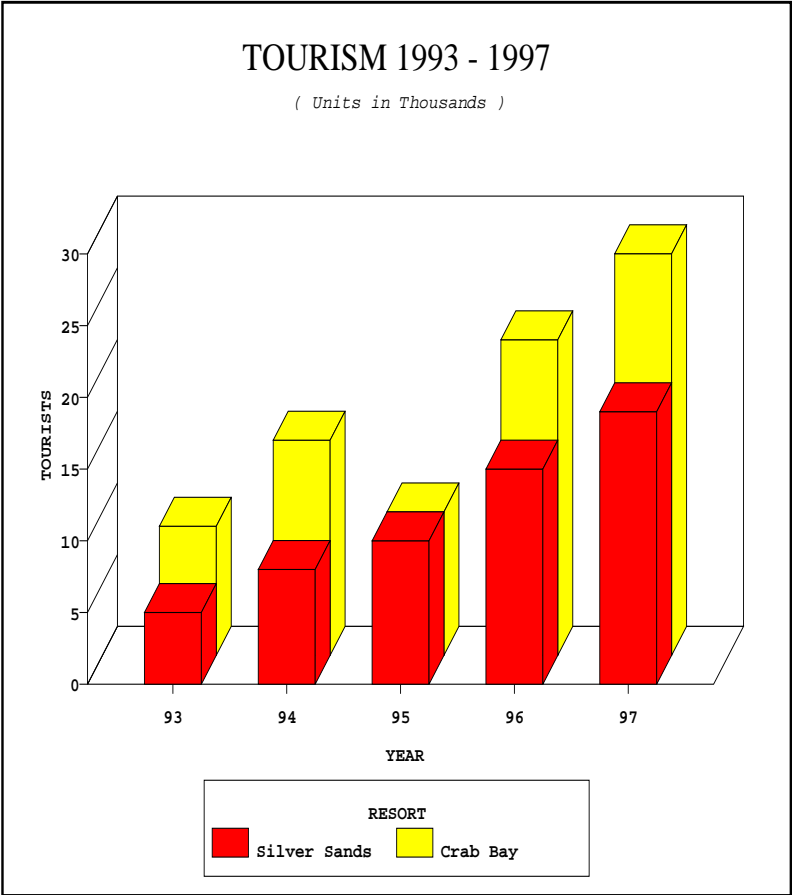
Graph Gallery

Different data is best represented by different types of graphs. The graphs in this section contain the type of data suitable for each type of graph.

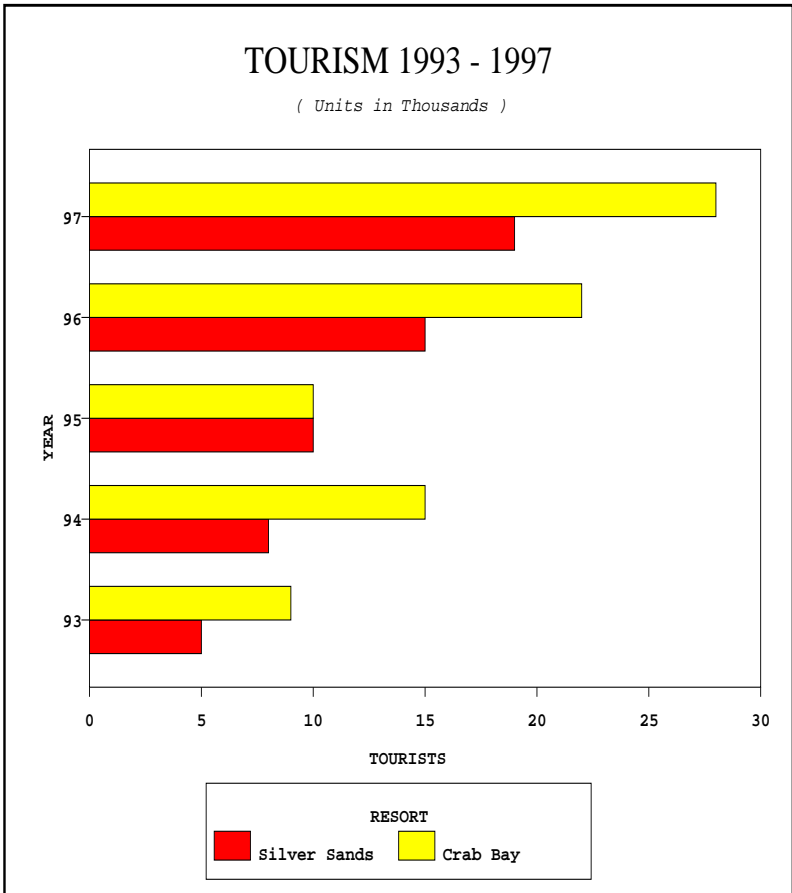


Vertical Bar Chart

Overview

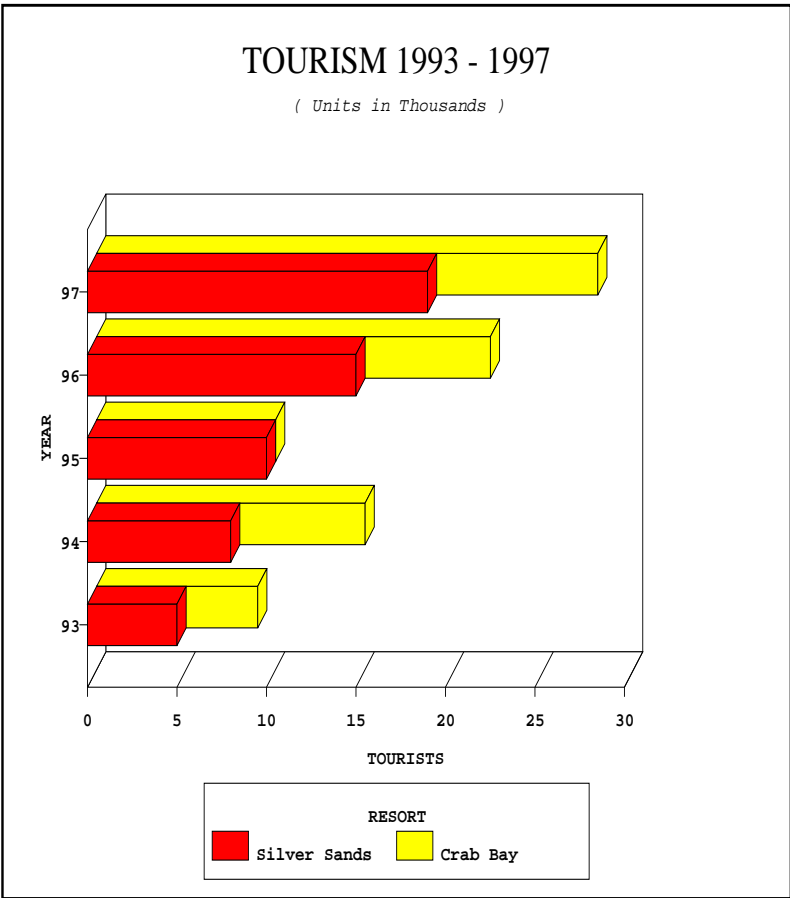


3D Vertical Bar Chart
Overlay Option On

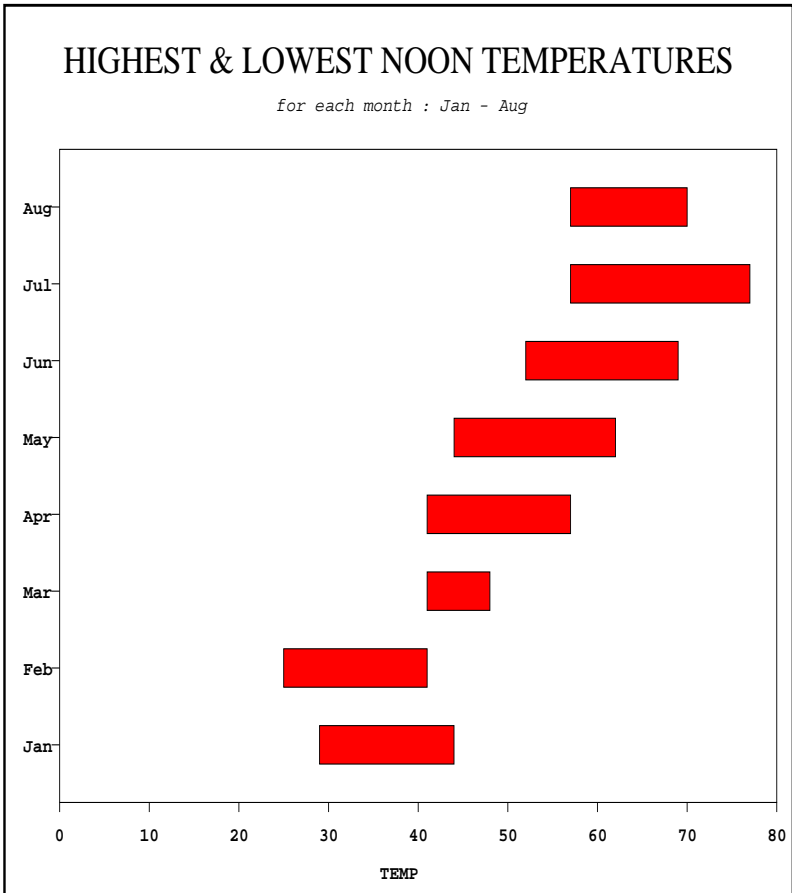
**Horizontal Bar Chart**



Overview

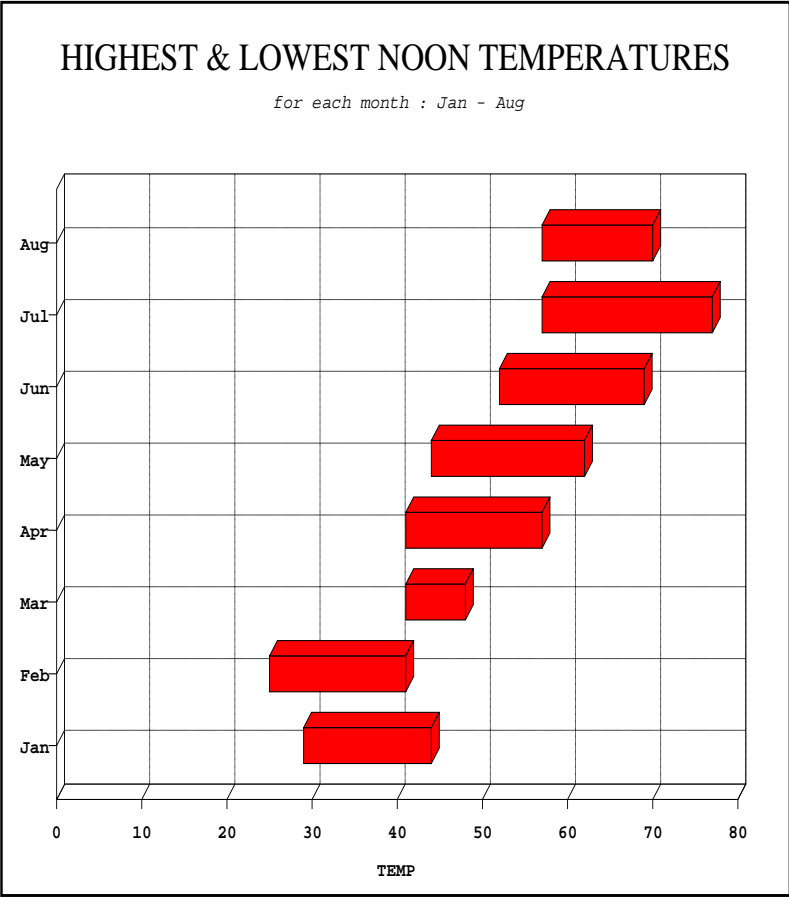


3D Horizontal Bar Chart
Overlay Option On

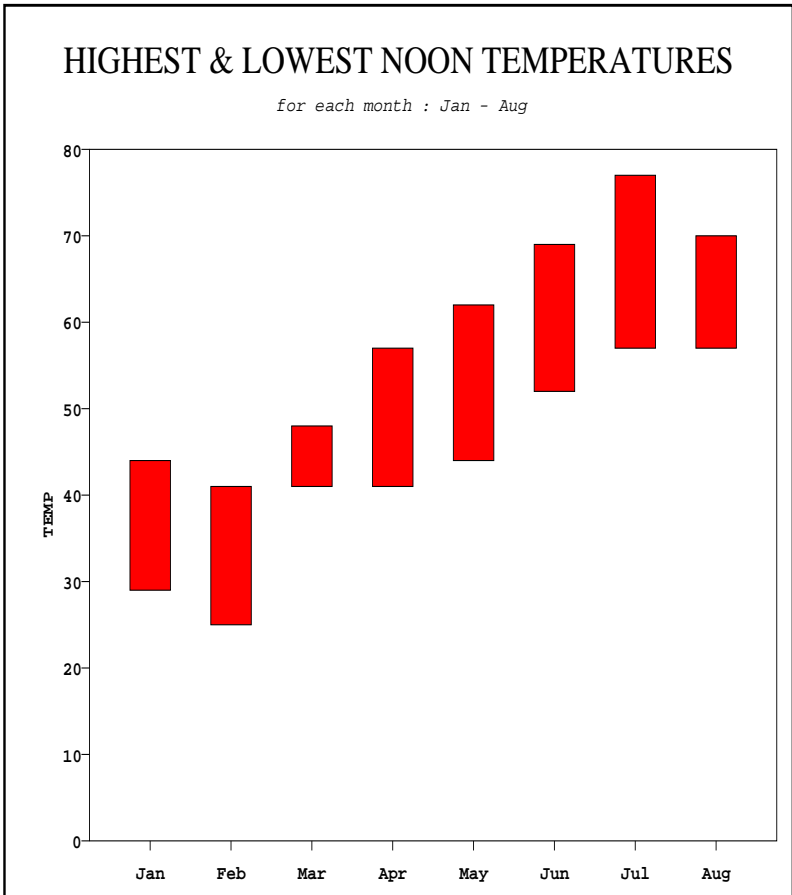
**Horizontal Max-Min Bar Chart**



Overview



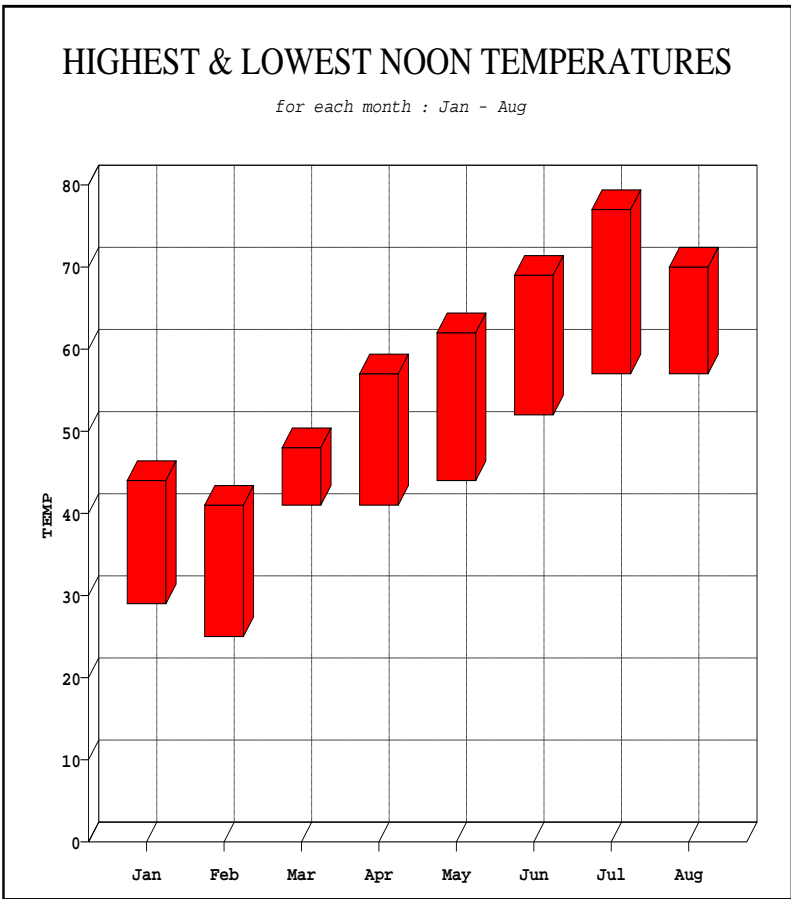
3D Horizontal Max-Min Bar Chart
Grid On



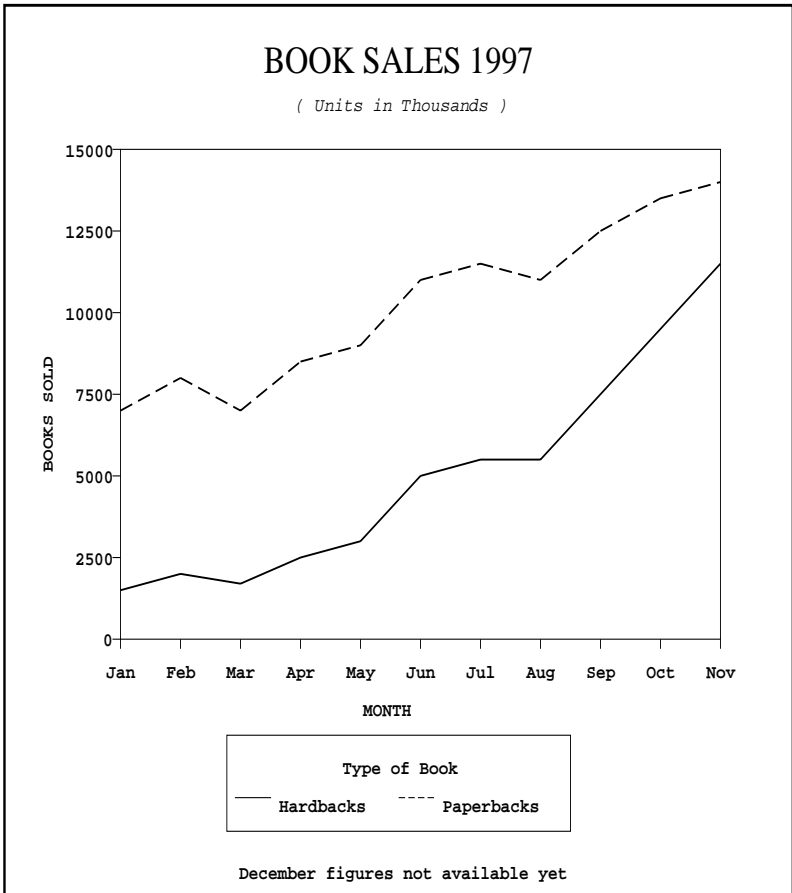
Vertical Max-Min Bar Chart



Overview

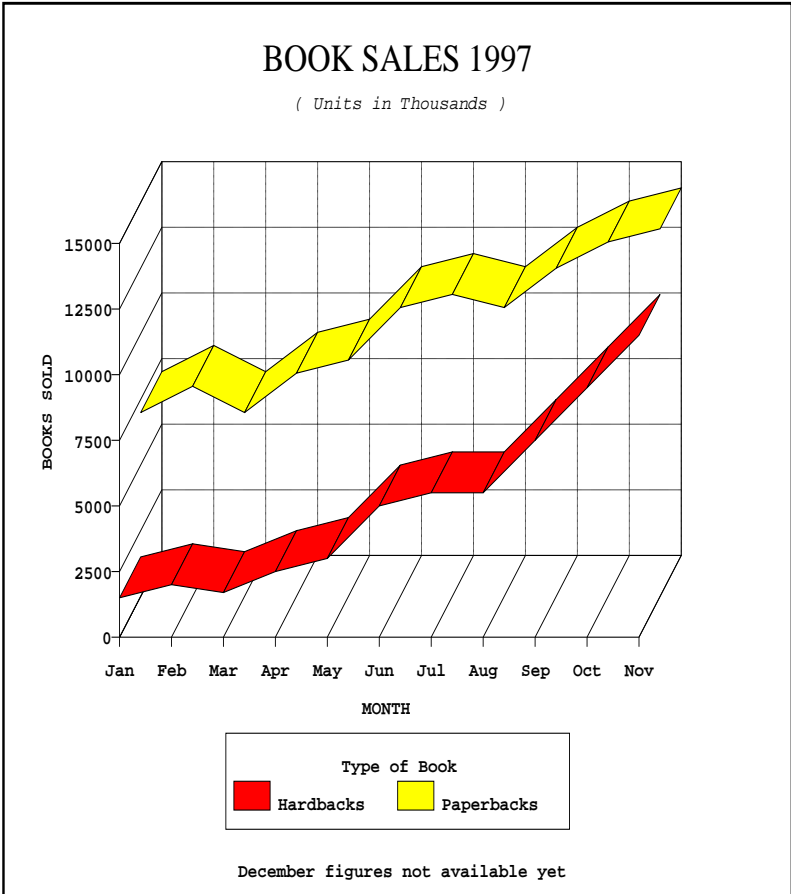


3D Vertical Max-Min Bar Chart
Grid On

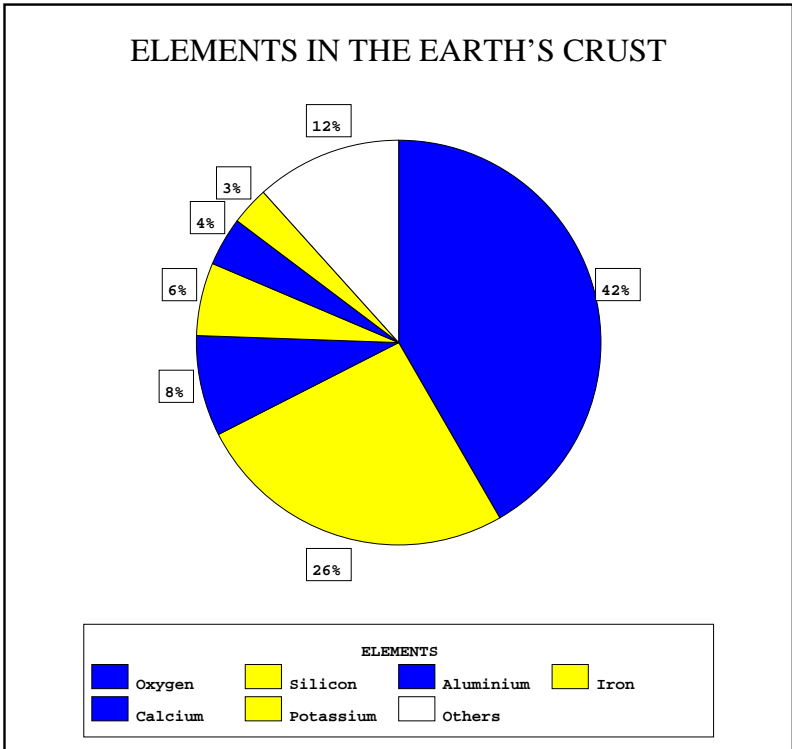


Line Graph

Overview

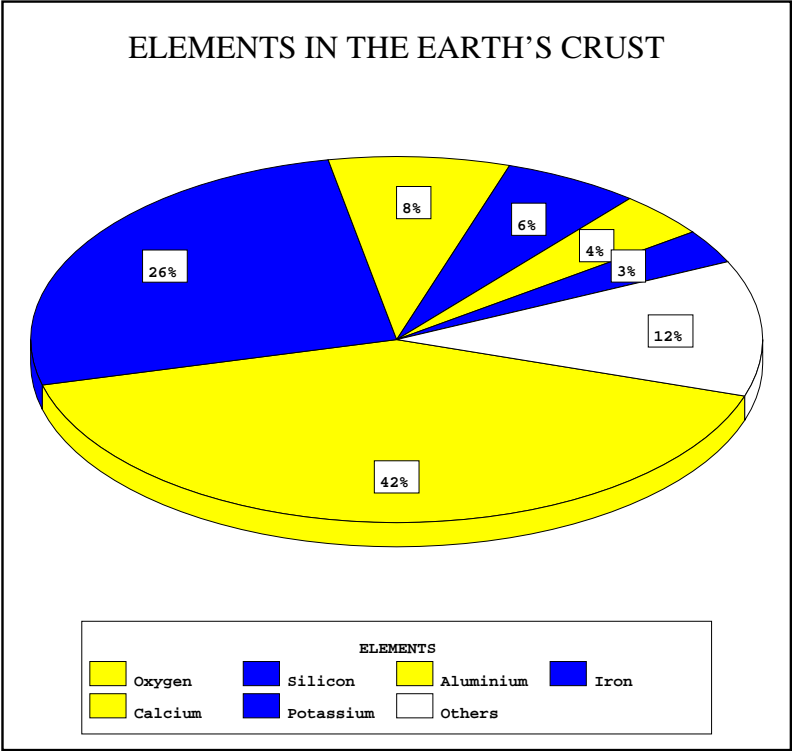


3D Line Graph
Grid On

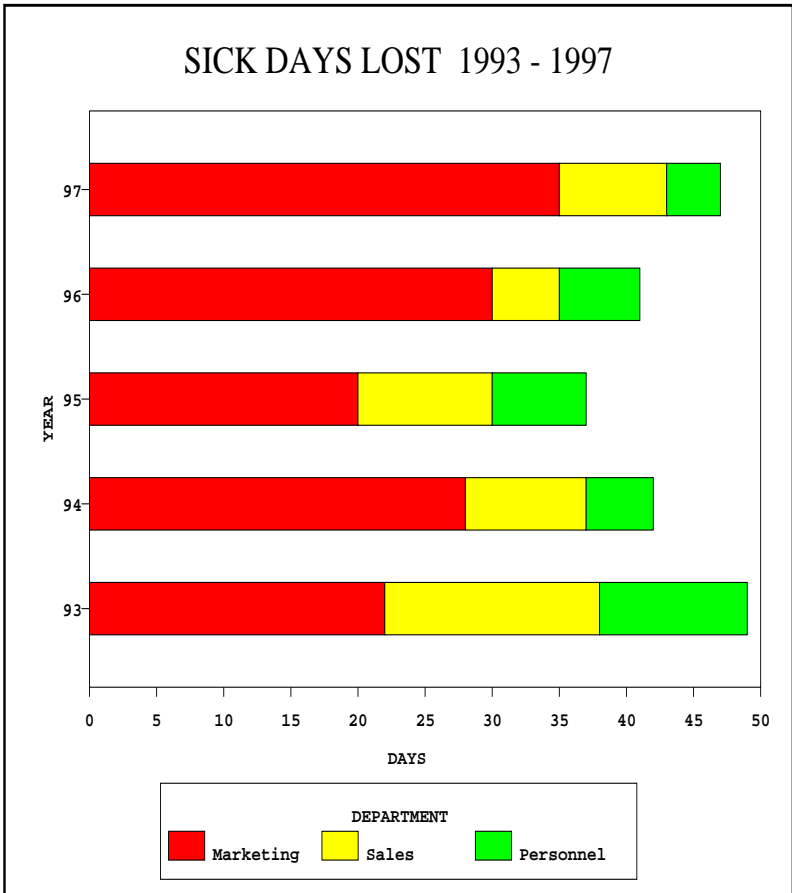


Pie Chart

Overview



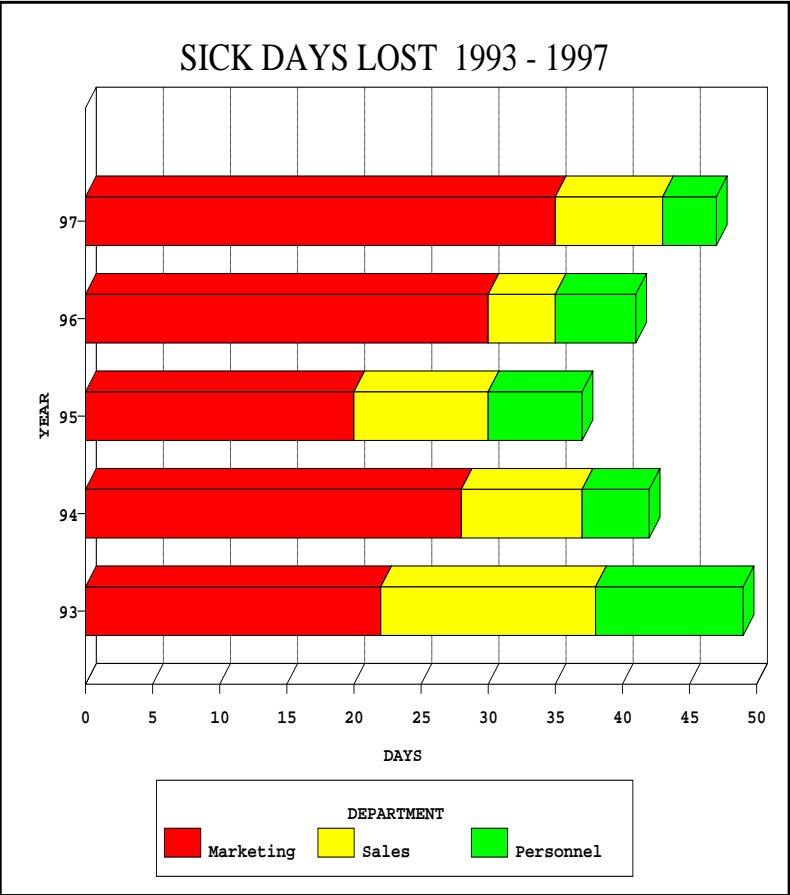
3D Pie Chart



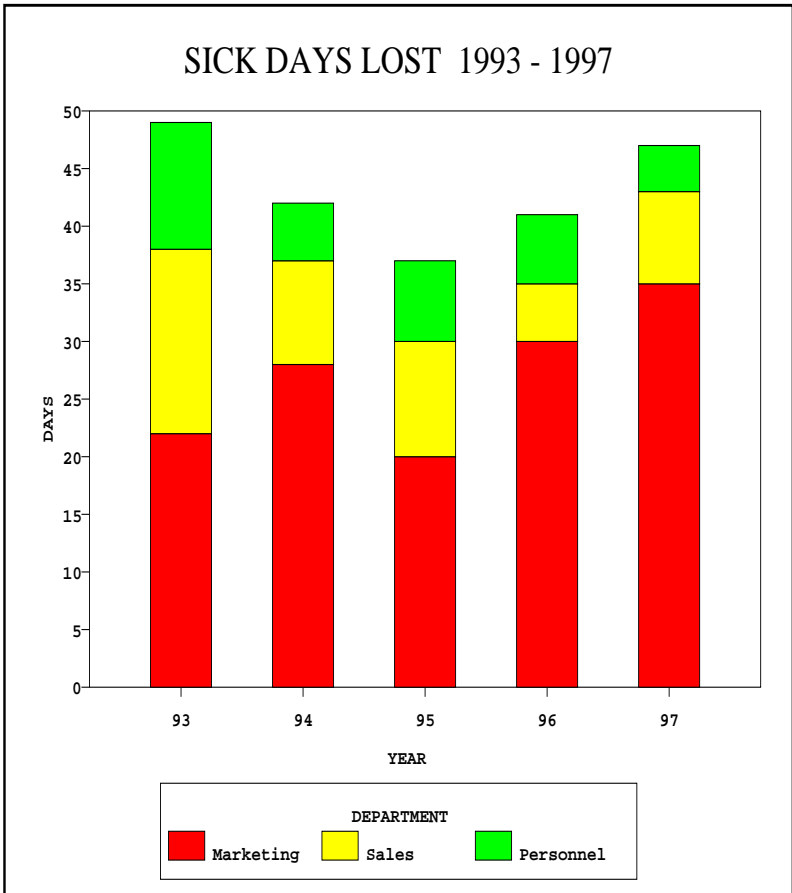
Horizontal Stacked Bar Chart



Overview

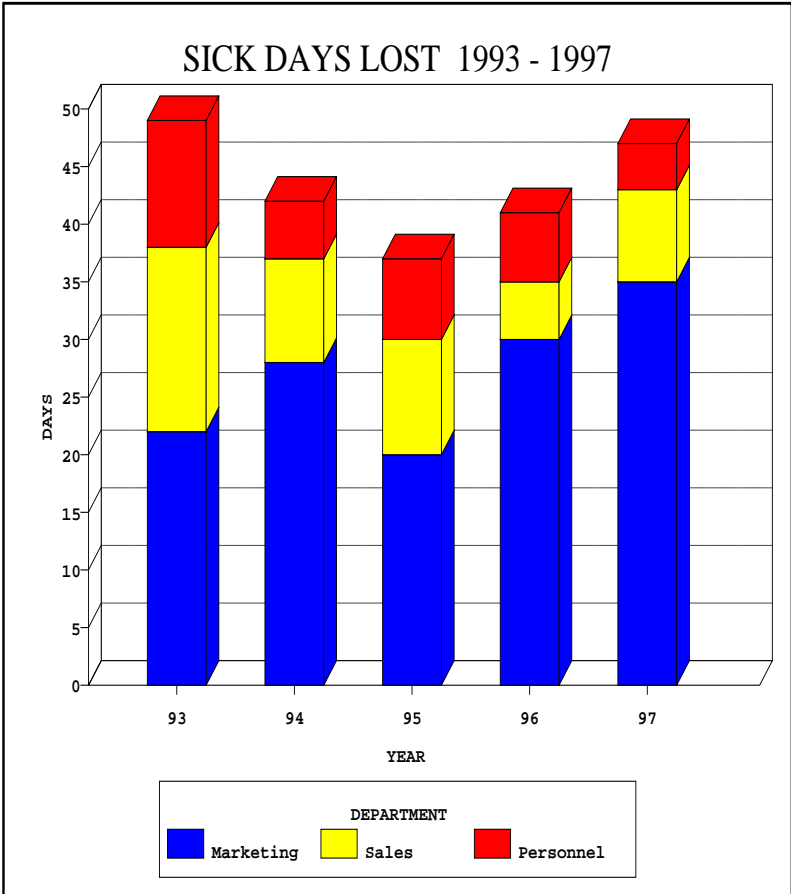


3D Horizontal Stacked Bar Chart
Vertical Grid Lines

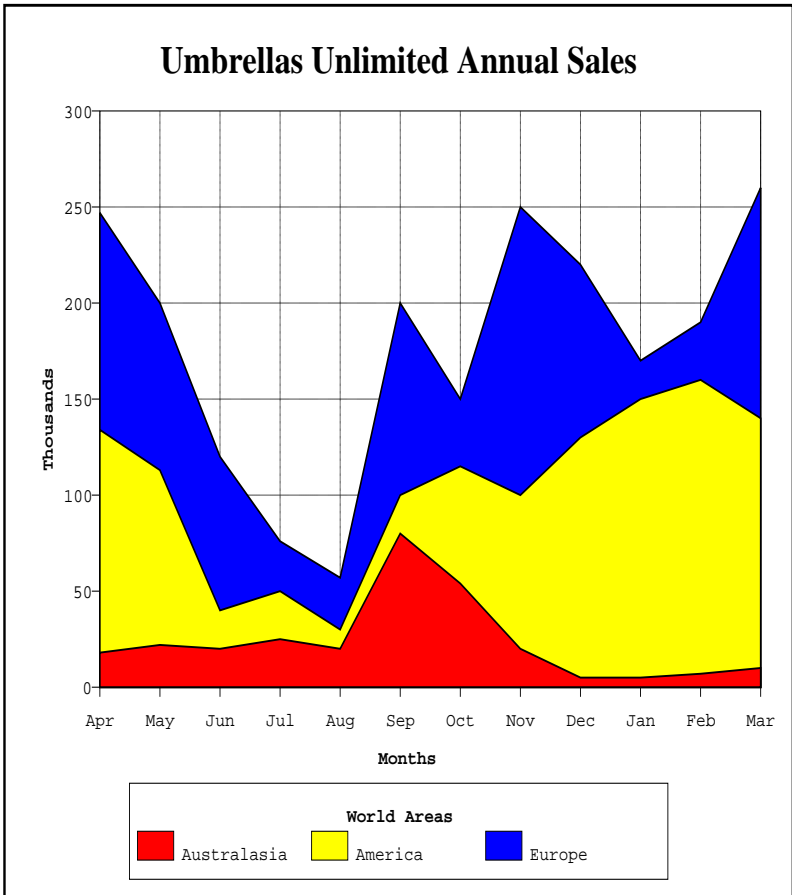


Vertical Stacked Bar Chart

Overview



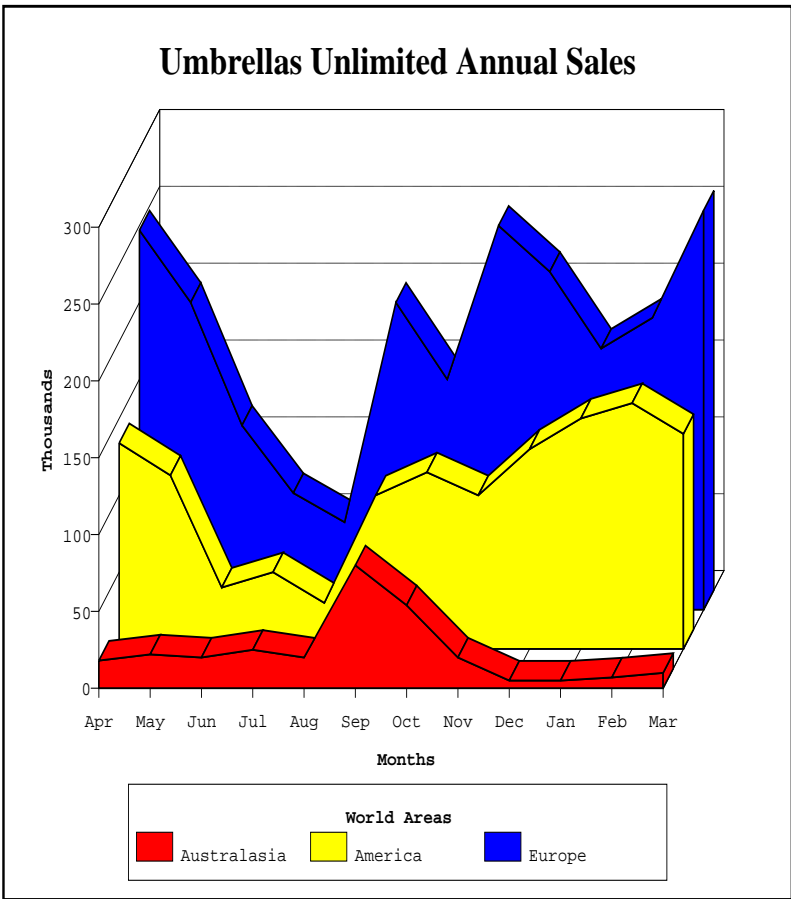
3D Vertical Stacked Bar Chart
Horizontal Grid Lines



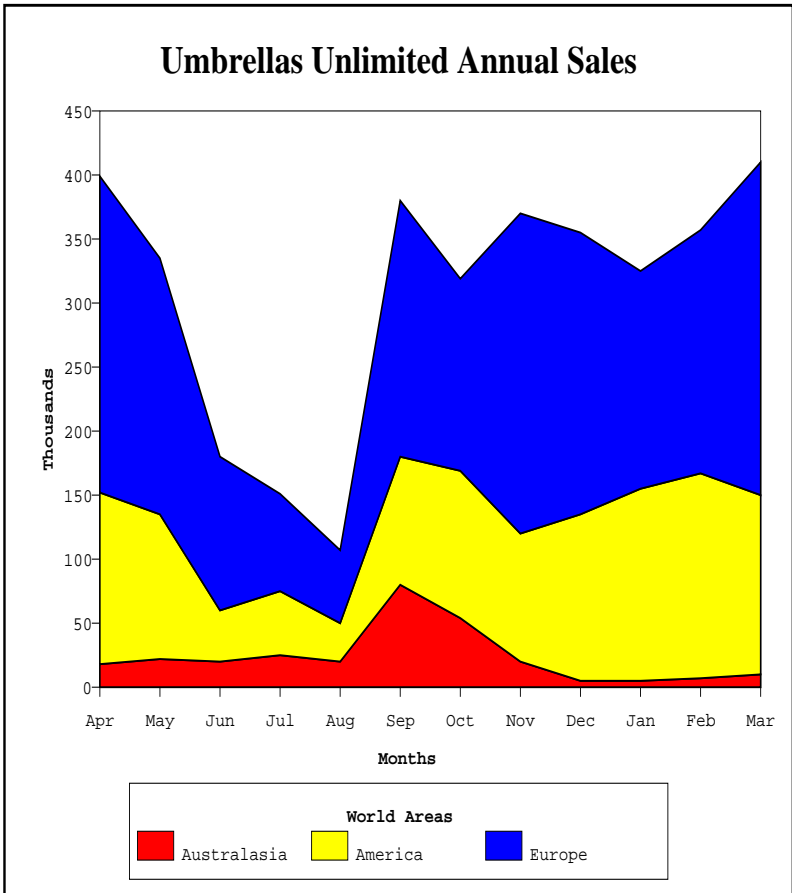
Area Graph
Grid On



Overview



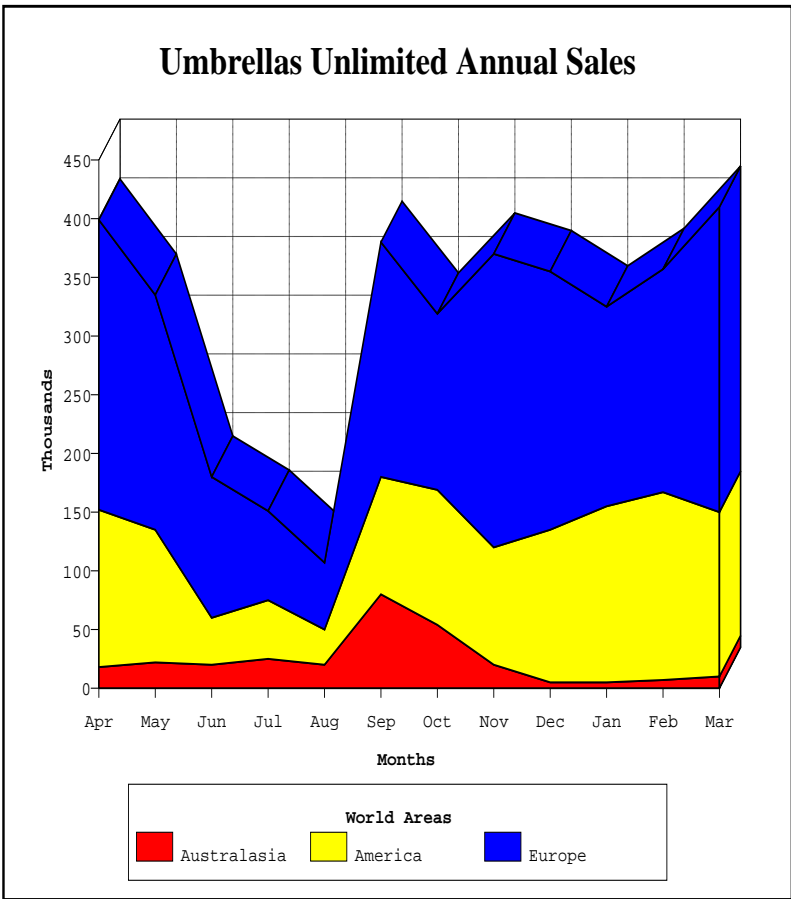
3D Area Graph
Horizontal Grid Lines



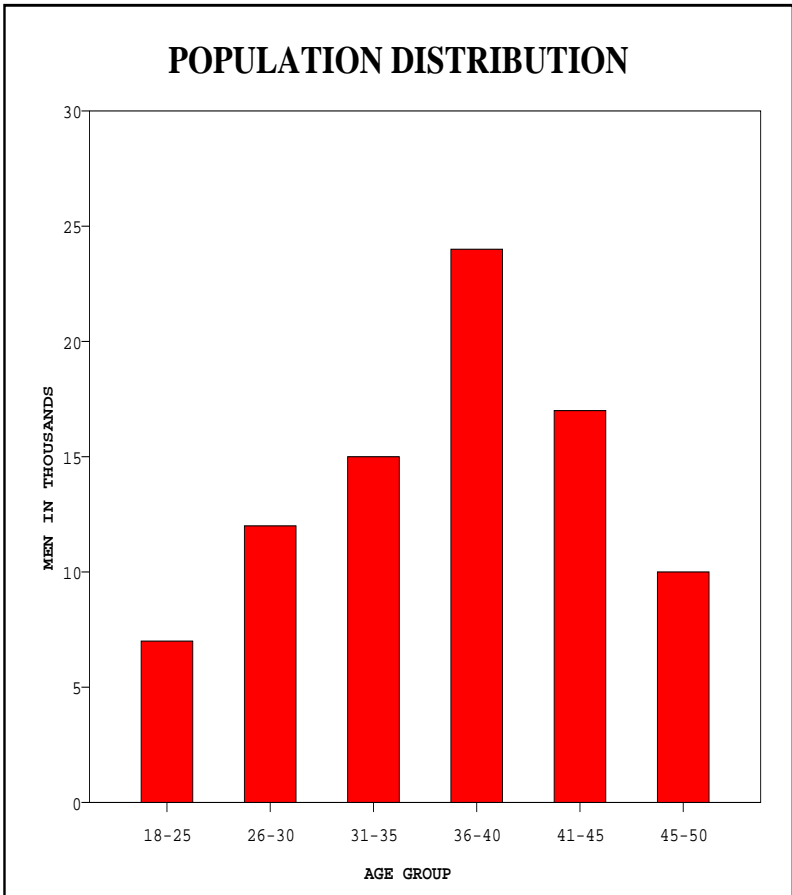
Stacked Area Graph



Overview



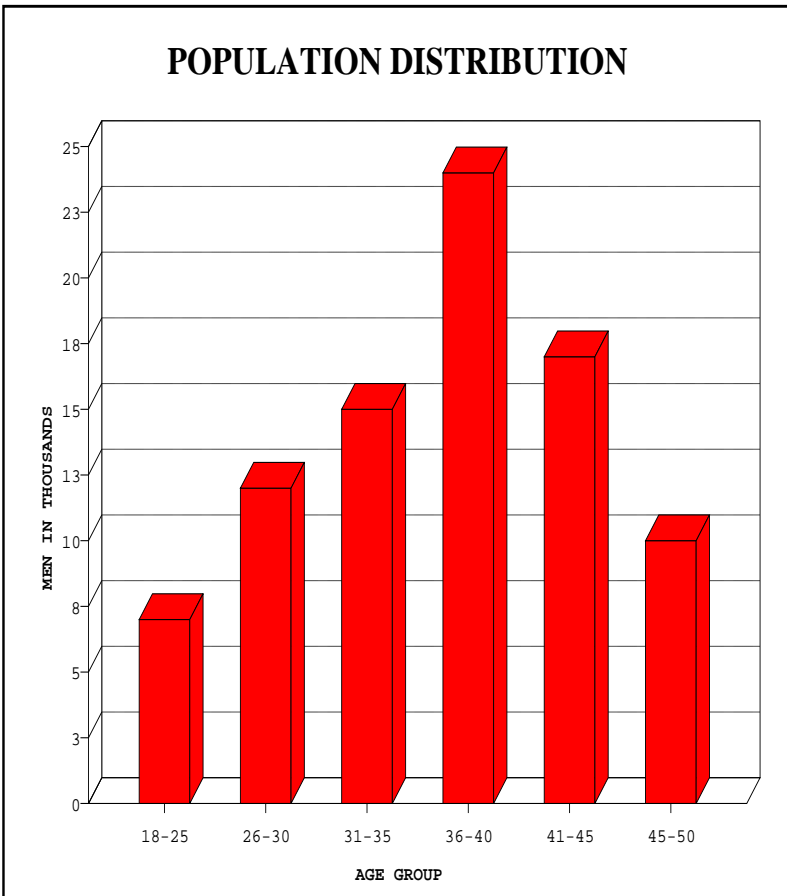
3D Stacked Area Graph
Grid On



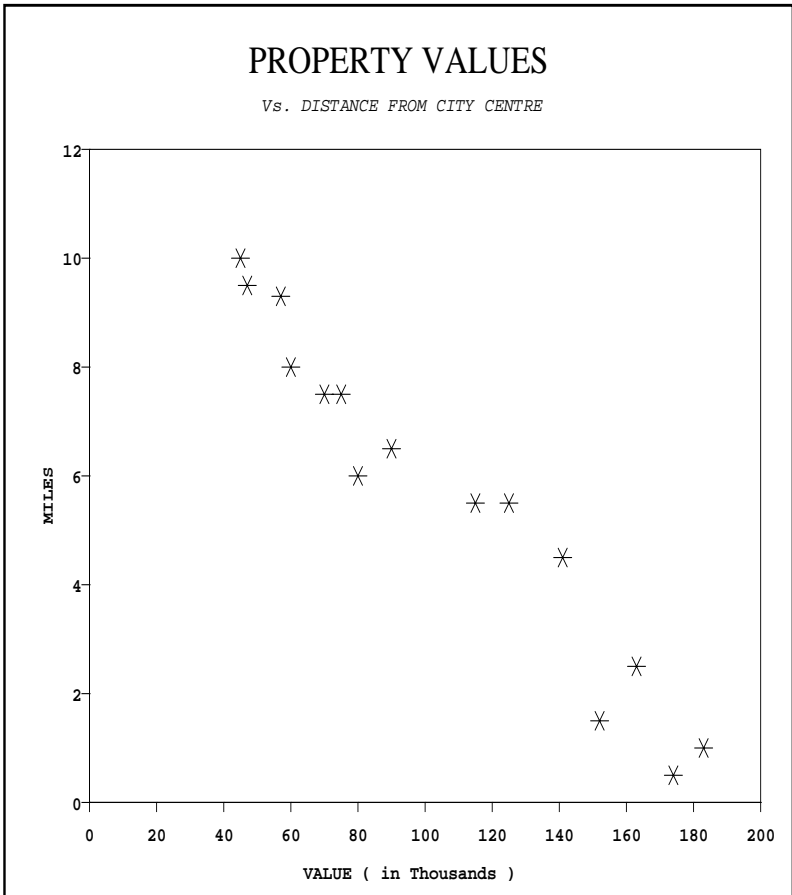
Histogram



Overview

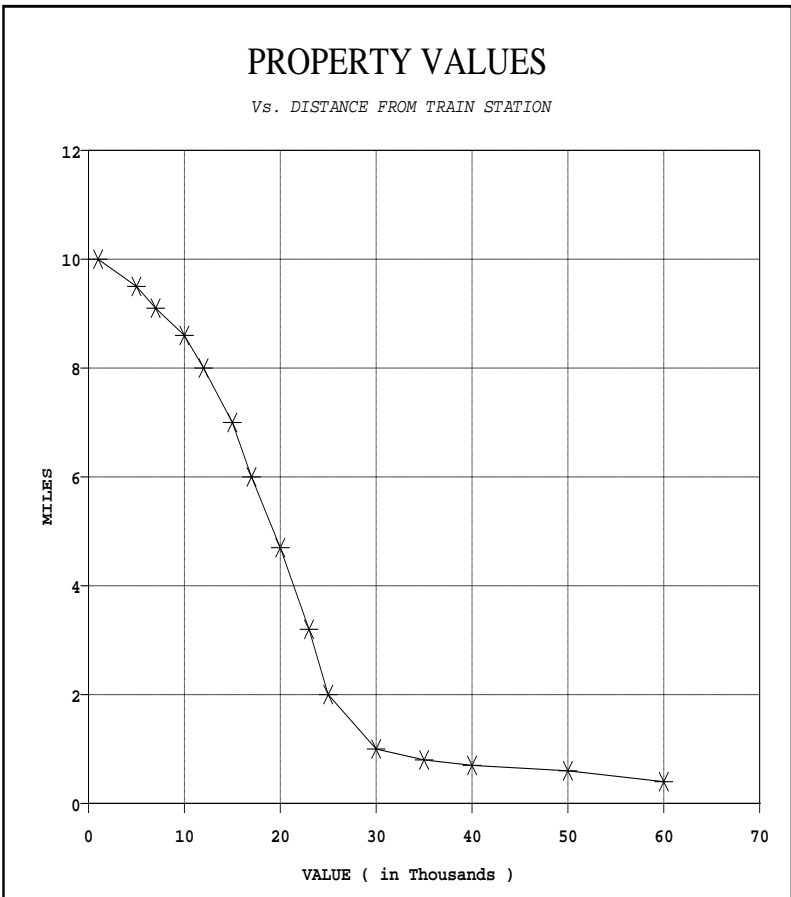


3D Histogram
Horizontal Grid Lines

**Scatter Graph**



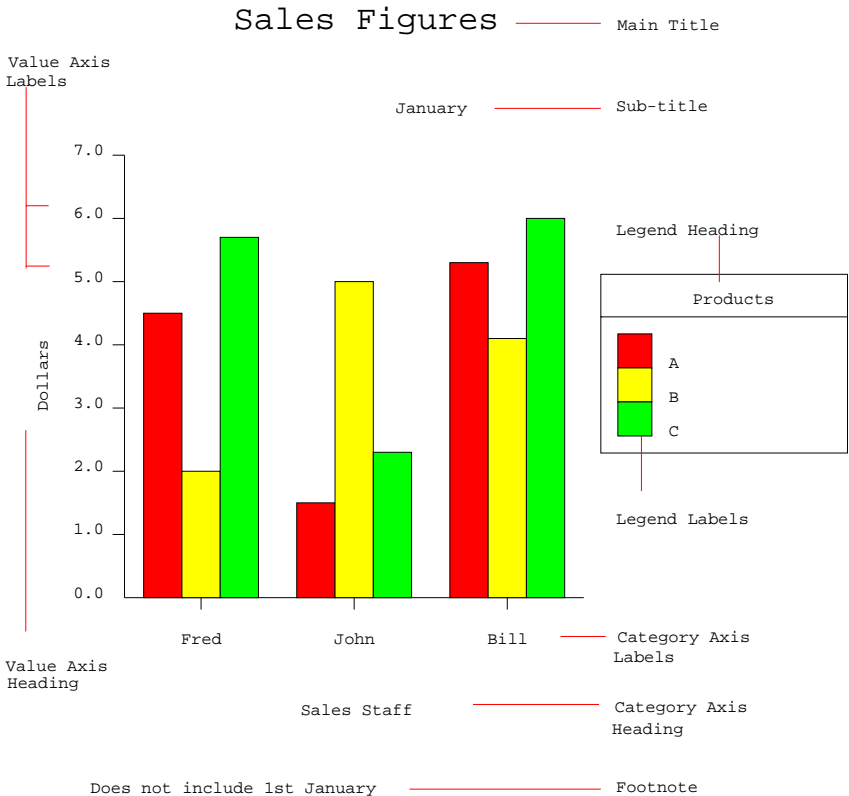
Overview



Scatter Graph
Connecting Lines and Grid

◇ Graph Text

You can include headings, titles, and text on your graph, in the size and font you require. For example, the default graph—a Vertical Bar chart—can contain the following text:





Overview



Current Graph

You can create a new graph or work with an existing one. You must select an existing graph to work with it.

When you create or select a graph it becomes the *current graph*. Whatever action you take within Presentation Graphics acts on the current graph. You must either save the current graph or discard it if you want to work on another graph.

Uniplex displays the name of the current graph on the status line. You do not name a graph until you save it, so Uniplex does not display the name of a graph you are creating.

◇ Access Presentation Graphics

You can access Presentation Graphics from the `Main` menu or by selecting the `Desk` popup from any application.

To access Presentation Graphics from the `Main` menu:

- o Pick and point the `Graphics` option.

Uniplex displays the `Advanced Graphics` menu as follows:

```

Uniplex Ltd. 1253130 - 9.00
Graph:          ADVANCED GRAPHICS          01/30/99 17:45

  WORK WITH GRAPHS      WORK WITH GRAPHS      UTILITIES

  1 - Create a Graph    R - Reset Options    P - Print Graph
  2 - Edit a Graph      V - View Graph       T - Plot Graph(s)
                               E - Easi-print
EDIT GRAPH              PRESENTATION EDITOR  S - Save Graph
                               C - Change Folder
  3 - Data Table        8 - Create Graphics  F - File Manager
  4 - Graph Text        9 - Edit Graphics
  5 - Graph Type
  6 - Display Format
  7 - Switch Options
                               H - Help
                               Q - Quit

F1=Enter  F3=Easi-Print  F4=Quit  F6=View Graph

```

See *External Windows* in the **Integration** chapter to access Presentation Graphics from an application.



Overview



Help

You can access on-line help at any time while you are using Presentation Graphics. You can request help about the tasks you can perform from the menu you are in or you can request more detailed help from within the application itself.

To access help about a menu:

- o Press **ESC h** while Uniplex displays a menu.

Uniplex displays a help screen which details the options available from the current menu and the tasks you can perform.

To access specific help about Presentation Graphics:

- 1 Press **ESC h** while you are working with Presentation Graphics.

Uniplex displays a popup menu showing the list of help topics available.

- 2 Pick and point the help topic you require.

Uniplex displays a further popup menu in some cases from which you can pick and point a help topic.

Uniplex displays one, or several, screens of help about the topic you specified.

To return to your task:

- o Press **ESC q**

↘ *You can also display help about Presentation Editor from the Presentation Graphics help menu.*



Worked Example



Worked Example

◆ Worked Example

Follow this section to create a practice graph to learn to use Presentation Graphics. It demonstrates the basic method of creating and modifying a graph. Press **ESC q** to quit from this sequence. Uniplex returns to the `Presentation Graphics` menu.

1 Access Presentation Graphics

Pick and point the `Graphics` option. Uniplex displays the `Advanced Graphics` menu.

2 Create a New Graph

Pick and point the `Create Graph` option. Uniplex prompts for confirmation to overwrite the current graph if you have previously created a graph and not saved it. See *Save the Current Graph*. Otherwise, Uniplex displays the `Graph Data Table`.

3 Enter the Data for the Graph

Enter the data in the Graph Data Table as shown below. Press **TAB** after completing a field. Press **RETURN** after completing a line. Use the arrow keys to move up and down lines to enter information in the `Data Series Labels` and the `Group Labels`.

Group Labels	Data Series Labels			
	1	2	3	4
[*****]	[John_]	[Jack_]	[Jill_]	[____]
1 [1994_]	[25__]	[30__]	[25__]	[____]
2 [1995_]	[46__]	[51__]	[55__]	[____]
3 [1996_]	[64__]	[53__]	[75__]	[____]
4 [1997_]	[31__]	[51__]	[46__]	[____]



Worked Example

Press **ESC e** when you have completed the form. Uniplex then displays the *Graph Text* form.

4 Enter the Graph Text

Complete the *Graph Text* form as shown. Press **TAB** after completing each field.

Graph: G R A P H T E X T	
Main Title :	[CAR SALES FIGURES _____]
Subtitle :	[1994 - 1997 _____]
Footnote :	[Figures for '97 do not include Dec. _]
Value Axis Heading :	[CARS SOLD _____]
Group Heading :	[YEAR _____]
Data Series Heading :	[SALESMEN _____]

Press **ESC e** when you have entered the data. Uniplex then displays the *Graph Type* form.

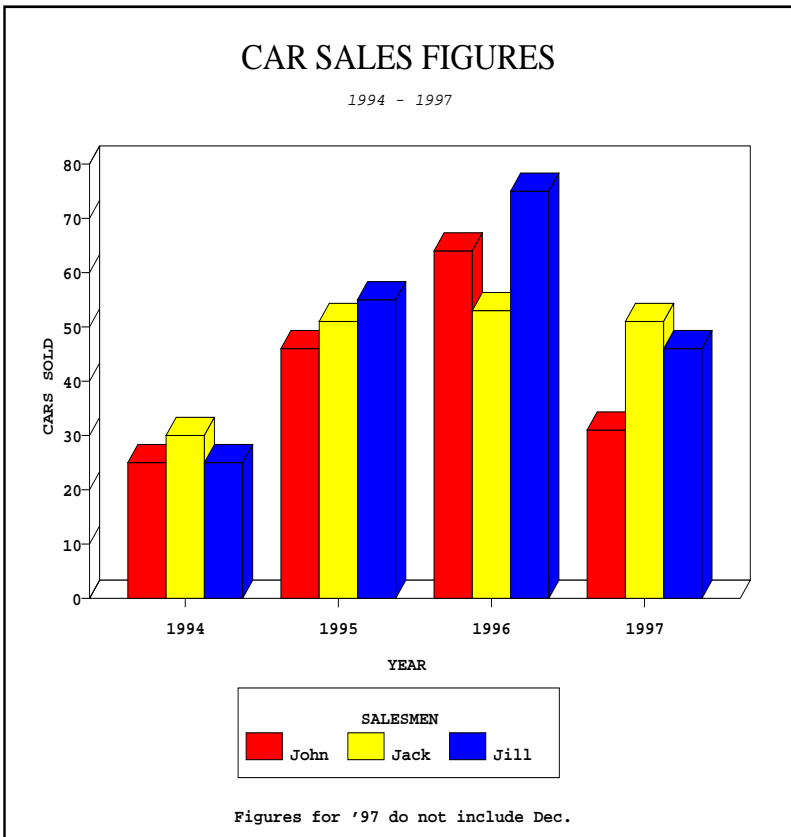
5 Select the Graph Type

The *Graph Type* form is displayed. Press **ESC e** to accept the default graph type of vertical bar chart.

Graph: G R A P H T Y P E	
1: Bar : Vertical	7: Max-Min : Vertical
2: Bar : Horizontal	8: Max-Min : Horizontal
3: Stacked Bar : Vertical	9: Line
4: Stacked Bar : Horizontal	10: Histogram
5: Scatter	11: Area
6: Pie	12: Stacked Area

Worked Example

Uniplex displays the graph on the screen:



✎ *The on-screen graph display depends on the capabilities of your terminal.*

You have now completed the Worked Example. Press **RE-TURN**. Uniplex returns to the **PRESENTATION GRAPHICS** menu. Pick and point the **save Graph** option and enter a name for the graph to save your work.



Reference

◆ Create and Modify Graphs

◇ Create a Graph

This section describes how to create a graph. Unlike the previous section, it provides details and the available options at each step. Some steps are optional. To create a graph:

- 1 Pick and point the `create a Graph` option.

Uniplex prompts for confirmation that you want to overwrite the current graph if you have been previously working with another graph that you have not saved. See *Save a Graph* if you want to save it. Otherwise, enter `*` and press **RETURN**. Uniplex displays the `Graph Data Table`.

- 2 Enter the data for the graph. See *Enter or Change Data*. Uniplex displays the `Graph Text` form.
- 3 Enter the text for the graph. See *Enter or Change Text*. Uniplex displays the `Graph Type` form.
- 4 Pick and point the graph type you want to plot. See *Select or Change Graph Type*. Uniplex displays the graph on the screen. Press **RETURN**. Uniplex returns you to the `Presentation Graphics` menu.
- 5 Pick and point the `change Display Format` option if you want to adjust the graph display. See *Adjust Graph Display*.
- 6 Pick and point `switch options` if you want to change default settings for the type of graph you are using. See *Switch Options*.
- 7 Use the `save Graph` option to save the graph. See *Save a Graph*.



Create and Modify Graphs



Edit a Graph

The graph you have selected to edit becomes the current graph. You can adjust the graph with the edit options once it is selected.

You may want to edit a graph for a number of reasons:

- o Modify Data and Replot
- o Redraw as a Different Graph Type
- o Change the Graph Display with Graph Adjustment Options
- o Alter Text on the Graph and Redraw
- o Print a Graph

To select a graph to edit:

- 1 Pick and point the `edit a Graph` option. Uniplex prompts for the name of a graph.
 - ✎ *Uniplex displays a warning that the current graph will not be saved if you are already working with a graph when you select the option `edit a Graph`. Press `*` if the current graph has already been saved or if you do not want to save it. Press **RETURN** and select the `save Graph` option if you do want to save the current graph. See **Save a Graph**.*
- 2 Enter the name of the graph and press **RETURN** or **DOWN ARROW** to display a list of the files in the current directory. Pick and point the graph from this list (press **DOWN ARROW** to select the graph using File Manager).

When you have selected a current graph, Uniplex displays the name of that graph on the status line of all the Presentation Graphics forms and menus.

◇ Enter or Change Data

You enter the data for a graph by filling in the Graph Data Table. You enter the data for the graph in the data series fields. You can have more than one group of data if required. You can also enter group labels and data series labels. Uniplex displays group labels, if included, below or beside the graph groups representing them on the graph plot. Uniplex displays data series labels, if included, in the graph legend.

You use the Graph Data Table in the same way as other Uniplex forms. You can use the Graph Data Table as follows:

- o **Enter Data.** See *Enter Data* and *Enter Negative Data*.
- o **Change Data.** You can change the data using the standard Uniplex editing commands. Presentation Graphics also provides facilities for inserting, deleting, and transposing the data. See *Change Data*.
- o **Cut and Paste Data.** You can complete the Graph Data Table by cutting data from a Uniplex document or file and pasting it into the Data Table. You can also cut data from the Graph Data Table and use it elsewhere in Uniplex. See *Cut and Paste Data*.
- o **Merge Data.** You can complete the Graph Data Table by merging a document or file, providing the data in that file is formatted correctly. See *Merge Data from a File*.



Create and Modify Graphs

Enter Data

To enter data for a graph:

- 1 Pick and point the `Data Table` option.

✎ *Uniplex automatically selects this option if you are creating a new graph.*

Uniplex displays the `Graph Data Table`.

- 2 Enter the data as follows:

- a) Enter each item of data in a separate field. Use only numeric characters. Precede negative values with the minus sign (-). See *Enter Negative Data*.
- b) Press **TAB** after each item of data to move to the next field.
- c) Press **RETURN** after each line of data to move to the next line. You can enter up to 200 groups and 200 data series. Uniplex scrolls the fields if you enter more data than can be displayed on the screen.

- 3 Enter the Data Series Labels as follows:

- a) Use the arrow keys to move to the Data Series Labels fields (on the top line).
- b) Enter each data series label in a separate field. Use only alphabetic characters or digits.
- c) Press **TAB** after each label to move to the next label field.

✎ *Uniplex scrolls the field horizontally to display the entry if it is longer than the field length.*



Create and Modify Graphs

- 4 Enter the Group Labels as follows:
 - a) Use the arrow keys to move to the Group Labels fields (in the left-hand column).
 - b) Enter each group label in a separate field. Use only alphabetic characters or digits.
 - c) Press **DOWN ARROW** or press **RETURN** after each label to move to the next label field.
 - ✎ *Uniplex scrolls the field horizontally to display the entry if it is longer than the field length.*
- 5 Press **ESC e** to accept your entries or press **ESC q** to quit from this form.

or

Press **F6** to accept your entries and plot the graph. Press **RETURN** to continue.

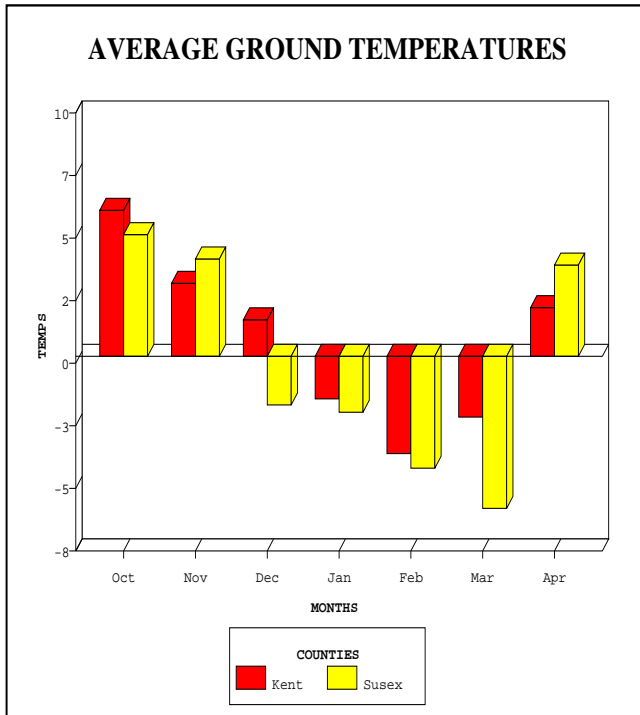
- ✎ *Uniplex plots the default vertical bar chart if you have not selected a graph type. There will be no text on the graph if you have not entered text.*



Create and Modify Graphs

Enter Negative Data

You can enter negative as well as positive data for some types of graphs. Precede negative values with the minus sign (-). Uniplex automatically plots negative values and adjusts the value axis accordingly. For example:



- ✎ You cannot plot pie charts, histograms, vertical and horizontal stacked bar charts, or area and stacked area charts from data tables containing negative values.



Change Data

Standard Uniplex editing commands are used to change the data in the Graph Data Table. You can also insert and delete data:

o Insert Data

- 1 Position the cursor at the field where you want to insert data.
- 2 Press **F7** to display the **Format** softkey menu.

To insert a group: Press **F1**

Enter the new group in the empty row that is inserted at the cursor position. The existing data moves down one row.

To insert a data series: Press **F2**

Enter the new data series in the empty column that is inserted at the cursor position. The existing data moves one column to the right.

o Delete Data

- 1 Position the cursor at the field where you want to delete data.
- 2 Press **F7** to display the **Format** softkey menu.

To delete a group: Press **F3**

The group at the current cursor position is deleted and the remaining data moves up one row.

To delete a data series: Press **F4**

The data series at the current cursor position is deleted and the remaining data moves one column to the left.



Create and Modify Graphs

Cut and Paste Data

You can cut data from a Uniplex document or file and paste it into a Data Table. This is useful if you want to create a graph from the figures included in a Word Processor document or a Spreadsheet file.

Cut and paste allows you to transfer information from:

- o Word Processing Document to Data Table
- o Spreadsheet Document to Data Table
- o Data Table to a File or Document
- o Data Table to Data Table
- o One Area of Data Table to Another Area

Transfer Data from Word Processor

You must cut data from the Word Processor file before you can paste it into a Data Table. Make sure the data is in the format of the data table form before attempting a transfer. See the *Worked Example* for a diagram of the form. You need to ensure:

- o Each data series is separated by a tab.
 - o Each group is on a new line.
 - o Each data series label is positioned above the correct series.
 - o Each group label is positioned to the left of the correct group.
- 1 Make the relevant graph current, then select the **Data Table** option to insert the data into an existing Graph Data Table.

Pick and point the **Create a Graph** option if you want to insert the data into a new Graph Data Table.



Create and Modify Graphs

- Position the cursor on the field you want to contain the first entry. The first entry is always the top left-hand entry of a block of data.

For example, if you want to insert the following data into a data table:

27	17	7
29	19	9

Place the cursor over the field you want to contain 27.

If you want to insert group and data series labels into a data table, as well as the data, for example:

	1995	1996	1997
John	33	22	11
Jack	27	17	7
Jill	29	19	9

Place the cursor over the top left-hand field of the Data Table (the field which contains a row of asterisks).

- Press **F5** then press **F3**.

Uniplex pastes the data into the Data Table form.

- Do not use the top left hand field of the Data Table (which contains asterisks) for your start position for pasting text, UNLESS the first entry you want to paste is blank. You will lose any data entry you try to paste into the asterisk field.*



Create and Modify Graphs

Transfer Data from Spreadsheet

Invoke the Spreadsheet directly if you want to cut data from a Spreadsheet file and paste it into a Data Table:

- 1 Press **F8** then press **F5**.

Uniplex invokes the Spreadsheet. See **Spreadsheet** in the **Uniplex II Plus User Guide** for details of how to select the spreadsheet from which data is to be copied or cut.

- 2 Press **ESC xs**. Uniplex returns to the `Data Table` menu.
- 3 Make the relevant graph current, then select the `Data Table` option if you want to insert the data into an existing Graph Data Table. Pick and point the `create a Graph` option if you want to insert the data into a new Graph Data Table.
- 4 Position the cursor on the field you want to contain the first entry. The first entry is always the top left-hand entry of a block of data (see the previous section for an example entry).
- 5 Press **F3**. Uniplex inserts the data.

Transfer Data from a Data Table

To transfer data from the Graph Data Table using cut and paste:

- 1 Position the cursor on the first entry. The first entry is always the top left-hand entry of the block of data you want to cut out.
- 2 Press **F5**. Press **F1** to mark the top left of the area to cut.
- 3 Move the cursor to the bottom right of the block of data you want to cut. Press **F2** to mark bottom right.

Uniplex copies the data to a clipboard. If required, you can use the `choose clipboard` softkey to specify the clipboard you require, prior to marking the area to cut.



Create and Modify Graphs

- 4 Move to the position in the file, document, or Data Table where you want to insert the copied data.
- 5 Press **ESC *I** to insert data into a file or document. Press **F3**, then press **RETURN** to insert data into a Data Table. Uniplex inserts the copied data.

Merge Data from a File

You can merge data from a file into a Graph Data Table. This means you can construct graphs from existing data without having to re-enter each piece of information.

To merge data into a Graph Data Table:

- 1 Edit the document or file containing the data. Make sure the data is in the correct format as follows:
 - o Each data series is separated by a tab.
 - o Each group is on a new line.
 - o Each data series label is positioned above the correct data series.
 - o Each group label is positioned to the left of the correct group.
- 2 Select the **Data Table** option from the **Presentation Graphics** menu. Uniplex displays the **Graph Data Table** option.
- 3 Enter **ESC mi** or press **F8**, then **F6**. Uniplex prompts for a file-name.
- 4 Enter the name of the file containing the data you want to merge. Enter the full pathname if the file is in a different folder. Uniplex merges the data.



Create and Modify Graphs

◇ Enter or Change Text

You can enter text in addition to data to label the axes of the graph, make any other notes, or add information.

There are two axes to label:


- o **Value Axis.** This axis displays the data you entered in the Graph Data table. The minimum and maximum values are defined by the range of the data values.
- o **Category Axis.** This axis displays the information you entered in the data series labels and the group labels in the Graph Data Table.

The value axis and the category axis are interchangeable. This means that if the value axis is the horizontal axis, then the category axis will be the vertical axis. The allocation of axis to value and category data depends on which type of graph you use. For example, the Vertical Bar chart plots the category axis on the horizontal axis, so the value axis becomes the vertical axis.

You enter the text for the graph by making entries in the Graph Text form. See Step 4 in the *Worked Example* for details of the Graph Text form. You can enter the following text on the graph:

Text	Where Displayed
Main Title	Centered above the graph.
Subtitle	Centered below the Main Title .
Footnotes	Centered below the graph.
Value Axis Heading	Beside a vertical scaled axis, or below a horizontal scaled axis. Pie charts do not have a Value Axis Heading .

Create and Modify Graphs

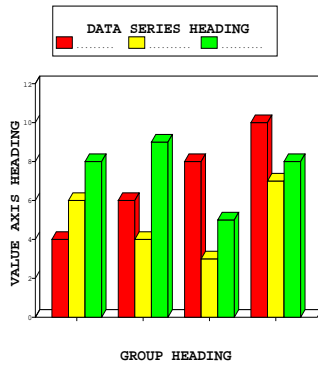
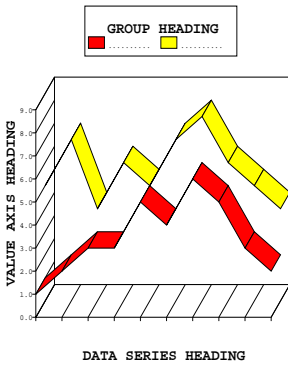
Text	Where Displayed
Group Heading	Beside a vertical category axis or below a horizontal category axis on all types of Bar charts. The legend heading, located wherever you choose to place the legend, on Line, Pie, and all Area charts.
Data Series Heading	<p>There is no Group Heading on Scatter graphs. The legend heading, located wherever you choose to place the legend, on all types of Bar charts</p> <p>Beside a vertical category axis or below a horizontal category axis on Line, Scatter and all Area charts. There is no Data Series Heading on Pie, Max-Min charts, and Histograms.</p>
 <i>Types of bar charts include vertical, horizontal, max-min, histogram, and stacked bar.</i>	

Create and Modify Graphs

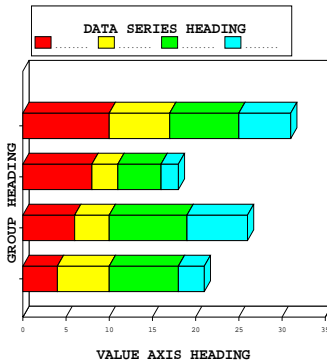
Heading Positions

- Line Graph
- Scatter Graph
- Area Graph
- Stacked Area Graph

- Vertical Bar Chart
- Vertical Stacked Bar Chart
- Vertical Max-Min Chart
- Histogram



- Horizontal Bar Chart
- Horizontal Stacked Bar Chart
- Horizontal Max-Min Chart





Create and Modify Graphs

Include Text Entries

You do not have to enter text on the graph, but it is recommended for the following reasons:

- o Identifies and explains the graph when it is included in a document.
- o Aids you and others in understanding the graph.
- o Helps you remember the original purpose of the graph at a later time.
- o Makes it easier to change the display if you use the graph text and labels as a point of reference when using the Alter Display Format menu.

The following points are important in deciding whether to include graph text if space is limited on the graph (for example, if you are plotting a large number of groups).

- o The position of the value axis is dependent on whether you include the data series labels and heading.
- o The main title, subtitle, and footer are always plotted in the same position on a graph. Uniplex plots the graph at a larger size if they are not included.

To include text on your graph:

- 1 Pick and point the `Graph Text` option.
 - ✎ *Uniplex selects this option for you after you have entered the graph data if you are creating a new graph.*
- 2 Complete the fields for the entries you want. You can use most of the Uniplex standard editing commands. Press **TAB** after making an entry to move to the next field. Use the arrow keys to move between fields.



Create and Modify Graphs

- ✎ *Uniplex scrolls the field horizontally to display the entry if it is longer than the field length.*

3 Press **ESC e** to accept the entries.

or

Press **F6** to accept the entries and plot the graph. Press **RETURN** to continue.

- ✎ *Uniplex plots the default vertical bar chart if you have not yet selected a graph type.*

See *Set Text Display* to change or delete the text you enter on a graph.

◇ Select or Change Graph Type

To select or change the graph type:

1 Pick and point the **Graph Type** option.

- ✎ *Uniplex automatically selects this option after you have entered the graph text if you are creating a new graph.*

Uniplex displays the **Graph Type** menu.

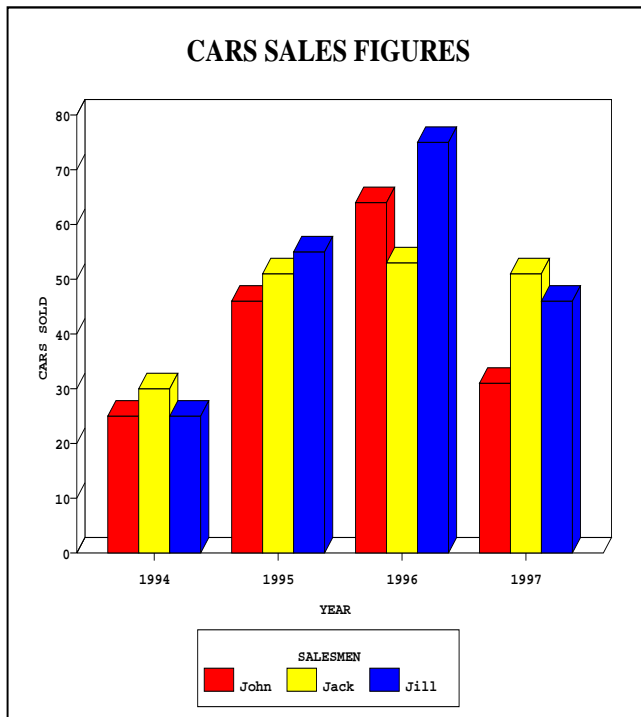
2 Pick and point the graph type you want by entering the number of the graph you require and pressing **RETURN**. See the following pages for details of the types of graphs you can plot.

3 Press **ESC e** or press **F6** to accept your entry and plot the graph. Press **RETURN** to continue.

The following pages show the types of graphs you can plot.

Create and Modify Graphso **Vertical Bar Chart**

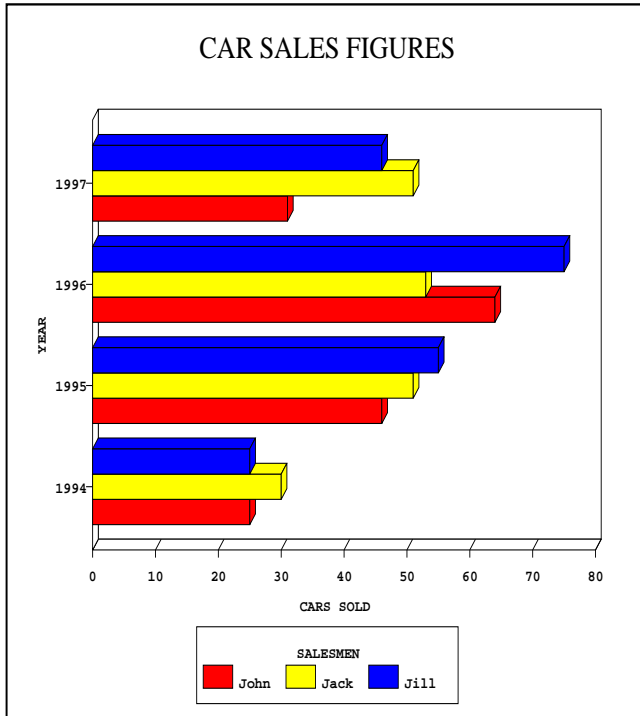
This is the default graph. Uniplex plots the data as a Vertical Bar chart if you do not specify otherwise. Each group is plotted as a group of vertical bars with each data series within that group represented as a single bar.



Create and Modify Graphs

o Horizontal Bar Chart

Each group is plotted as a group of horizontal bars with each data series represented as a single bar.



Create and Modify Graphs

o **Pie Chart**

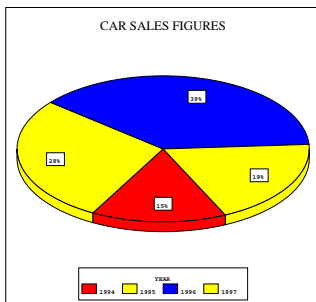
Uniplex plots the first data series from the Data Table (the first column in the table). You can plot a maximum of 15 segments on a Pie chart. You cannot plot Pie charts from Data Tables containing negative values.

Plot each data series separately by excluding all the other data series before plotting the graph if you have more than one data series and want to represent each as a Pie chart. See *Include/Exclude Data Series*.

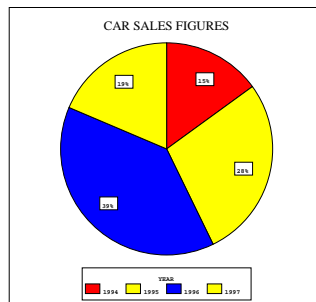
Uniplex plots the segments in a clockwise direction. Use the Re-order Groups facility if you want to change this order.

Default 3D Pie Chart

First Segment at 6 o'Clock

**Default 2D Pie Chart**

First Segment at 12 o'Clock



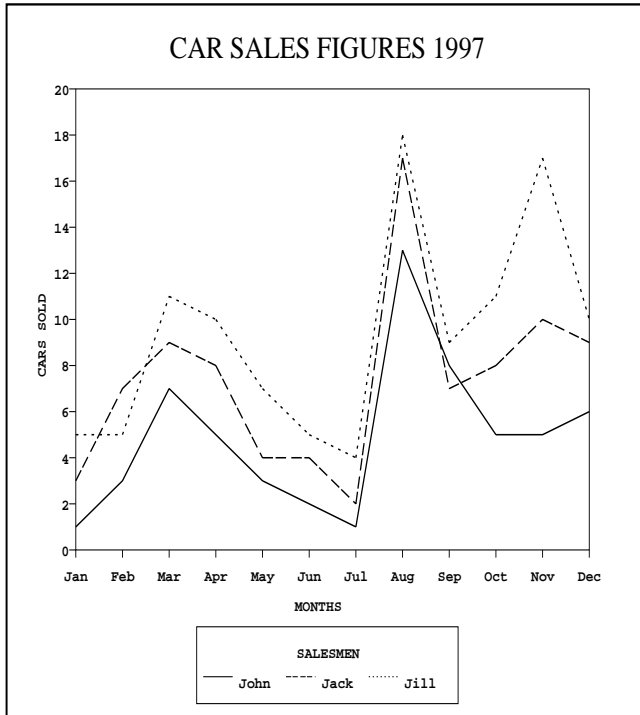
- ✎ *Uniplex displays a warning message if the data does not add up to 100% for Pie charts with percentage segments. Adjust the data entries accordingly.*



Create and Modify Graphs

o Line Graph

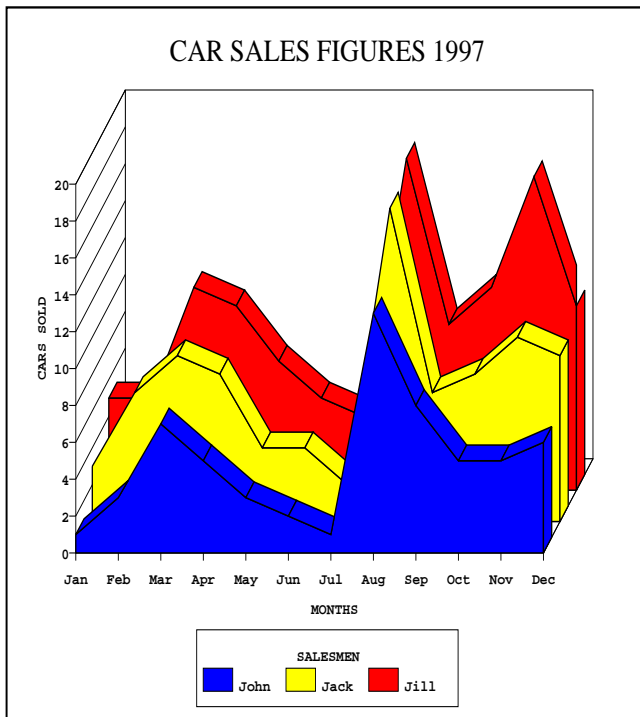
Uniplex plots each group as a line with each data series as a point on the line. There is a unique fixed marker type for each line type on a line graph. You can change the line type.



Create and Modify Graphs

o Area Graph

Uniplex plots each group as a line. Each data series is a point on that line. The area below the line is filled in. The area representing each group label is measured from the category axis. You cannot plot an area graph to show negative data.

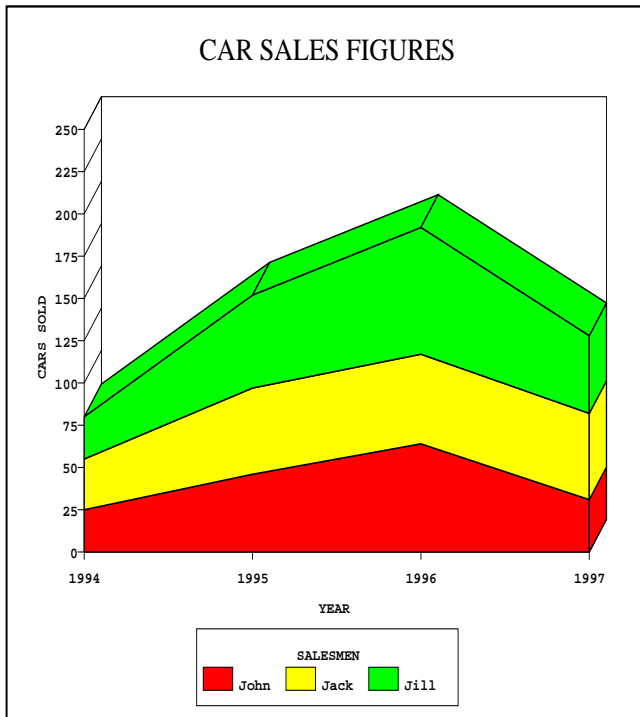




Create and Modify Graphs

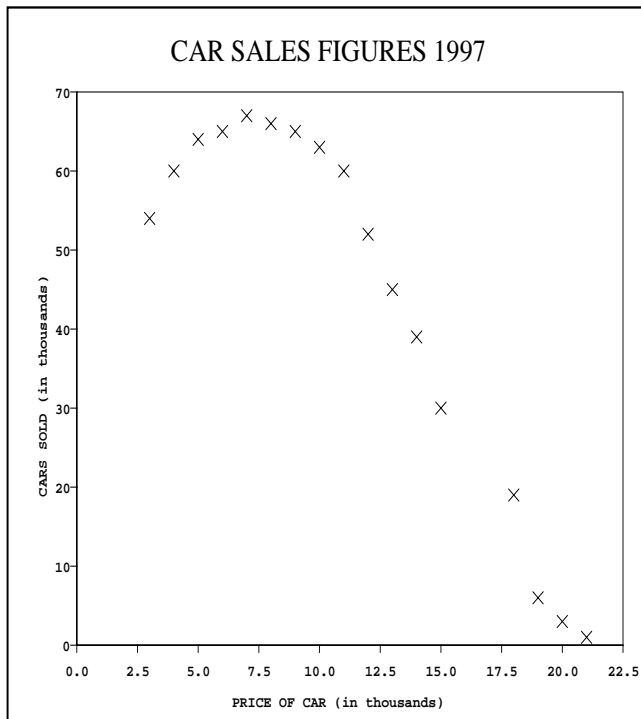
o Stacked Area Graph

Uniplex plots each group as a line. Each of the data series is a point on that line. The area below the line is filled in. The filled area for each group label is measured from the last group line unlike an ordinary area graph. Therefore, the area for each group stacks on top of the last group area. You cannot plot a stacked area graph to show negative data.



o Scatter Graph

Uniplex plots the first two data series (the first two columns on the Data Table) against each other. The first data series is the x-axis, the second data series is the y-axis, and the markers show where the data series intersect. Uniplex does not plot a legend on scatter graphs. All scatter graph points are shown using the same marker type, depending on which one you have selected.

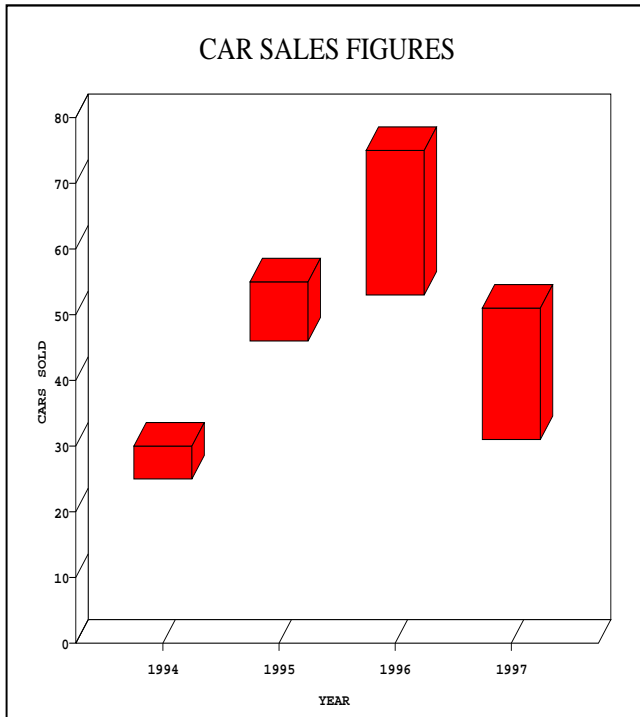




Create and Modify Graphs

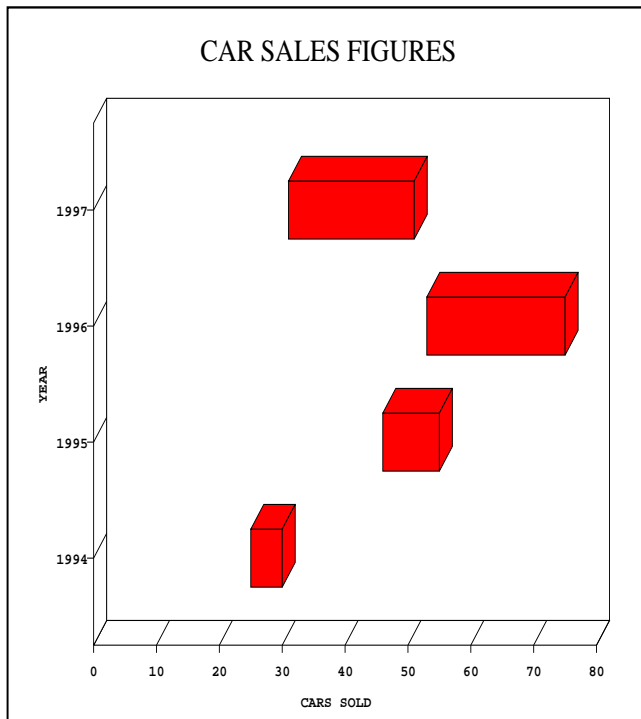
o Vertical Max-Min Bar Chart

Each group is represented as a single vertical bar. Each bar shows the range of the data series within each group. Uniplex does not plot a legend on max-min graph types. All bars are plotted in the same shade, style, or color.



- **Horizontal Max-Min Bar Chart**

Each group is represented as a single horizontal bar. Each bar shows the range of the data series within each group. Uniplex does not plot a legend on max-min graph types. All bars are plotted in the same shade, style, or color.

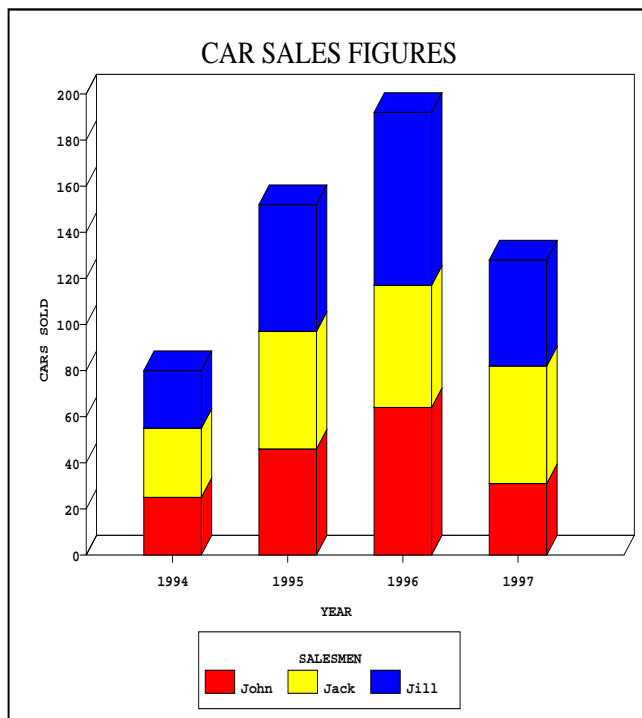




Create and Modify Graphs

o Vertical Stacked Bar Chart

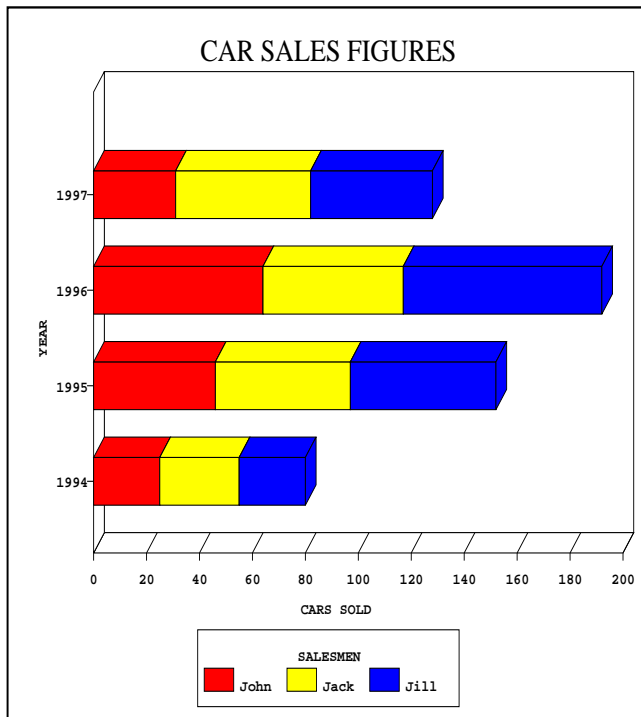
Each group is represented as a single vertical bar with each data series within the group as a section of that bar. Therefore, the height of the resulting column of bars indicates the sum total of the data series within that group. You cannot plot vertical stacked bar charts from Data Tables containing negative values.



Create and Modify Graphs

o **Horizontal Stacked Bar Chart**

Each group is represented as a single horizontal bar with each data series within the group as a section of that bar. You cannot plot horizontal stacked bar charts from Data Tables containing negative values.

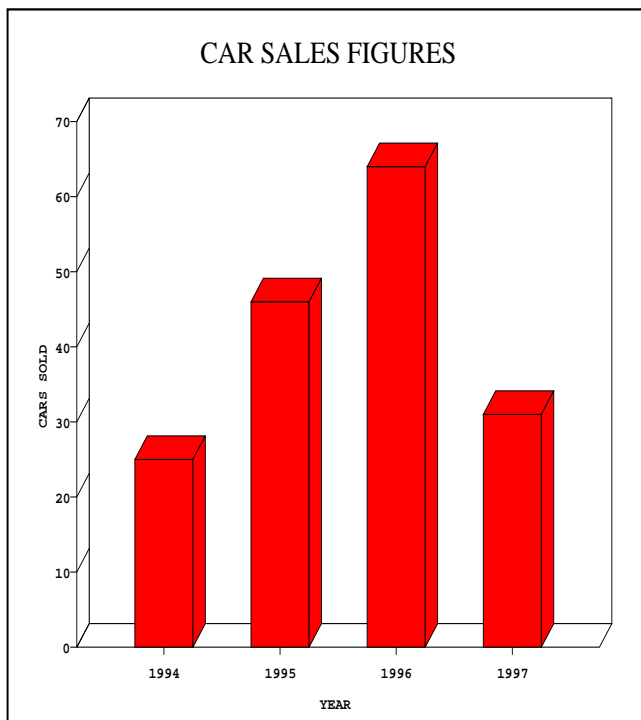




Create and Modify Graphs

o Histogram

Uniplex plots the first data series from the Data Table (the first column in the table). You cannot plot histograms from Data Tables containing negative values. Histograms do not contain a graph legend. The bars are all shown in the same shade.



◆ Adjust Graph Display

You can make various alterations to a graph, such as the data, the scale, the position of the legend, and the spacing between bars on bar charts. For example, you can change the size and font for the title, or the order of the groups, or perhaps, put grid lines on the graph to help you read the data.

You make these adjustments using the `Display Format` option. You can change the display format of the following aspects of the graph:

- o Layout
- o Color, Shading, Marker, and Line Style
- o Axis Scale
- o Exploded Pie Segments
- o Text Display
- o Order of Groups or Data Series
- o Exclusion of Groups or Data Series
- o Transposition of Data

To change the display of the graph:

- 1 Pick and point the `Display Format` option.

Uniplex displays the `Alter Display Format` menu. There is a different `Alter Display Format` menu for each of the graph types.

- ✎ *Some of the menu options will change according to the graph type currently selected. For example, Option 4 becomes `Explode Pie Segments` if the current graph type is a pie chart.*



Adjust Graph Display

Graph:

ALTER DISPLAY FORMAT

05/11/99 14:44

```

1 - Switch Options
2 - Change Graph Type
3 - Change Bar Colors
4 - Axis Scaling
5 - Text Display Attributes
6 - Re-order Groups
7 - Re-order Data Series
8 - Include/Exclude Groups
9 - Include/Exclude Data Series

T - Transpose Data
V - View Graph
R - Redraw Graph
H - Help
Q - Quit

```

F1=Enter

F4=Quit

F6=View Graph

- 2 Pick and point the option you require. Follow the instructions in the following sections on how to use these options.
- 3 When you have made the adjustment, you can:
 - o Press **ESC e** to accept the change.
 - o Press **F6** to accept the change and replot the graph on the full screen. Press **RETURN** to continue.
 - o Press **F5** to accept the change and replot the graph on the right side of the screen.

✎ *Uniplex cannot display the form and the graph simultaneously if the terminal does not have split screen capabilities. Uniplex plots the graph on the full screen if you press **F5**.*

Adjust Graph Display

◇ Change Fill, Shading, or Style

You can set various options depending on graph type:

Graph Type	Attribute Type
Line	Line Style
Scatter	Marker Style
Others	Shade, Color, or Pattern (the fill for bars, area blocks, segments, and 3D lines)

There are various colors, patterns, shades, lines, and markers from which you can choose. These depend partly on the terminal capabilities (*i.e.*, the color attributes will not appear if you have a monochrome display). These are the standard options you can choose:

Colors	Patterns	Shades
RED	SOLID	Shade 1 70%
YELLOW	HORIZ LINES	Shade 2 10%
GREEN	45deg LINES	Shade 3 40%
CYAN	VERT LINES	Shade 4 30%
BLUE	135deg LINES	Shade 5 90%
MAGENTA	HORIZ LATTICE	Shade 6 60%
FOREGROUND	45deg LATTICE	Shade 7 100%
BACKGROUND	HOLLOW	Shade 8 0%
LIGHT RED	BRICKS	Shade 9 35%
LIGHT YELLOW	FISH SCALES	Shade 10 5%
LIGHT GREEN	BASKET WEAVE	Shade 11 20%
LIGHT CYAN	CHESS BOARD	Shade 12 15%
LIGHT BLUE	LOZENGES	Shade 13 45%
LIGHT MAGENTA	FRIEZE	Shade 14 25%
LIGHT GREY	ROTATE BRICKS	Shade 15 20%
DARK GREY	ROTATE FRIEZE	Shade 16 80%



Adjust Graph Display

- ✎ *Background is black or white, depending on how the terminal is set up. Foreground is the contrast to background, either black or white.*

Lines

SOLID
DOT
DASH
DASH DOT
DOT DOT
DASH DASH
DOT DASH DASH
DASH DOT DOT

Markers

POINT
PLUS
STAR
SQUARE
CROSS
DIAMOND
HORIZ BOWTIE
VERT BOWTIE

To set graph shadings, lines, colors, patterns, shades, or markers:

- 1 Pick and point the option for changing the line, color, or marker. This will vary according to the type of graph you are using. For example, the vertical bar chart shows the option:

`Change Bar Colors`

- ✎ *You can only select the option for changing fills if there is some data already entered in the graph.*

Uniplex displays a form listing each data series on the graph with a field showing the current fill.

- 2 Use **TAB** or the arrow keys to move to the field you want to set.
 - ✎ *Uniplex shows the new order if you changed the order of the groups or data series. Uniplex does not display any excluded data series on the graph.*
- 3 Press **SPACEBAR** to scroll to the option which specifies the color, line, or marker you want to set for each field.

Adjust Graph Display

- ✎ *Press any key other than **SPACEBAR**, a function key, or **RETURN** to see a popup menu of all the options available. Uniplex displays a list of options. Pick and point the one you want.*

Press **F7** if you want to set a shade or pattern for each data series instead of a color. This is the flip command. Use **F7** as you use **SPACEBAR** to scroll through options.

- 4 Press **ESC e** to accept the changes.

or

Press **F6** to accept the change and plot the graph on the full screen. Press **RETURN** to continue.

or

Press **F5** to accept the change and replot the graph shown on the right side of your screen.

- ✎ *Uniplex cannot display the form and the graph simultaneously if the terminal does not have split screen capabilities. Press **F5** to plot the graph on the full screen.*

◇ Switch Options

The switch options allow you to change the layout of the graph. You can access the switch options from the Presentation Graphics menu or from the Alter Display Format menu. There are many layout changes you can make with the switch options. These are explained in *Switch Options*.

◇ Axis Scale

You can set the scale for the value axis to any value required. You specify a lower and upper limit for the scale and set either automatic or manual scaling. It is not required that the lower and upper limits both be manual or automatic. You can set one as automatic and



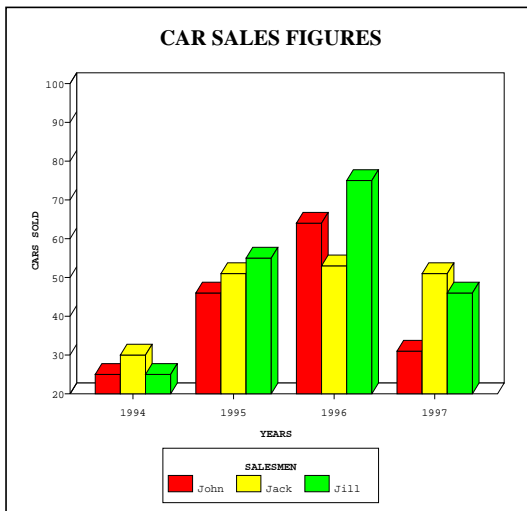
Adjust Graph Display

one as manual. For example, you can force the lower limit to zero and let Uniplex set the upper limit for you.

Uniplex calculates an appropriate limit for the scale if you set automatic scaling. This limit is slightly higher than the highest value in the data series. This means that the axis can be divided into logical stepped marks. You are not restricted to values outside the data series values if you set manual scaling. For example, Uniplex only plots a portion of the data series if you set the higher limit to a value lower than the highest value in the data series. You can examine portions of the graph data in this way.

The Axis Scaling form shows the highest and lowest values in the data series as a guide when it is displayed.

Below is an example of how you can exaggerate the height of the bars by reducing the range of the value axis scale. The *Worked Example* graph has been plotted with the lower and upper limits set to 20 and 100, respectively:





Adjust Graph Display

You can set the position of the category axis in addition to setting the scaling for a graph. Uniplex plots the category axis at zero by default. You can change this to a different value if required.

Set the axis scaling:

- 1 Pick and point the **axis scaling** option.
- 2 Set the Lower Limit field to either **AUTOMATIC** or **MANUAL** scaling by pressing **SPACEBAR** to display the required setting.
- 3 Set the Upper Limit field to either **AUTOMATIC** or **MANUAL** scaling by pressing **SPACEBAR** to display the required setting.
- 4 Enter the lower limit for the scale in the Lower Limit Manual Values field if you set manual scaling for the lower limit.
- 5 Enter the upper limit for the scale in the Upper Limit Manual Values field if you set manual scaling for the upper limit.
- 6 Enter a value for the category axis in the Category Axis field if required.
- 7 Press **ESC e** to accept the entries.

or

Press **F6** to accept the change and plot the graph on the full screen. Press **RETURN** to continue.

or

Press **F5** to accept the change and replot the graph shown on the right side of the screen.

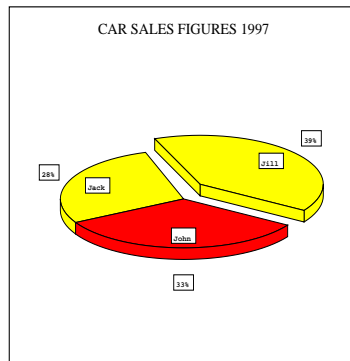
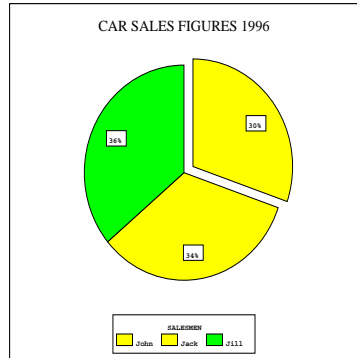
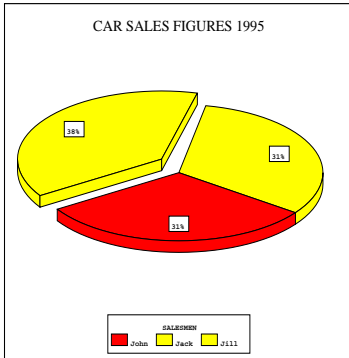
⚡ *Uniplex cannot display the form and the graph simultaneously if the terminal does not have split screen capabilities. Press **F5** to plot the graph on the full screen.*



Adjust Graph Display

◇ Explode Pie Segment

You can explode one or more pie segments. It is useful to explode a pie segment when you want to emphasize a particular item of data. For example:





Explode a pie segment:

- 1 Pick and point the `Explode Pie Segment` option.
 - ✎ *You can only select this option after entering some data values in the Graph Data Table.*
- Uniplex displays the `Exploded Pie Segment` form with each segment label listed.
- 2 Press **TAB** or **DOWN ARROW** to move to the segment label you want to explode.
 - 3 Press **SPACEBAR** to switch between `YES` or `NO`. Set this field to `YES` if you want this label segment exploded.

◇ Set Text Display

You can specify how the text on the graph is displayed, either when creating the graph or when modifying the graph. You can specify the following for each piece of text on the graph:

- o **Include or Not.** You can specify whether the text is displayed on the graph or not. This does not mean the text is deleted, but is just not displayed.
- o **Font Size.** The font size is scaled from 1 through 4 where 1 is small and 4 is large. The actual sizes available depend on the capabilities of the terminal. See the System Administrator for details.
- o **Font Type.** You can choose the font in which the text is displayed or printed. The fonts types are numbered 1 through 4 where each number represents a different font type and style. The combinations available depend on the terminal you are using. See the System Administrator for details.



Adjust Graph Display

Change the default text display attributes:

- 1 Pick and point the `Text Display Attributes` option:

Graph: `CHANGE TEXT DISPLAY ATTRIBUTES`

TEXT	INCLUDE	SIZE	FONT
Main Title	[YES]	[2]	[2]
Subtitle	[YES]	[1]	[2]
Footnote	[YES]	[1]	[3]
LEGEND			
Heading	[YES]	[1]	[2]
Labels	[YES]	[1]	[1]
AXIS HEADINGS			
Category Axis	[YES]	[1]	[2]
Value Axis	[YES]	[1]	[2]
AXIS LABELS			
Category Axis	[YES]	[1]	[1]
Value Axis	[YES]	[1]	[1]

`F1=Enter F2>Save F3-Easi-Print F4=Quit F6=View Graph`

- 2 Press **TAB** to move between fields. Press **SPACEBAR** to scroll the entries in the fields or enter numbers in the numeric fields.
- 3 Press **ESC e** when you have made the changes.

◇ Reorder Groups

You can specify the order in which the groups are plotted. For example, if you have the following data (from the *Worked Example* section):

	John	Jack	Jill
1994	25	30	25
1995	46	51	55
1996	64	53	75
1997	31	51	46

You have groups: 1994, 1995, 1996, and 1997. Uniplex plots the groups in the order they are entered: 1994, 1995, 1996, and 1997, by default. You can change the order in which the groups are plotted either manually or automatically.

Specify the exact order you want the groups shown to change the order manually. For example, using the above data you can specify that the groups are ordered as: 1997, 1995, 1994, and 1996.

Specify whether you want **ASCENDING** or **DESCENDING** order and whether you want the groups sorted by **DATA SERIES** or by **TOTALS** to change the order automatically. Choose the data series you want to use if you specify sorting by data series. Uniplex sorts the data series for this group into ascending or descending order and then sorts the remaining groups into this order.

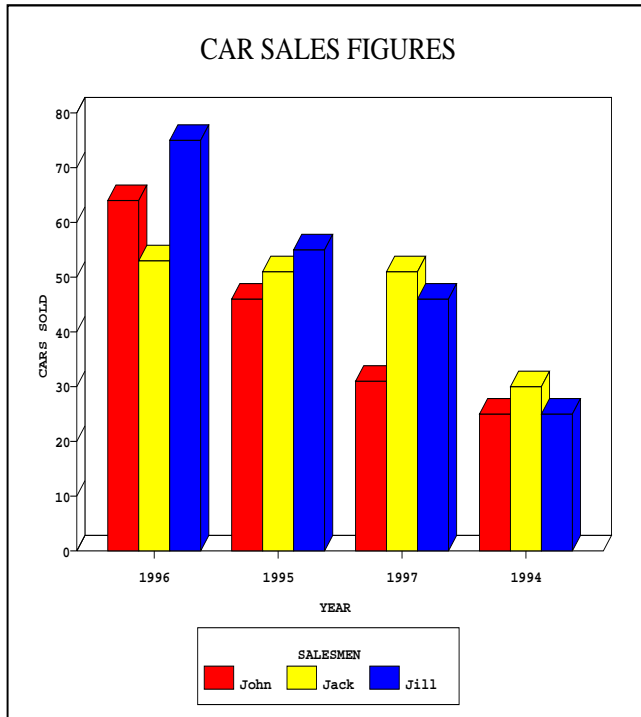
You could specify that you want to order the groups by Data Series John into descending order. Uniplex sorts this data as follows:

	John
1996	64
1995	46
1997	31
1994	25



Adjust Graph Display

Uniplex plots the groups in the order: 1996, 1995, 1997, and 1994 when you plot the graph:

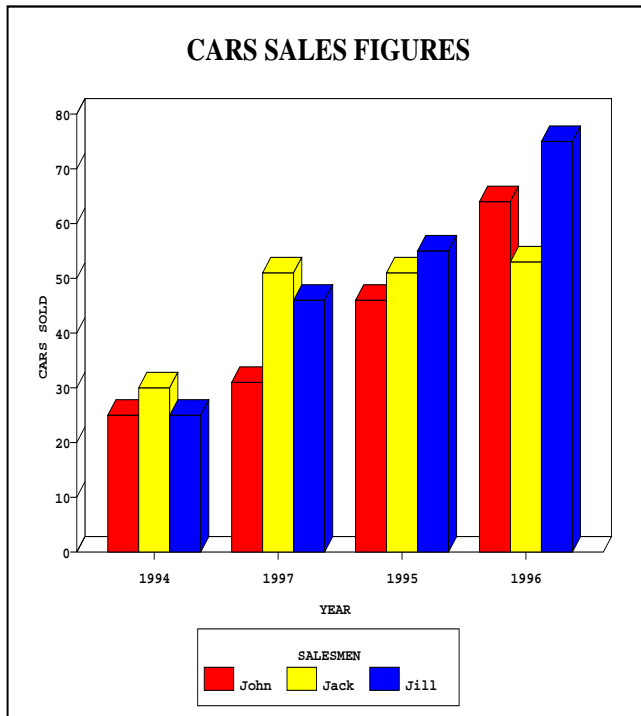


Adjust Graph Display

Uniplex adds each group and sorts the groups depending on the result if you specify `TOTALS`. For example, using the above data:

	John	Jack	Jill	(Totals)
1994	25	30	25	(80)
1995	46	51	55	(152)
1996	64	53	75	(192)
1997	31	51	46	(128)

Uniplex sorts the groups into: 1994 (total of 80), 1997 (total of 128), 1995 (total of 152), and 1996 (total of 192) if you specify sorting into ascending order on totals. The graph is plotted as follows:





Adjust Graph Display

To reorder the groups:

- 1 Pick and point the `Re-order Groups` option.

✎ *You can only select this option after entering some data values in the Graph Data Table.*

Reorder the groups either manually or automatically as follows:

- o Reorder the groups manually:
 - a) Leave the Order field set to `MANUAL`. Press **ESC e**.
 - b) Use **TAB** to move between the Order fields.
 - c) Change the order as required.
 - d) Press **ESC e** when the order is correct.

or

Press **F6** to accept the change and plot the graph on the full screen. Press **RETURN** to continue.

or

Press **F5** to accept the change and replot the graph shown on the right side of the screen.

✎ *Uniplex cannot display the form and graph simultaneously if the terminal does not have split screen capabilities. Press **F5** to plot the graph on the full screen.*

Adjust Graph Display

- o Reorder the groups automatically:
 - a) Press **SPACEBAR** to change the Order field to `AUTOMATIC`. Press **ESC e**.

Uniplex displays the `Re-order Groups Automatically` form.
 - b) Press **SPACEBAR** to select the sort order (`ASCENDING OF DESCENDING`). Press **TAB** to move to the next field.
 - c) Press **SPACEBAR** to select either `DATA SERIES OR TOTALS`. Press **ESC e**.

Uniplex displays a pick and point list of the available data series if you select that option. Pick and point the data series on which the groups are to be sorted.

- d) Press **ESC e**.

or

Press **F6** to accept the change and plot the graph on the full screen. Press **RETURN** to continue.

or

Press **F5** to accept the change and replot the graph shown on the right side of the screen.

✍ *Uniplex cannot display the form and the graph simultaneously if the terminal does not have split screen capabilities. Press **F5** to plot the graph on the full screen.*

Uniplex sorts the groups into the order you have specified. Uniplex shows the groups in this order when you next plot the graph. Uniplex shows the order you have specified here when you use other Graph Adjustment options that show the order of the groups.



Adjust Graph Display



Reorder Data Series

You can specify the order in which the data series are displayed. For example, if you have the following data (from the *Worked Example* section):

	John	Jack	Jill
1994	25	30	25
1995	46	51	55
1996	64	53	75
1997	31	51	46

You have the data series: John, Jack, and Jill. Uniplex plots the data series in the default order: John, Jack, and Jill if you plot the default vertical bar chart.

You can change the order in which the data series are plotted either manually or automatically.

Specify exactly the order you want the data series shown to change the order manually. For example, using the above data you can specify that the series are ordered as Jill, Jack, and John.

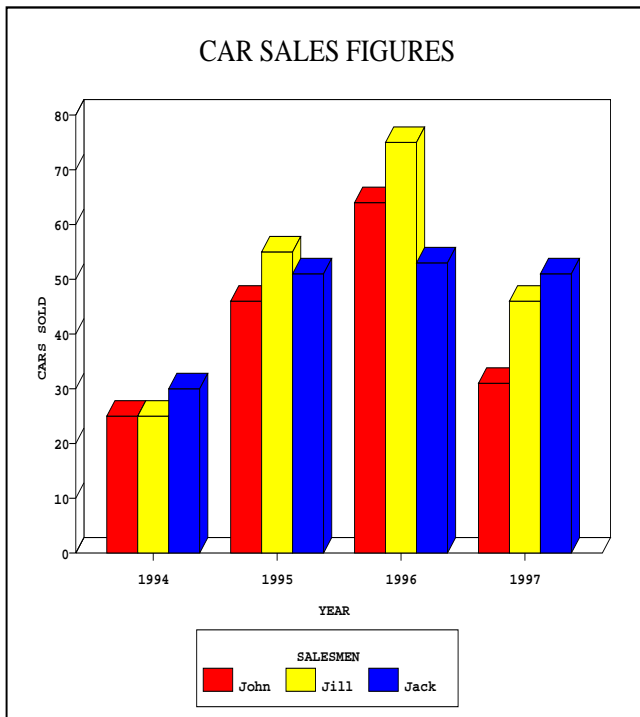
Specify whether you want `ASCENDING` or `DESCENDING` order and whether you want the data series sorted by `GROUP` or by `TOTALS` to change the order automatically. Choose the group you want to use if you specified `GROUP`. Uniplex sorts the data series for this group into ascending or descending order and then sorts the data series for the remaining groups into the same order.

Adjust Graph Display

For example, using the above data you could specify that you want to order the data series by the 1997 group in ascending order. Uniplex sorts this data as follows:

	John	Jill	Jack
1997	31	46	51

Uniplex plots the data series in every group in the order John, Jill, and Jack when you plot the graph. For example:



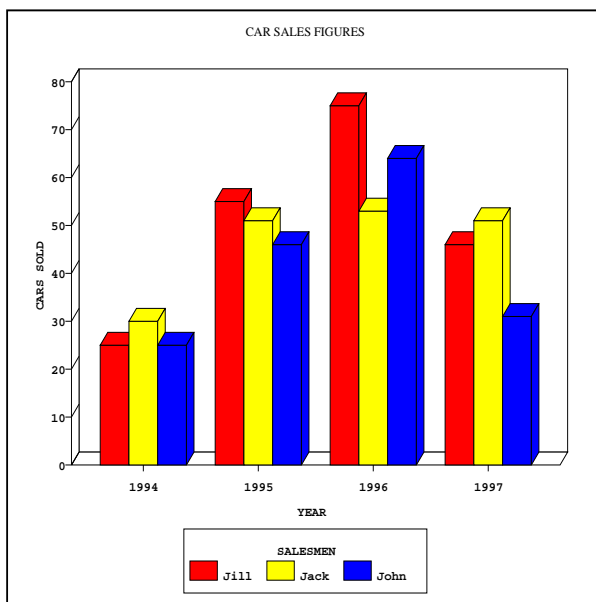


Adjust Graph Display

Uniplex adds each set of data series and sorts the data series, depending on the result, into ascending or descending order if you specify **TOTALS**. For example, using the data below:

	John	Jack	Jill
1994	25	30	25
1995	46	51	55
1996	64	53	75
1997	31	51	46
(Total	166	185	201)

Uniplex sorts the groups into: Jill (201), Jack (185), and John (166), and plots the data series for the graph in this order if you specify sorting into descending order on totals. For example:





Reorder the data series:

- 1 Pick and point the `Re-order Data Series` option.

✎ *You can only select this option after entering some data values in the Graph Data Table.*

Reorder the data series either manually or automatically as follows:

- o Reorder the data series manually:
 - a) Leave the Order field set to `MANUAL`. Press **ESC e**.
 - b) Use **TAB** to move between the Order fields.
 - c) Change the order as required.
 - d) Press **ESC e** when the order is correct.

or

Press **F6** to accept the change and plot the graph on the full screen. Press **RETURN** to continue.

or

Press **F5** to accept the change and replot the graph shown on the right side of the screen.

✎ *Uniplex cannot display the form and graph simultaneously if the terminal does not have split screen capabilities. Press **F5** to plot the graph on the full screen.*



Adjust Graph Display

- o Reorder the data series automatically:
 - a) Press **SPACEBAR** to change the Order field to **AUTOMATIC**. Press **ESC e**

The **Automatic Data Series Re-ordering** form displays.

- b) Press **SPACEBAR** to select the sort order (**ASCENDING** OR **DESCENDING**). Press **TAB** to move to the next field.
 - c) Press **SPACEBAR** to select either **GROUP** OR **TOTALS**. Press **ESC e**

Uniplex displays a pick and point list of the groups if you select **GROUP**. Pick and point the group on which you want to sort the data series.

- d) Press **ESC e**

or

Press **F6** to accept the change and plot the graph on the full screen. Press **RETURN** to continue.

or

Press **F5** to accept the change and replot the graph shown on the right side of the screen.

✍ *Uniplex cannot display the form and the graph simultaneously if the terminal does not have split screen capabilities. Press **F5** to plot the graph on the full screen.*

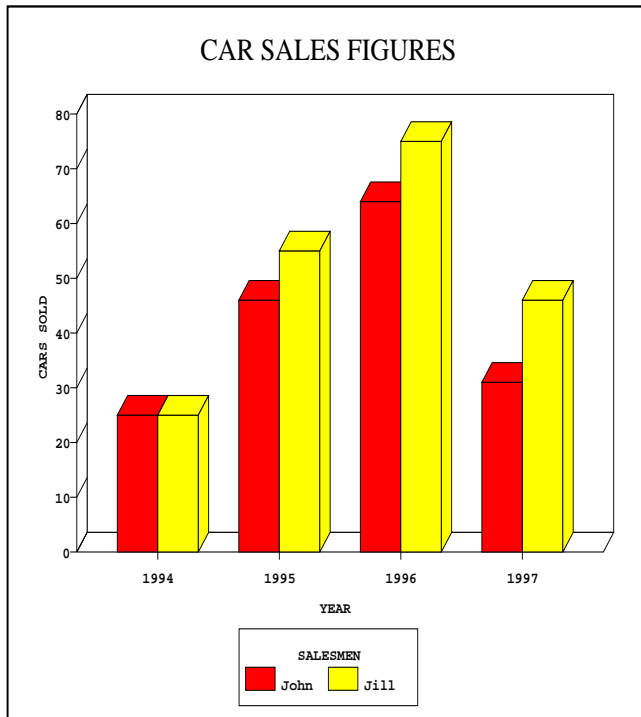
Uniplex sorts the data series into the order you have specified. Uniplex shows the data series in this order when you next plot the graph. Uniplex displays the order of the Data Series in the order you have specified when you use other Graph Adjustment options that show the order of the data series.

Adjust Graph Display

◇ Include/Exclude Data Series

Uniplex plots all groups that exist in the Graph Data Table by default. You can specify which data series you want included when you plot the graph. Uniplex does not delete the data, but merely does not display it when it plots the graph if you do not want a data series included.

For example, if you exclude Jack from the *Worked Example* graph:



- Plot each data series separately by excluding the appropriate data series before plotting the graph if you have more than one data series and want to represent each as a pie chart.



Adjust Graph Display

Include or exclude a data series from a graph:

- 1 Pick and point the `Include/Exclude Data Series` option.
 - ✍ *You can only select this option after entering some data values in the Graph Data Table.*

Uniplex displays the `Include/Exclude Data Series` form.

- 2 Use **SPACEBAR** to scroll the entry for each data series field to `YES` or `NO`, depending on whether you want the data series included or not.

Use **TAB** and the arrow keys to move between fields.

- ✍ *Uniplex shows the ordering you have chosen if you have changed the order of the data series.*

- 3 Press **ESC e** to accept the changes.

or

Press **F6** to accept the change and plot the graph on the full screen. Press **RETURN** to continue.

or

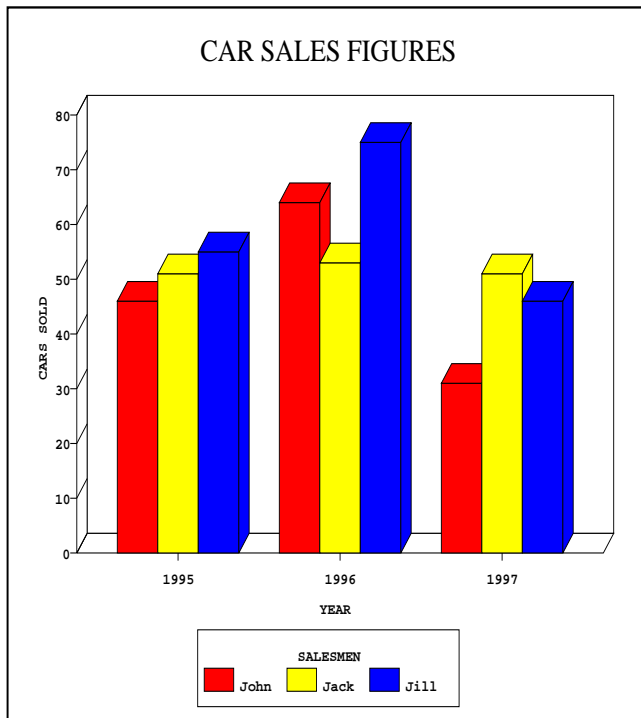
Press **F5** to accept the change and replot the graph shown on the right side of the screen.

- ✍ *Uniplex cannot display the form and the graph simultaneously if the terminal does not have split screen capabilities, Press **F5** to plot the graph on the full screen.*
- ✍ *Uniplex excludes a data series from the other attribute forms (i.e., the Color Fill form) when you exclude it.*

◇ Include/Exclude Groups

Uniplex plots all groups that exist in the Graph Data Table by default. You can specify which groups you want included when you plot the graph. Uniplex does not delete the data, but merely does not display it when it plots the graph if you want a group excluded.

For example, if you exclude 1994 from the *Worked Example* graph:





Adjust Graph Display

Include or exclude a group from a graph:

- 1 Pick and point the `Include/Exclude Group` option.
 - ✎ *You can only select this option after entering some data values in the Graph Data Table.*

Uniplex displays the `Include/Exclude Group` form.

- 2 Press **SPACEBAR** to scroll the entry for each group field to **YES** or **NO**, depending on whether you want the group included or not.

Use **TAB** and the arrow keys to move between fields.

- ✎ *Uniplex shows the order you have chosen if you have changed the order of the groups.*

- 3 Press **ESC e** to accept your changes or press **ESC q** to quit.

or

Press **F6** to accept the change and plot the graph on the full screen. Press **RETURN** to continue.

or

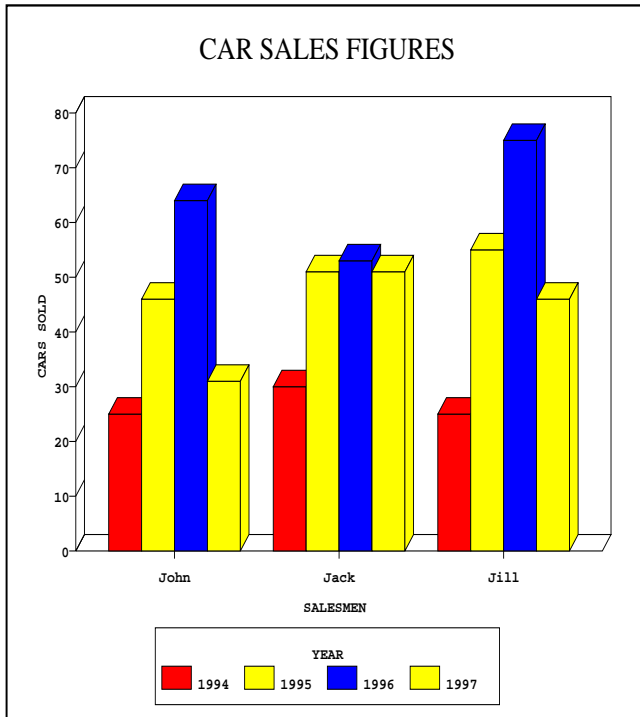
Press **F5** to accept the change and replot the graph shown on the right side of the screen.

- ✎ *Uniplex cannot display the form and the graph simultaneously if the terminal does not have split screen capabilities. Press **F5** to plot the graph on the full screen.*
- ✎ *Uniplex excludes a group from the other attribute forms (i.e., the Shade/Line/Marker Type form) when you exclude it.*

◇ Transpose Data

You enter the data as a group series and a data series. You can transpose the data so that the group series becomes the data series and vice versa.

For example, the *Worked Example* graph with the data transposed:





Adjust Graph Display

To transpose data:

- 1 Pick and point the **Transpose Data** option. Uniplex displays the **Transpose Data** form (same as the **Reset to Defaults** form; see *Reset Graph Adjustments* for details).
- 2 Set the options in the form to either **YES** or **NO**. Use **TAB** and the arrow keys to move around the form. Press **SPACEBAR** to scroll between settings.

The following table explains each of the options in the form.

Field	Setting
Clear Text Fields	Leave this set to NO unless you want to enter new text for the graph.
Reset Text Attributes	Leave this set to NO unless you want to reset the text attributes. See <i>Set Text Display</i> for details.
Reset Shade Settings	Leave this set to YES unless you want the same shade settings, even though you have transposed the data. See <i>Change Fill, Shading, or Style</i> for details.
Reset Exploded Pie Segments	Leave this set to YES unless you want the same exploded pie segments, even though you have transposed the data. See <i>Explode Pie Segment</i> for details.
Reset Excluded Data Series	Leave this set to YES unless you want the same data series excluded, even though you have transposed the data. See <i>Include/Exclude Data Series</i> for details.

**Adjust Graph Display**

Field	Setting
Reset Excluded Groups	Leave this set to YES unless you want the same groups excluded, even though you have transposed the data. See <i>Include/Exclude Groups</i> for details.
Reset Group Re-ordering	Leave this set to YES unless you want the same reordering for groups, even though you have transposed the data. See <i>Reorder Groups</i> for details.
Reset Data Series Re-ordering	Leave this set to YES unless you want the same reordering for data series, even though you have transposed the data. See <i>Reorder Data Series</i> for details.
Reset Axis Scaling	Leave this set to YES unless you want the same scale for the axis, even though you have transposed the data. See <i>Axis Scale</i> for details.
Reset Options	Leave this set to YES unless you want the Switch Options set the same, even though you have transposed the data. See <i>Switch Options</i> for details.



Switch Options

◆ Switch Options

The switch options allow you to adjust the layout of the graph. You simply select a series of options on the Switch Options form and Uniplex adjusts the graph accordingly.

There is a different Switch Option form for each type of graph. The options are retained for the current graph until you want to change them again once you have made a series of entries. The switch options allow you to switch various graph attributes on and off or make other adjustments to them. For example, you can switch 3D effect on and off or choose the position you want the legend to display.

There are a number of switch options. Each graph type has a different set of available switch options. The following table lists all the available switch options and summarizes the possible entries you can choose. The options are then described in detail in the subsections which follow. Lastly, there is a section entitled, *Individual Switch Options*. This shows which switch options are available for each of the different types of graphs.

Switch Option	Entry
3D Effect	Select YES for 3D effect and NO for 2D effect.
Overlay	Select YES for overlapped bars in all bar charts or NO for bars placed side-by-side.
Legend on Graph	Select YES to include a legend on the graph or NO for no legend.
Legend Position	Select RIGHT , LEFT , ABOVE , or BELOW to place the legend on the graph. Select AUTOMATIC if you want Uniplex to select the best position for the graph.



Switch Options

Switch Option	Entry
Legend Style	Select COLUMN or FLAT format. Select AUTOMATIC if you want Uniplex to select the best style for the graph.
Legend Box	Select YES for a box or NO for no surround.
Bar Group Spacing	Select YES for spaces or NO for no spaces.
Bar Series Spacing	Select YES for spaces or NO for no spaces.
Block Group Spacing	Select YES to show a space between blocks or NO to show no spaces.
Point Markers	Select YES to include point markers or NO for no markers.
Connecting Lines	Select YES to include a connecting line on scatter charts or NO for no line.
Grid Lines	Select VERTICAL lines only, HORIZONTAL lines only, or VERTICAL and HORIZONTAL lines together. Select AUTOMATIC if you want Uniplex to select the best grid for the graph.
Percent Labels	Select INSIDE PIE , OUTSIDE PIE , ON LEGEND , or OFF for no labels. This option only appears on pie charts.
Text Labels	Select INSIDE PIE , OUTSIDE PIE , ON LEGEND , or OFF for no labels. This option only appears on pie charts.
Frame Box	Select YES for a box around the graph or NO for no surround.



Switch Options

Use **SPACEBAR** to scroll through the options. Press any character key to display a pick and point list of the available options in each scrollable field.

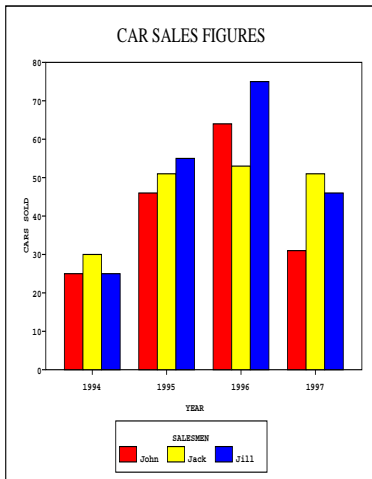
Not all of the switch options appear on each of the individual Switch Options forms because not all of them are applicable to every type of graph. Each type of graph has its own special version of the Switch Options form. These are shown in *Individual Switch Options*.

◇ 3D Effect

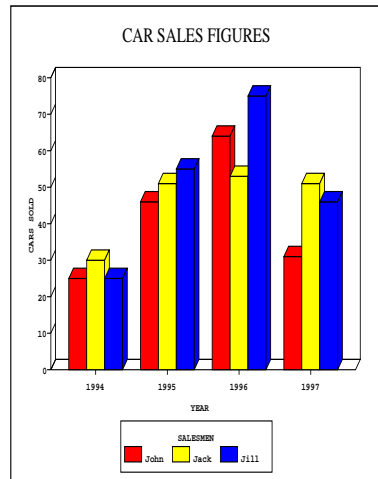
You can display a graph in 3D or 2D effect. 3D effect gives the illusion that the shapes on the graph are solid. 2D effect displays the graph flat.

The default setting is **YES** for 3D effect.

2D Graph



3D Graph

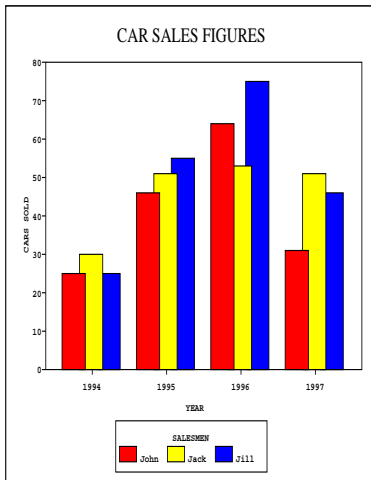


◇ Overlay Bars

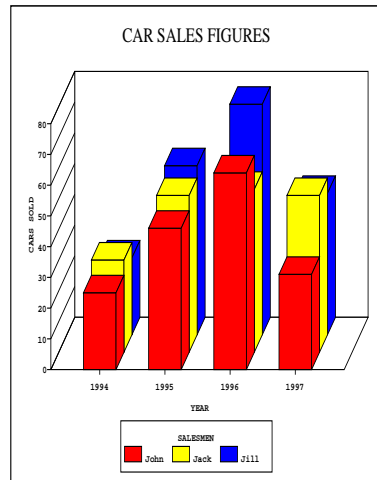
You can overlay the bars on bar charts. This makes the bars appear slightly overlapped. The bars are stacked one in front of another in 3D charts.

The default setting is `NO` for no overlaid bars.

Overlaid 2D Graph



Overlaid 3D Graph





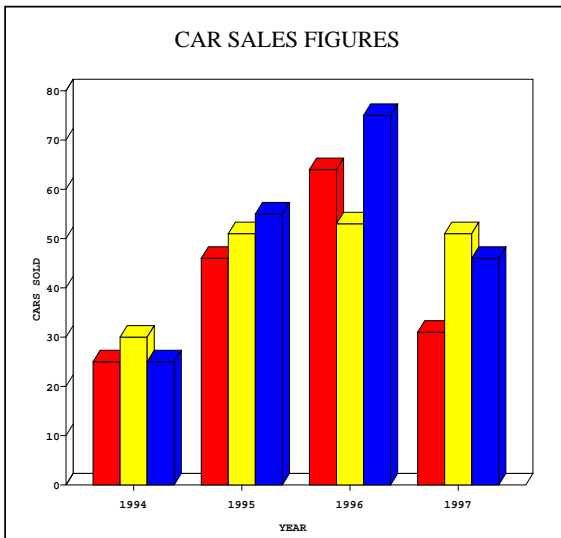
Switch Options

◇ Legend Display

A legend is a set of labels which describe what each of the filled shapes on the graph represent. It is a key to the bars, pie segments, or pattern marks on the graph. You can choose not to display a legend.

It is unnecessary to include a legend for a graph with only one group. The maximum number of groups you can show in a legend is fifteen. The legend is always set apart from the main graph area.

The default setting is `YES` to include a legend. You can adjust the position and style if you choose to include a legend. Here is an example of a graph without a legend:



◇ Legend Box

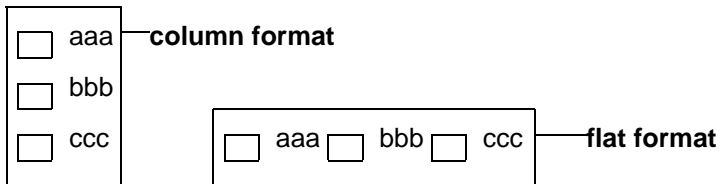
You can choose to surround the legend in a box or leave it without a frame. The default setting is `YES` to include a frame.

◇ Legend Position

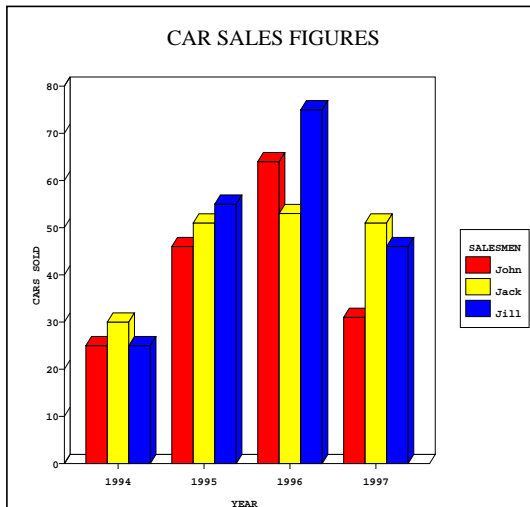
The legend can be placed to the right, left, above, or below the graph. You can allow Uniplex to select the best position, according to the style of the legend and the type of graph, by enabling the `AUTOMATIC` option. This is the default setting.

◇ Legend Style

The legend can be in column format with the labels in a list or flat format with the labels in a line.



Here is a graph with a legend in column format on the right:





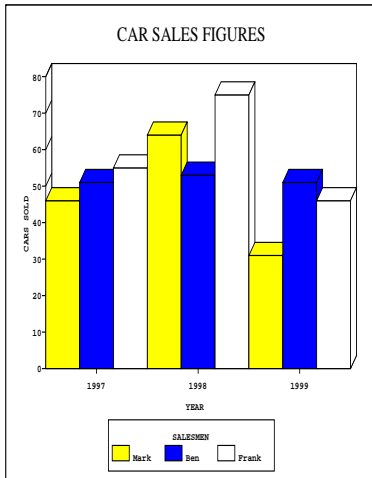
Switch Options

◇ Space Bar Groups

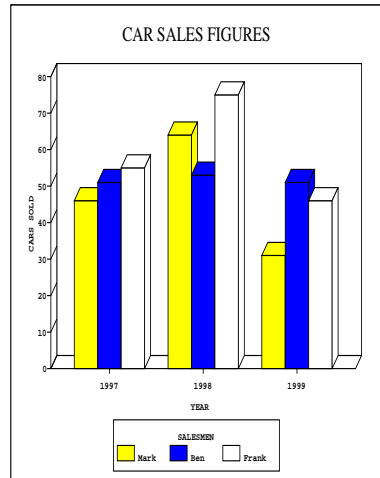
You can display space between groups of bars which represent the data series. This helps highlight each bar group.

The default setting is `YES` to place spaces between groups of bars.

3D Chart without Bar Group Spaces



3D Chart with Bar Group Spaces



◇ Block Group Spacing

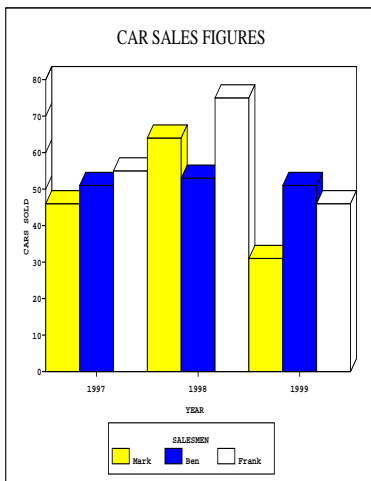
You can choose to put spaces between the filled blocks on an area or stacked area chart. The default setting is `YES` to include spaces between blocks.

◇ Space Bar Series

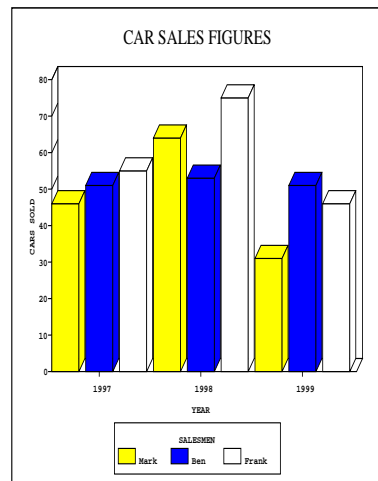
You can display a bar chart with spaces between the bar series. This means Uniplex puts spaces between each bar.

The default setting is `NO` to not include spaces between bars.

3D Chart without Bar Series Spaces



3D Chart with Bar Series Spaces



◇ Line Graph Point Markers

Uniplex plots a line graph showing each group as a line with each data series as a point on this line. You can choose to display a line graph with or without point markers. The default setting is `YES` to include point markers.



Switch Options

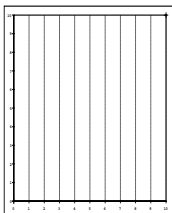
◇ Scatter Graph Connecting Lines

You can choose to connect the point markers on a scatter graph with a line. A line helps you show a trend in the data by connecting point markers in the order in which the groups occur in the Data Table. It is meaningless to switch this option on unless one of the data series is in ascending or descending order.

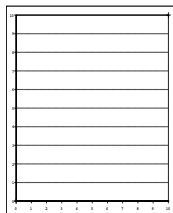
The default setting is **NO** to not include a connecting line between the point markers.

◇ Grid Lines

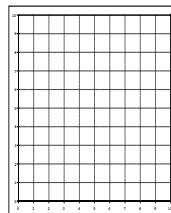
Grid lines can help you read the data on the graph more clearly. Grid lines draw a set of vertical or horizontal lines parallel to the data values on an axis. The grid lines are drawn on the background of the graph. You can choose to show only vertical lines, only horizontal lines, or both vertical and horizontal lines:



Horizontal



Vertical



Horizontal/Vertical

You can leave the selection of grid lines to Uniplex by selecting the **AUTOMATIC** option. You do not have to include grid lines at all. See *Graph Types* for examples of graphs with and without grid lines.

The default setting is **OFF** to not include any grid lines.

◇ Pie Chart Percent Labels

Percent labels are only available on pie charts. Each pie segment represents a percentage of the whole chart. You can locate the label which shows the percent figure for each segment in various positions:

- o On the Segment
- o Outside the Segment
- o On the Legend

You can also choose not to display a percent label by selecting the **OFF** option. See *Explode Pie Segment* for examples of pie charts with percentage labels.

The default setting is **INSIDE PIE** to place percentage labels on the pie segments.

◇ Pie Chart Text Labels

Text labels show which segment of a pie chart represents which group or item on it. You can locate text labels in exactly the same way you locate percent labels. See the previous section for details.

The default setting is **ON LEGEND** to place text labels on the chart legend.

◇ Frame a Graph

You can choose to enclose the entire graph in a boxed frame. You do not have to frame the graph.

The default setting is **YES** to frame the graph.



Switch Options

◇ Individual Switch Options

Each type of graph has specialized switch options to change its layout as discussed in the following sections. Scroll through the options by pressing **SPACEBAR**. See the beginning of this section for details of each option. Move from field to field by using **UP ARROW** and **DOWN ARROW**.

Vertical/Horizontal Bar Chart

This is the Switch Option form for the Vertical Bar Chart. The Horizontal Bar Chart form has the same options.

VERTICAL BAR CHART	
3D Effect	[YES]
Overlay	[YES]
Legend on Graph	[YES]
Legend Position	[AUTOMATIC]
Legend Style	[AUTOMATIC]
Legend Box	[YES]
Bar Group Spacing	[YES]
Bar Series Spacing	[NO]
Grid Lines	[OFF]
Frame Box	[YES]

Line Graph

This is the Switch Option form for the Line Graph.

LINE CHART	
3D Effect	[YES]
Legend on Graph	[YES]
Legend Position	[AUTOMATIC]
Legend Style	[AUTOMATIC]
Legend Box	[YES]
Point Markers	[NO]
Grid Lines	[OFF]
Frame Box	[YES]

Vertical/Horizontal Stacked Bar Chart

This is the Switch Option form for the Vertical Stacked Bar Chart. The Horizontal Stacked Bar Chart form has the same options.

VERTICAL STACKED BAR CHART	
3D Effect	[YES]
Legend on Graph	[YES]
Legend Position	[AUTOMATIC]
Legend Style	[AUTOMATIC]
Legend Box	[YES]
Bar Group Spacing	[YES]
Grid Lines	[OFF]
Frame Box	[YES]

Vertical/Horizontal Max-Min Bar Chart and Histogram

This is the Switch Option form for the Vertical Max-Min Bar Chart. The Histogram and the Horizontal Bar Chart forms have the same options.

VERTICAL MAX-MIN BAR CHART	
3D Effect	[YES]
Bar Group Spacing	[YES]
Grid Lines	[OFF]
Frame Box	[YES]

Scatter Graph

This is the Switch Option form for the Scatter Graph.

SCATTER GRAPH	
Connecting Lines	[NO]
Grid Lines	[OFF]
Frame Box	[YES]

Switch Options

Area Graph

This is the Switch Option form for the Area Graph.

AREA CHART	
3D Effect	[YES]
Legend on Graph	[YES]
Legend Position	[AUTOMATIC]
Legend Style	[AUTOMATIC]
Legend Box	[YES]
Block Group Spacing	[YES]
Grid Lines	[OFF]
Frame Box	[YES]

Stacked Area Graph

The Switch Option form for the Stacked Area Graph is a variation of the Area Graph Switch Option form (see above). The Stacked Area Graph Switch Option form does not have the option, *Block Group Spacing*.

Pie Chart

This is the Switch Option form for the Pie Chart.

PIE CHART	
3D Effect	[YES]
Legend on Graph	[YES]
Legend Position	[AUTOMATIC]
Legend Style	[AUTOMATIC]
Legend Box	[YES]
Percent Labels	[YES]
Text Labels	[NO]
Frame Box	[YES]



◇ Set the Switch Options

You adjust the appearance of the graph using the Switch Options form. Uniplex displays the Switch Options form and the graph simultaneously if the terminal has split screen capabilities. Press the **F5** softkey to replot the graph showing the change in adjustments you make.

Uniplex shows the Switch Options form on the full screen if the terminal does not have split screen capabilities. Press **F5** to replot the graph on the full screen. You can press **F6** to plot the graph on the full screen irrespective of whether the terminal has split screen capabilities. To set the switch options:

- 1 Pick and point `switch options` from the `Presentation Graphics` menu or pick and point `Display Format`, then `Switch Options`.
- 2 Move between the fields with **TAB** and **ARROW**, then press **SPACEBAR** to scroll field options. See the table at *Switch Options* above for details of each option.
- 3 Press **F6** to accept the changes and plot the graph on the full screen. Press **RETURN** to continue.

or

Press **F5** to accept the changes and replot the graph at the right of the screen if the terminal has split screen capabilities (otherwise this will also plot full screen).

- 4 Press **ESC e** to save changes and exit.

or

Press **ESC q** to quit.



Reset Graph Adjustments

◆ Reset Graph Adjustments

You can reset the adjustments and return the graph to its original state after making changes to a graph. This allows you to experiment with different types of text and layout without losing the graph with which you started. To reset a graph:

- 1 Pick and point `Reset` options from the `Presentation Graphics` menu. Uniplex displays the `Reset to Defaults` form:

Graph: R E S E T T O D E F A U L T S

Enter which of the fields you would like to reset to their default settings.

Clear Text Fields	[YES]
Reset Text Attributes	[YES]
Reset Shade Settings	[YES]
Reset Exploded Pie Segments	[YES]
Reset Excluded Data Series	[YES]
Reset Excluded Groups	[YES]
Reset Group Re-ordering	[YES]
Reset Data Series Re-ordering	[YES]
Reset Axis Scaling	[YES]
Reset Switch Options	[YES]

F1=Enter F2>Save F3=Easi-Print F4=Quit F6=View Graph

- 2 Scroll the settings to either `YES` or `NO` (see *Transpose Data* for details on each of the options in this form).
- 3 Press **ESC e** to save the form and reset the graph. Uniplex displays the following prompt:

Press * to confirm or RETURN to quit []

- 4 Either confirm the reset options or quit to abandon the reset.

◆ Graph Administration**◇ Save a Graph**

You must save after creating or modifying a graph to keep it for later use. To save the current graph:

- 1 Pick and point the `save Graph` option.
- 2 Enter the filename for the graph and press **RETURN** to save it to the current folder.

Enter the full pathname of the folder followed by the filename of the graph and press **RETURN** to save the graph to a named folder. Uniplex saves the graph.

✎ *You can save an existing graph by typing **ESC w**.*

◇ Print a Graph

You can print a graph using one of two options:

- o **Easi-print**. This option prints unsaved graphs. This is useful if you create a graph and want to see how it looks when it is printed, before you save it. You can then make adjustments to the graph as you require.
- o **Print Graph**. This option prints saved graphs.

Print a graph using Easi-print:

- o Pick and point the `Easi-print` option from the `Presentation Graphics` main menu. Select the `Easi-print` option by entering **ESC p** if you are viewing a graph. Uniplex prints the current graph.



Graph Administration

Print a graph using Print Graph:

- 1 Pick and point the `Print Graph` option. Uniplex displays a printing selection form.
- 2 Complete the form. Press **ESC e**

You can also include a graph in a Word Processor or Report Writer document by entering a `Print Graph` command. When you print the document Uniplex merges the relevant graph into the document. To print a graph in a document:

- 1 Create or edit a Uniplex document.
- 2 Move the cursor through the document to the point where you want the graph included.
- 3 Enter the following command:

```
.GR graph_filename [n b s r width height offset]
```

where

graph_filename The name of the file containing the saved graph. This is the name with which the graph was saved if you created it using Presentation Graphics or the Presentation Editor. This is the name of the save file if you created the graph using Spreadsheet Graphics.

n The graph number if it was created with the Spreadsheet and there is more than one graph in the save file.

b Specifies that you want the graph boxed when it is printed. Printing a boxed graph takes longer than a non-boxed graph.

Graph Administration

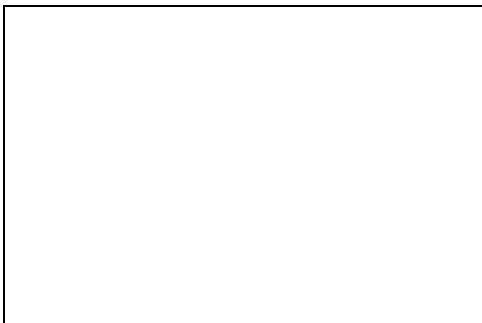
- s** Scales the graph to fit in the area you have assigned. The graph is centered within the area you assigned if this is not specified.
- r** Uses characters rather than lines to define the height. Also inserts the graph in the position you specify.
- width* The width in characters for the graph. A box is not needed if a width is specified. There must be a box in which to place the graph if no width is specified.
- height* The height in lines for the graph.
- offset* The offset in characters from the left margin.

You can specify where you want the graph to be by setting the width, height, and offset. For example:

```
.GR graph_filename b 40 15 5
```

This will create a graph inside a box 40 characters wide, 15 lines high, and indented 5 characters from the left-hand margin. Alternatively, you need only specify *graph_filename* and include a boxed area to display the graph. For example:

```
.GR sales_pie
```





Graph Administration

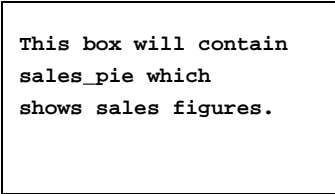
This box can be any size. Follow these guidelines when deciding on the size of the box:

- o Each dot on the Word Processor ruler generally represents one tenth inch.
- o Each line on the screen generally represents one sixth inch.

Make sure this box does not run over a page break. Uniplex does not print graphs over page breaks. Uniplex prints the graph on the second page if a box does run over a page.

You can include text within the box. Uniplex does not print this text when it prints the document unless the specified graph does not exist. You can include notes for yourself about the graph in this box. For example:

```
.GR sales_pie
```



```
This box will contain  
sales_pie which  
shows sales figures.
```

Uniplex prints the graph in this box when you print the document. See the **Integration** chapter for more details on how to position and scale graphic images.

◇ Other Administrative Functions

All other administrative functions are performed using the File Manager. This provides facilities to delete, rename, and copy a graph, for example. See the **Uniplex II Plus User Guide** for more details.

◆ Graph Type Guidelines

There are some basic rules for choosing among the various graph types. Decide the purpose of the graph including what you want to prove or which fact is to be highlighted. Different graph types can present the same information in both positive and negative lights. Base your choice in the data available, the presentation medium (terminal screen, slides, paper, etc.), and the intended audience's experience.

◇ Recommended Data Types

- Avoid plotting any kind of bar graph with more than four data series (four bars in each group).
- Avoid plotting a line graph with more than five groups (five lines on the graph).
- Avoid plotting pie charts with more than eight groups (eight segments in the pie).
- Remember that dark shaded patterns or alternatively bright colors get most attention (since they appear larger and closer) when changing the shading for a graph. Use this to your advantage when trying to prove a point by emphasizing an individual data series (or bar within a group).
- Use the Re-order Data Series and Re-order Groups options as another way to emphasize a point.
- Don't use a legend if it only includes one item since this is meaningless.



Graph Type Guidelines

◇ Recommended Graph Types

This section lists the graph types available with the recommended uses for each:

Graph Type	Recommended Uses
Bar Chart	Shows the value of an item as it varies at precise intervals over a period of time.
Line Graph	Shows large amounts of quantitative information to allow readers to quickly and easily see trends and relationships. Depicts trends over a period of time to show relative distribution of one variable.
Area Chart	Shows the same information as a line graph where the data has peaks and troughs and would look better filled below the line.
Histogram	Represents the distribution of data in each class or range where groups of data are presented in a bar chart format.
Pie Chart	Compares the relative proportions of the parts that make up the whole. The relationship to the whole of each part is easy to see.
Scatter Graph	Discovers the extent and type of relationship existing between two variables.
Stacked Bar Chart	Compares overall sums of different groups while also showing the relative proportions of the group components.
Max-Min	Compares data composed of values that consistently range between highs and lows. For example, temperature over a period of time.

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Chapter 2

Presentation Editor

Presentation Editor

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◆ Overview

The Presentation Editor (PED) lets you modify graphs you have created with Presentation Graphics or create simple graphic images, for example, simple shapes and illustrations.

You can create a graph using Presentation Graphics. You can enter the graph data, select the graph type, specify the graph text, and change the general appearance of the graph. The Presentation Editor lets you further refine the appearance of a graph. For example, you can change the position of some text, change the color of a solid, or add some additional simple objects. You can also use the Presentation Editor to create images such as logos.

You must have a graphics terminal to use PED. It is recommended that you use PED with a mouse (see below), but you can use it without one. The following sections describe some basic concepts for those who have not used a graphics application before.

Graphics Terminals

There are four general classes of terminals. The traditional terminal such as a Wyse 60, VT-100, or *telnet* emulation is character-based. This means that the screen area is divided into a grid of character cells, typically 80 characters wide and 24 lines long. PED cannot be used on character terminals nor can its graphics images be displayed. Presentation Graphics charts and graphs are simulated using line drawing characters and screen effects.

Some character terminals like the Wyse 99GT or Falco 5600 have a high-resolution display mode which can be used to view Presentation Graphics charts and graphs or PED images. This is a display-only mode and cannot be used to actually run PED.

Graphics terminals represent the screen in a different way. The screen on a graphics terminal is like a television screen. It is divided into scan lines and each scan line is divided into points. Each of these points can display a different color on a color graphics terminal. The points are used to build up an image.



Overview

High-resolution terminals like the Tektronix 4207 have a continuous graphics display which provides full PED functionality. X Window System terminals, workstation consoles, or X Window System emulators like SCO Vision or Hummingbird eXceed all support an X Window/Motif environment which is also suitable for PED. All of the X Window devices allow multiple screen windows so that the image may be viewed in one window, the data table in another, image editing controls in a third, and so on.

The Mouse

A mouse is a small hand-controlled device attached to a terminal. You use it to move the cursor around the screen. You give a command using the mouse by positioning the cursor on the screen and *clicking* one of its keys.

Mice are used in preference to traditional cursor movement keys because they let you move the cursor quickly and smoothly to provide a natural pointing action.

There are a number of mouse configurations available. You must have a mouse with at least two keys to use the Presentation Editor. This documentation refers to the mouse keys as follows:

Key 1 The leftmost key on the mouse.

Key 2 The key immediately to the right of **Key 1**.

◇ Terminology

Term	Explanation
Object	An item on a graph. See the next table.
Object Styles	There are four styles of objects: solids, lines, markers, and text. See the next table.
Attributes	Each object style has a number of attributes. See the next table.

Term	Explanation
Style Menu	The style menu shows each of the object styles. It is displayed at the top left of the screen and highlights the currently selected object style.
Attribute Menu	Each object style has a set of attributes. These attributes are shown in the attribute menus.
Attribute Entries	Each attribute menu shows the range of settings or entries for this attribute.
Click	To use a mouse key, you <i>click</i> it by pressing and releasing the key.

Each object style can have the following attributes:

Object Style	Members	Attributes	
Solids	Segments Boxes Polygons Arcs Circles	Outline Style Outline Width Outline Color	Fill Pattern Fill Color
Lines	Lines	Color Width	Style
Marks	Markers	Color Size	Type
Text	Text	Color Text Type Justification	Typeface Size Rotation

Overview

◇ Access the Presentation Editor

To access the Presentation Editor:

- 1 Pick and point the `Graphics` option from the `Main` menu.
- 2 Pick and point the `Create Graphics` option to invoke the Presentation Editor without a current graph.





or

Pick and point the `Edit Graphics` option to select a graph.

Uniplex displays the Presentation Editor screen. The screen is divided into two areas; the left side shows the Presentation Editor menu and the right side is the graph area. The Presentation Editor message line is at the bottom of the screen. PED displays prompts and messages in this line.

◇ The Presentation Editor Menu

The top menu in PED is the Object Style menu. It displays the four object styles: solid, line, mark, and text.

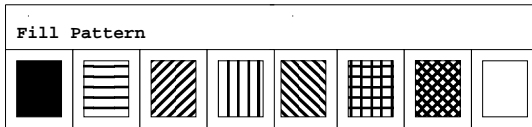
SOLID	LINE	MARK	TEXT
		 3	5 

Each object style has a set of attribute menus that you can use to change the appropriate object style. Only one set of these attribute menus can be displayed at any time. The highlight on the object style menus indicates which set of attribute menus is active when you select an object.

The active set of attribute menus is displayed immediately below the Object Style menu. Each attribute menu shows the available

settings for the appropriate object style. For example, lines have the attributes: color, width, and style. PED displays the three attribute menus: Line Color, Line Width, and Line Style when the `Lines` object style is selected.

Each attribute menu is split into entry boxes. Each box shows a different setting for this particular attribute. For example, the Fill Pattern menu for solids as shown on some terminals:



You can display the attributes menu for a style of object after you select it. Uniplex shows the settings of each attribute for this particular object, highlighting the current setting with a box.

Worked Example

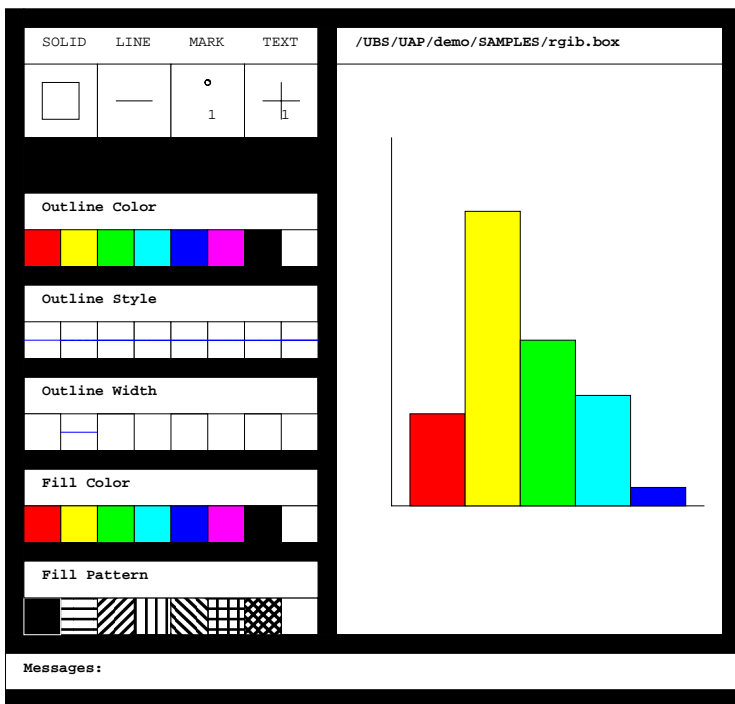
Worked Example

◆ Worked Example

The following example leads you through a typical session of using the Presentation Editor. Work through this example to become familiar with the capabilities of PED.

1 Display the PED Menu

- a) Pick and point the **Graphics** option from the **Main** menu.
- b) Pick and point the **Edit Graphics** option.



Worked Example

2 Select a Graph

A practice graph is provided with Uniplex. Select the practice graph by entering its name:

`/usr/UAP/demo/SAMPLES/rgip.box`

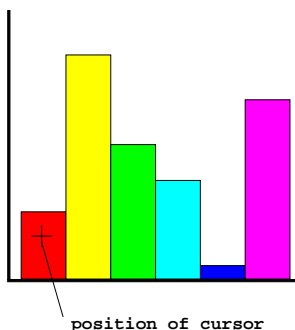
- ✎ *The location of the practice graph is machine-dependent. It is normally located as described above.*

Uniplex draws the graph on the right side of the screen. The left of the screen shows the aspects of the graph you can change.

3 Select an Object on the Graph

Move the mouse freely over the graph and the PED menu to shift the cursor in the same direction. The practice graph is a Vertical Bar chart. Modify any part of the graph by selecting any of its component objects:

- a) Move the cursor to the first bar of the chart:

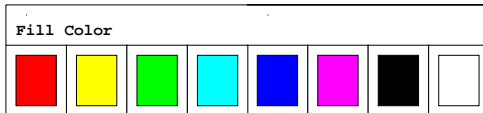


- b) Click any mouse key. A box displays around the bar to show that it is selected. The default attribute menus in PED are for a solid like this bar, so you do not need to change the current object style. Change the attributes as required.

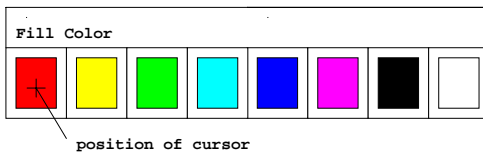
4 Change a Setting

You change a setting by simply selecting the setting you require. Change the color of the first bar as follows:

- a) Move the cursor to the `Fill Color` selection menu:



- b) Move the cursor to a color, for example, red:



- c) Click any mouse key.

Uniplex changes the color of the bar to the color you selected. Perhaps this color does not look quite right. Select another color or try changing the fill pattern.

5 Add Text

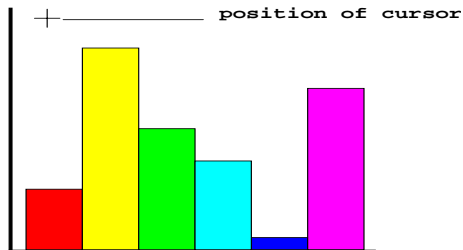
There is no text on the graph. Add some text as follows:

- a) Press **F8**. Press **F4**.
- b) Press **t**.
- c) Enter the following and press **RETURN**:

Rain Distribution in June

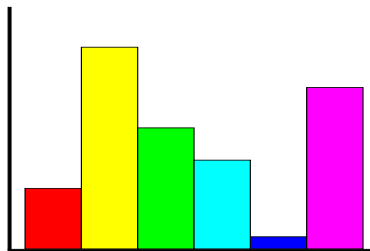
Worked Example

- d) Move the cursor to the top of the graph:



- e) Click any mouse key to include the text on the graph. For example:

Rain Distribution in June



- f) Press any keyboard key, for example, **SPACEBAR** to leave Add mode.
- ✎ *The text size required on some terminals is too small to display. Uniplex displays a crossed box in this situation to show the position of the text (see Add Text to select a larger text size so that it can be displayed).*

6 Move Text

You may find that the text is not quite in the right position for you. Move it as follows:

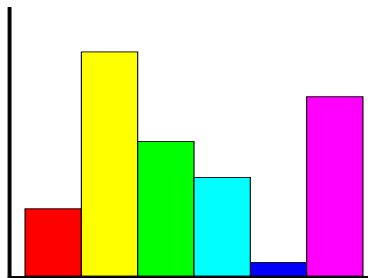
- a) Move the cursor to any point on the text.
- b) Click any of the mouse keys to select the text.

Uniplex displays a box around the text:

Rain Distribution in June

- c) Click **Key 2** to select the text for moving.
- d) Move the cursor above the present position of the text. For example:

+ ——— position of cursor
Rain Distribution in June



- e) Click **Key 2** again.

Uniplex moves the text to the new position.

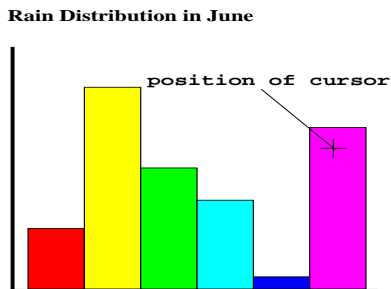


Worked Example

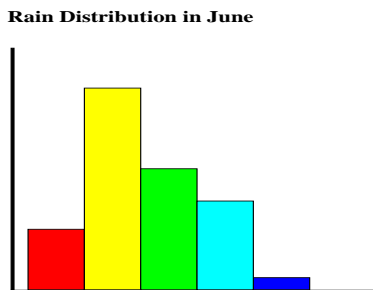
7 Delete an Object

Delete an object from the graph as follows:

- a) Move the cursor to the last bar on the right. For example:



- b) Click any mouse key.
- c) Press **CTRL c** or **DEL**
- d) Press * to confirm. The bar is deleted. For example:



The Presentation Editor worked example is complete. Continue changing the graph if you wish. Press **ESC q** to quit PED without saving the changes or press **F3** to save the graph as a new file. Enter a file name and press **RETURN**, then press **ESC q** to leave the Presentation Editor.

Reference

◆ Select a Graph

You can use any graph you created with Presentation Graphics with the Presentation Editor or any graph that is stored in the Redwood Graphics Interface Protocol (RGIP) format.

You lose the results of any changes you make with PED if you subsequently edit the graph with Presentation Graphics. Therefore, it is recommended that you create two copies of a graph; one for use with Presentation Graphics and one for use with PED, as follows:

- 1 Create the graph using Presentation Graphics.
- 2 Edit the graph using the Presentation Editor. Save this edited graph with a different name from the original graph.

◇ Existing Graph

Select a graph to work with as follows:

- 1 Display the **HOME** softkey menu, if it is not already displayed.
- 2 Press **F5**
- 3 Enter the name of the graph and press **RETURN**.

◇ Multiple Graphs

You can display up to four graphs at any one time. Uniplex splits the screen display into four windows. You can display the same graph in each window if you want. You can copy objects between the graphs.



Select a Graph

To display more than one graph:

1 Display the **HOME** softkey menu, if it is not already displayed.

2 Press **F7**

Uniplex splits the screen into four windows, and displays the current graph, if there is one, in the top left window.

3 Select them as follows if you want to select and display additional graphs:

a) Move the cursor into the window where you want to display the graph.

b) Press **F5**. Enter the name of the graph you want included. Uniplex displays the additional graphs in the following order:

1	2
3	4

☞ You can display up to four graphs at one time.

c) Select a graph by moving the cursor to anywhere within the window containing the graph and click any mouse key.

Uniplex highlights the currently selected graph with an outline box.

d) Select objects on a graph by first selecting the graph and then selecting the object in the normal way.

Select a Graph

- 4 Move to the window containing a graph and save or quit from that graph when you no longer wish to display it. See *Save Graph*.
- 5 Press **F7** to return to single graph display.

The graph you last selected is displayed by itself.

◇ **Create a Graphic Image**

You can use the Presentation Editor without an existing graph to create simple graphic images:

- 1 Access the Presentation Editor in the usual way.
- 2 Do not select a graph.
- 3 Draw any objects you want. See *Add Objects*.

Modify a Graph

◆ Modify a Graph

You can modify a selected graph as follows:

- o Modify Objects
- o Move Objects
- o Delete Objects
- o Add Objects

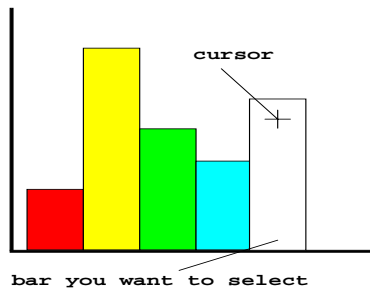
◇ Modify Objects

You can change the following on a graph:

- o Text
- o Solid Objects (segments, arcs, boxes, and polygons)
- o Lines
- o Marks

To modify the appearance of an object:

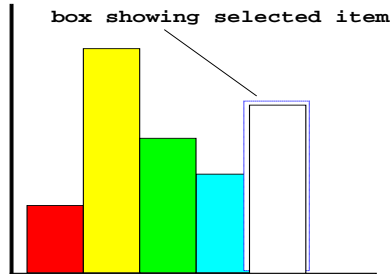
- 1 Move the cursor to a position within the object. For example, to select a bar on a bar chart, position the cursor within the bar:



Modify a Graph

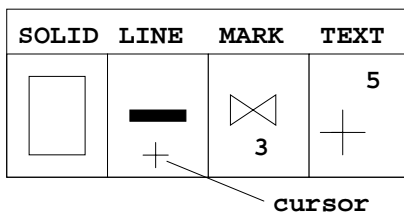
- Click any mouse key to select the object.

Uniplex highlights the selected item with a box, for example:



- Select the appropriate menu if the currently displayed menu is not the correct type for this style of object.

Move the cursor to the object style menu and position it over the box for this object style. For example:



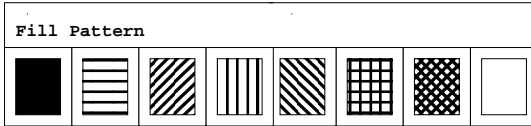
Click any mouse key.

Uniplex changes the displayed attribute menus to those for this style of object. In addition, it highlights this style of object on the style menu.

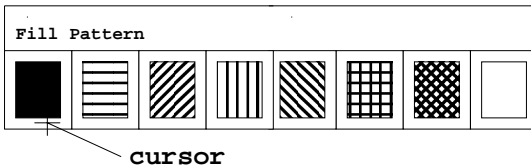


Modify a Graph

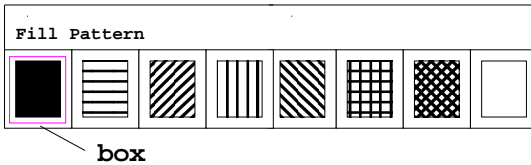
- 4 Move the cursor to the attribute menu for the setting you want to select. For example, move to the **Fill Pattern** menu:



- 5 Move the cursor over the setting you require. For example, move to the first pattern:



- 6 Click any mouse key to select the setting.



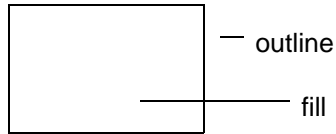
Uniplex changes the display of the object to the setting you selected, and displays a box around the setting you have chosen.

Modify a Graph

You can change the following:

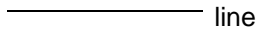
o **Solids**

- Outline Color
- Outline Style
- Outline Width
- Fill Color
- Fill Pattern



o **Lines**

- Color
- Style
- Width



o **Markers**

- Color
- Type
- Size

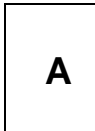
* x ^ example markers

o **Text**

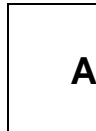
- Color
- Typeface
- Text Type
- Point Size
- Rotation and Justification

You can set whether the text is:

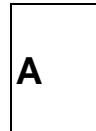
Justify Center



Justify Right



Justify Left



You can also choose to display text vertically and you can change its justification.

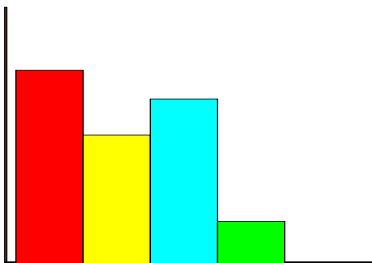
Modify a Graph

◇ Move Objects

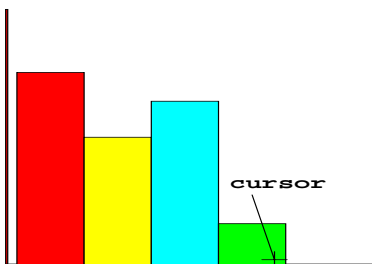
You can move any of the objects on a graph. It helps to use grid lines and grid snapping if you want to align vertical and horizontal lines when moving objects. See *Grids* for details.

To move an object:

- 1 Move the cursor to the object at the point you want to use to reposition the object. For example, you have the following Bar Chart and want to convert it into a Stacked Bar chart:



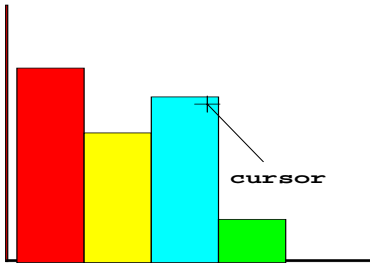
To reposition the last bar on the right on top of the middle bar you must position the cursor on one of the bottom corners of the bar. For example:



- 2 Click any mouse key to select the object.
- 3 Click **Key 2** to select the object for moving.

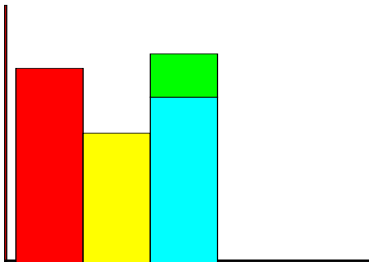
Modify a Graph

- 4 Position the cursor where you want the object placed. For example:



- 5 Click the **Key 2** to move the object to this position.

Uniplex moves the object to the point you selected, for example:



◇ **Delete an Object**

You can delete any object from the graph as follows:

- 1 Move the cursor over the object you want to delete.
- 2 Click any mouse key to select the object.
- 3 Press **CTRL c** or **DEL**. Press * to confirm the deletion.



Modify a Graph

◇ Add Objects

You can add the following types of objects to the graph:

- o Lines
- o Boxes
- o Markers
- o Segments
- o Arcs
- o Circles
- o Polygons
- o Text

It helps to use grid lines and grid snapping if you want to align vertical and horizontal lines when moving objects. See *Grids* for details. You can leave Add mode at any time by pressing any keyboard key or you can continue adding objects of the selected style until you leave Add mode. You can change the object style and attributes at any time while drawing an object. To add an object to the graph:

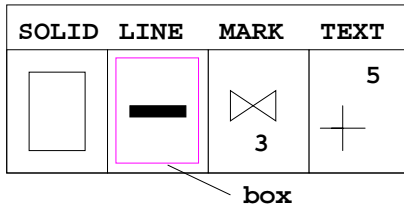
- 1 Display the **HOME** softkey menu if it is not already displayed.
- 2 Press **F8**, then **F4**
- 3 Enter the initial letter of the name of the object you want to draw, as follows:

Letter	Object	Letter	Object
l	Line	a	Arc
b	Box	c	Circle
m	Marker	p	Polygon
s	Segment	t	Text

- 4 Select the appropriate object type so that you can change attributes if you do not want the default settings.

Modify a Graph

Move the cursor to the Object Style menu, position it over the appropriate box, and click any mouse key. For example, position the cursor in the Line box to select the Line object type:



Uniplex indicates that the Line object has been selected by displaying a box around it. The subsidiary visual menus are changed to show the Line attributes.

- 5 Add or draw the object as described in the following sections.
- 6 Add additional objects if required.

or

Press any keyboard key to leave Add mode.

Draw a Line

- 1 Use the softkeys to specify that you want to draw a line. See *Add Objects*.
- 2 Position the cursor at the point where you want the line to start. Click any mouse key.
- 3 Position the cursor at the point where you want the line to end. Click any mouse key.



Modify a Graph

Draw a Box

- 1 Use the softkeys to specify that you want to draw a box. See *Add Objects*.
- 2 Position the cursor at the first corner of the box. Click any mouse key.
- 3 Position the cursor at the diagonally opposite corner of the box. Click any mouse key.

Draw a Marker

- 1 Use the softkeys to specify that you want to draw a marker. See *Add Objects*.
- 2 Position the cursor where you want the marker. Click any mouse key.

Draw a Segment

- 1 Use the softkeys to specify that you want to draw a segment. See *Add Objects*.
- 2 Position the cursor at the center point for the segment. Click any mouse key.
- 3 Position the cursor at the start of the segment. Click any mouse key.
- 4 Position the cursor to give the required subtended angle for the segment. Click any mouse key.

Draw an Arc

- 1 Use the softkeys to specify that you want to draw an arc. See *Add Objects*.
- 2 Position the cursor at the center of the arc. Click any mouse key.
- 3 Position the cursor at the start of the arc. Click any mouse key.
- 4 Position the cursor to give the required subtended angle for the arc. Click any mouse key.

Draw a Circle

- 1 Use the softkeys to specify you want to draw a circle. See *Add Objects*.
- 2 Position the cursor at the arc center of the circle. Click any mouse key.
- 3 Position the cursor at anywhere on the circumference. Click any mouse key.

Draw a Polygon

- 1 Use the softkeys to specify that you want to draw a polygon. See *Add Objects*.
- 2 Position the cursor at the first polygon point. Click any mouse key.
- 3 Add additional points for the polygon by clicking **Key 1**.
- 4 Click **Key 2** when you have provided all polygon points.

Modify a Graph

◇ Add Text

To add text:

- 1 Use the softkeys to specify that you want to add text. See *Add Objects*.
- 2 Enter the text and press **RETURN**.
- 3 Position the cursor for the text depending on the rotation and justification you have selected:

Position the cursor to the left of the position where you want the text placed if you have selected *left-justified* text. For example:

**Rain Distribution in June**
cursor

Position the cursor at the place that you want to be the center of the text if you have selected *centered* text. For example:

**Rain Distribution in June**
cursor

Position the cursor to the right of the position you want the text placed if you have selected *right-justified* text. For example:

**Rain Distribution in June**
cursor

Rotate the above positions by 90 degrees if you have selected *vertical* text.

- 4 Click any mouse key.

Uniplex adds the text.

The text size required is too small to display on some terminals. Uniplex displays a crossed box in this situation to show the position of the text. You can easily change the size of text so that it can be displayed:

- a) Select the `Text style` menu.
- b) Select a larger text size from the `Text Size Attribute` menu.

Grids

◆ Grids

You can use the Presentation Editor either with or without grids. It is useful to use grids when you want to align or add vertical or horizontal lines. There are three different pitches of grid. Grids are evenly spaced horizontal and vertical lines or points. Uniplex displays them across the length and width of the screen like the grids on graph paper.

When you are using grids, you can set grid *snapping*. When grid snapping is enabled, and you position the cursor for moving or adding objects, Uniplex uses the nearest grid point as the point you want to move from or as the start point for adding an object. Without grid snapping it is difficult to position the cursor precisely since there are so many positions on the screen and it can be difficult to move to these using the mouse.

Pixels are points on the screen. They are shown on the screen by a tiny display of light. The thousands of pixels on a computer screen make up the individual characters of the display.

✎ *You can move the cursor one pixel in any direction using the cursor keys. See **Mouseless Operation**.*

◇ Grid Display

To set grid display:

- 1 Display the **H**ome softkey menu, if it is not already displayed.
- 2 Press **F8** twice.
- 3 Press **F1** to display the **G**rid softkey menu.
- 4 Press **F1** to turn grids on or off.

◇ Grid Snapping

To set grid snapping:

- 1 Display the **H**ome softkey menu, if it is not already displayed.
- 2 Press **F8** twice.
- 3 Press **F1** to display the **G**rid softkey menu.
- 4 Press **F2** to enable or disable grid snapping.

◇ Grid Pitch

To set the grid pitch:

- 1 Display the **H**ome softkey menu, if it is not already displayed.
- 2 Press **F8** twice.
- 3 Press **F1** to display the **G**rid softkey menu.
- 4 Press **F3** to set the grid pitch.
- 5 Enter **0** and press **RETURN** to set the pitch to fine. Fine pitch shows the screen with 40 horizontal and 40 vertical lines.

or

Enter **1** and press **RETURN** to set the pitch to medium. Medium pitch shows the screen with 20 horizontal and 20 vertical lines.

or

Enter **2** and press **RETURN** to set the pitch to coarse. Coarse pitch shows the screen with 10 horizontal and 10 vertical lines.

Scale◆ **Scale**

You can change the scale of an object or a group of objects by enlarging or decreasing their size.

To scale the size of an object:

- 1 Display the **HOME** softkey menu, if it is not already displayed.
- 2 Press **F8**. Press **F3** to display the **EDIT** softkey menu.
- 3 Select the object you want to scale by positioning the cursor over the object and clicking any mouse key.
- 4 Press **F1**.
- 5 Enter the scaling factor as follows:

- o Enlarge the object:

Enter factor by which you want to enlarge the object. For example, enter 2 if you want the object twice as big; or, enter 10 if you want the object 10 times as big; or, enter 1.5 if you want the object one and a half times as big.

- o Reduce the object:

Enter the factor by which you want to reduce the object. For example, enter .5 if you want the object half as big; or, enter .1 if you want the object one tenth of its size.

Uniplex redraws the object to the scale you specified.

You can scale the position of groups of markers or text. For example, if the following set of markers are grouped:

* *

* *

You can scale the positions of the markers, relative to each other, by 50%. For example:

* *

* *

Use the Size Attribute menu for each of these styles of object if you want to change the size of single markers or lines of text.



Rotate

◆ Rotate

You can rotate any object or group of objects up to 360 degrees.

To rotate an object:

- 1 Display the `HOME` softkey menu, if it is not already displayed.
- 2 Press **F8**. Press **F3** to display the `EDIT` softkey menu.
- 3 Select the object you want to rotate by positioning the cursor over the object and clicking any mouse key.
- 4 Press **F3**.
- 5 Enter the rotation factor. For example:

Enter `90` if you want to rotate the object by 90 degrees; or, enter `270` if you want to rotate the object by 270 degrees.

Uniplex only rotates the position of the object when you rotate text and markers. For example, if you have the group:

Text Example 1

Text Example 2

You can rotate the group by 90 degrees as follows:

Text Example 1 Text Example 2

Use the `ROTATION ATTRIBUTE` menu for each of these styles of object if you want to rotate the object itself.

◆ Copy Objects

You can create a copy of an object. You can move the copy to wherever you want on the graph. It is useful to take copies of objects when you need more than one copy of the same object on the graph, since it eliminates the need to redraw the object.

To copy an object:

- 1 Display the **HOME** softkey menu, if it is not already displayed.
- 2 Select the object you want to copy by positioning the cursor over the object and clicking any mouse key.
- 3 Press **F8**. Press **F1**.

Uniplex creates a copy of the object slightly to the right and below the original object.

- 4 Move the object to the position you want it on the graph if required. See *Move Objects*.

Groups

◆ Groups

You can group individual objects that make up the graph, like lines, solids, and marks; then move and delete the group as one entity. To create a group:

- 1 Display the **H**OME softkey menu, if it is not already displayed.
- 2 Press **F8**. Press **F6** to display the **G**ROUP softkey menu.
- 3 Press **F1** to start creating a group.
- 4 Select the members of the group as follows:
 - a) Move the cursor to the first object.
 - b) Click any mouse key.
 - c) Move the cursor to other objects. Click any mouse key.

To deselect all selected objects on a graph and select all non-selected objects, move the cursor to a position where there are no objects drawn and click any mouse key. Selected objects are highlighted by a bounding box.

- 5 Press **F2** when you have selected all the objects you want as members of the groups.

To ungroup a group:

- 1 Display the **H**OME softkey menu, if it is not already displayed.
- 2 Press **F8**. Press **F6** to display the **G**ROUP softkey menu.
- 3 Select the group.
- 4 Press **F4** to ungroup.

◇ Using Groups

A group of objects can act as a single entity. Applying the same action to each object that makes up a graphic image is difficult, but the grouped image may be moved, deleted, scaled, or rotated with a single action. The entire group is selected when you pick any member of it. Click **Key 1** several times until the bounding box is only around a specific object if you don't want to select the entire group.

The bounding box of a single object may be the same as the bounding box for the entire group, for example, where a text block also has a background color of the same size. Resolve this situation as follows:

- 1 Move the cursor over a free space and click any mouse key. There are now no objects selected on the graph. Therefore, Uniplex does not display the bounding boxes.
- 2 Move the cursor over the group and click any mouse key. Uniplex selects the group, and therefore displays a bounding box around it.
- 3 Click any mouse key again. Uniplex selects the first member of the group. For example, the background box.

◇ Reorder Objects

When you want objects to overlap, the order they are drawn becomes important. Any object or group can be made to appear on top of or below all other graph objects, by using the pop and push commands. Only the ordering of the members within that group is affected if the currently selected object is a group member.

The ordering of the group affects which object can overlap others if you want to overlap objects in a group (for example bars on a bar chart). You can change the object or group drawing as follows.

Groups

Reorder an object so that it is at the top of a group and therefore displayed in the foreground when objects overlap:

- 1 Display the `home` softkey menu, if it is not already displayed.
- 2 Select the object you want displayed in the foreground.
- 3 Press **F8**. Press **F3** to display the `edit` softkey menu.
- 4 Press **F4** to push the object to the forefront.

Reorder an object so that it is at the bottom of a group and therefore displayed in the background when objects overlap:

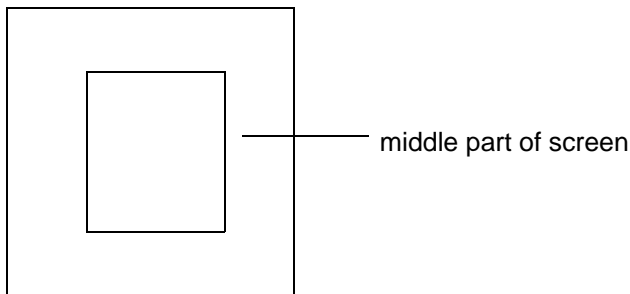
- 1 Display the `home` softkey menu, if it is not already displayed.
- 2 Select the object you want displayed in the background.
- 3 Press **F8**. Press **F3** to display the `edit` softkey menu.
- 4 Press **F5** to pop the object to the background.

◆ Zoom

You can zoom in on portions of images. This is particularly useful when you are working with images that have fine detail. Uniplex expands a portion of the image to show it on the entire screen when you zoom in on it. That is, you temporarily enlarge the portion.

You can zoom in on the following:

o Middle of the Screen



Uniplex zooms in on this area, so that it is displayed on the whole screen.

o Area of the Screen

You can zoom in on an area of the image by indicating this area with a box.

You can return to original image, or if you have zoomed in more than once, you can reduce the zooms stage-by-stage when you have finished working on an area you have zoomed in on.



Zoom

To zoom in on an image:

- 1 Display the `HOME` softkey menu, if it is not already displayed.
- 2 Press **F8** twice.
- 3 Press **F2** to display the `zoom` softkey menu.
- 4 Press **F3** to zoom in on the middle portion of the screen.

or

Press **F2** to zoom in on a particular area.

Uniplex prompts you to mark two corners of the box you want to zoom in on if you press **F2**. Use the mouse to position the cursor on each corner. Click any mouse key to mark the corners.

Uniplex zooms in on the area you specify.

To return to the original display:

- o Press **F1**

You can repeatedly zoom in on portions of areas you have already expanded. You can see increasingly smaller proportions of the complete image at an increasingly larger size in this way.

You can return to the original display as described above if you repeatedly zoom in on portions of areas you have already expanded or you can reduce the expanded area, stage-by-stage, as follows:

- o Press **F4** as many times as necessary to return to the original image.

◆ Pan

Uniplex only displays a portion of the complete image once you have used the zoom feature. You can then pan the image to display the portions that are off the screen.

To pan an image:

- 1 Display the **HOME** softkey menu, if it is not already displayed.
- 2 Press **F8** twice.
- 3 Press **F3** to display the **PAN** softkey menu.
- 4 Pan the image in one of the following ways:

Pan Left: Press **F1**

Pan Right: Press **F2**

Pan Up: Press **F3**

Pan Down: Press **F4**

Uniplex stops panning when you reach the edge of the full image.



Save Graph

◆ Save Graph

You can save or quit from a graph using the standard Uniplex commands for leaving documents when you have finished creating or modifying it or you can use the softkeys as follows:

- 1 Display the `HOME` softkey menu, if it is not already displayed.

You can do one of the following:

Task	Softkey
Save the graph(s) and leave the Presentation Editor. You must specify a filename if the graph did not previously exist.	F1
Save the graph(s) and continue using the Presentation Editor. You must specify a filename if the graph did not previously exist.	F2
Write the current graph to a file and continue working with it.	F3
Quit from the graph(s) without saving any changes.	F4
Read in a new file to work with (maximum of four at a time).	F5
Delete the current graph.	F6

◆ Save and Retrieve Objects

You can save and retrieve objects in the same way you can save and retrieve complete graphs or graphic images.

You can save and retrieve objects to clipboards or to files.

◇ Save an Object

You can save an object or group of objects as follows:

- 1 Select the object or group of objects you want to save by positioning the cursor over the object and clicking any mouse key.
- 2 Display the **Home** softkey menu, if it is not already displayed.
- 3 Press **F8**. Press **F5** to select the **cut and paste** softkey menu.
- 4 Press **F4** if you want to save an object to a clipboard and you want to specify which clipboard. Enter the number of the clipboard you want to use.
- 5 Press **F1** if you want to save an object to a clipboard.

or

Press **F2** if you want to save an object to a file.

- 6 Click any mouse key to select the object you want to cut.
- 7 Press **F3** to end the cut.

Uniplex places a copy of the object or group of objects in the clipboard or file. You can use the other softkeys on this menu to retrieve the objects. See the next section.

Save and Retrieve Objects

◇ Retrieve an Object

You can retrieve an object or group of objects as follows:

- 1 Display the **H**OME softkey menu, if it is not already displayed.
- 2 Press **F8**. Press **F5**. Press **F3** to display the **P**ASTE softkey menu.
- 3 Press **F4** if you want to retrieve an object from a clipboard and want to specify which clipboard. Enter the number of the clipboard you want to use.
- 4 Press **F1** if you want to retrieve an object from a clipboard.

or

Press **F2** if you want to retrieve an object from a file.

Uniplex prompts you to select a position on the graph or image where you want the object placed.

- 5 Position the cursor where you want the object placed and click any mouse key.

Uniplex places a copy of the object or group of objects at the position you specified.

◆ Softkey Sequences

You can use the Presentation Editor softkeys to invoke all the functions. However, when you become more familiar with the Presentation Editor, you may want to use key sequences instead. The following table shows the key sequences you can use:

Task	Key Sequence
Select Solids Attribute Menu	ESC z s
Select Line Attribute Menu	ESC z l
Select Marker Attribute Menu	ESC z m
Select Text Attribute Menu	ESC z t
Copy Selected Object	CTRL f c
Scale Selected Object	CTRL f s
Rotate Selected Object	CTRL f r
Divide Screen into Four	CTRL f d
Redraw Current Chart	ESC z g r
Redraw Entire Screen	ESC z g n
Push Selected Object	ESC g b
Pop Selected Object	ESC g t
Add Object	ESC z a
Display Grid	ESC z g g



Softkey Sequences

Task	Key Sequence
Enable/Disable Grid Snapping	ESC z g s
Set Grid Pitch	ESC z g p
Start Group	ESC (
End Group	ESC) a
Ungroup Group	ESC))
Pan Left	ESC z z l
Pan Right	ESC z z r
Pan Up	ESC z z u
Pan Down	ESC z z d
Zoom to Default	ESC z z n
Zoom on a Box	ESC z z b
Zoom In	ESC z z i
Zoom Out	ESC z z o
Save and Exit	ESC e
Quit	ESC q
Save and Continue	ESC s f
Write to Document	ESC s x
Read from Document	ESC m f

Softkey Sequences

Task	Key Sequence
Delete Object	CTRL c
Delete Chart/Graph/Image	CTRL x
Select Clipboard Number	ESC #
Place Object in Clipboard	ESC) l
Paste Object from Clipboard	ESC * o
Place Object in File	ESC) w
Paste Object from File	ESC m f
End Cut Object Selection	ESC) a

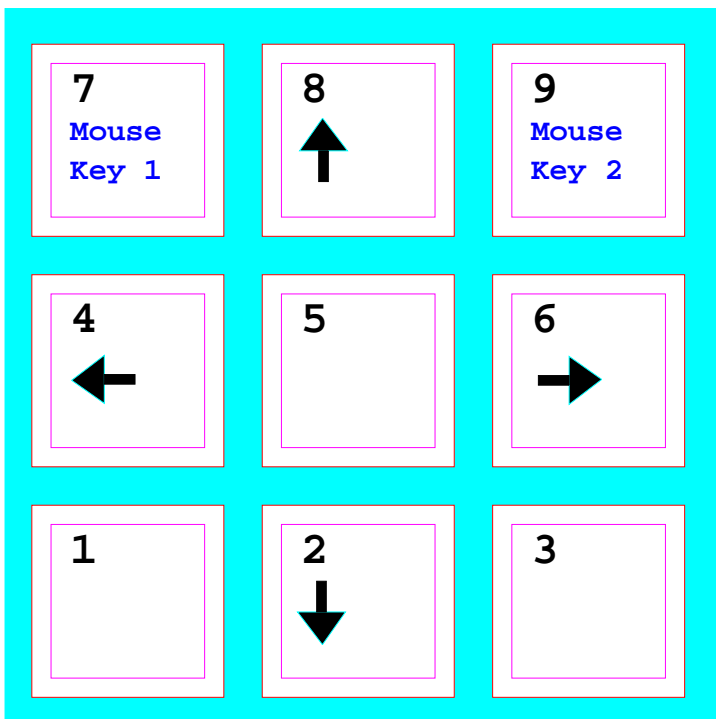


Mouseless Operation

◆ Mouseless Operation

You can use the Presentation Editor without a mouse if the graphics terminal supports a local mouse emulation facility via the keyboard.

The keyboard must be configured for PED; the arrow keys must be configured with the mouse keys. See the System Administrator for details. For example, the keypad on the keyboard could be configured as follows:



Press **CTRL** and the required arrow key to move the cursor. Use the 7 key to represent **Key 1** on the mouse and the 9 key to represent **Key 2** on the mouse.

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Chapter 3

Printing

Printing

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◆ Overview

You can use Uniplex to print out copies of documents and files on a wide range of printers, using different fonts, character sets, and typefaces to enhance the appearance of documents. You can:

- o Print Immediately with Easi-Print
- o Print with Multiple Styles
- o Print Draft and Quality Versions
- o Print with Multiple Printers
- o Print the Whole Document or a Range of Pages
- o Print Multiple Copies
- o Print in Fixed or Proportional Fonts
- o Print Combined Text and Graphics
- o Print on Different Paper Sizes
- o Print Page-by-Page

Uniplex has a variety of print *styles* which let you produce printed documents to meet individual requirements. The most commonly used styles are `Fixed-Pitch` and `quality`.

`Fixed-Pitch` printing is intended for documents you want to print quickly and that do not require any special formatting. `quality` printing is intended for documents that require special formatting, for example, proportional spacing. You can also define your own print styles. See *Print Styles* for an overview of print styles. See the **Printing** chapter in the **Uniplex II Plus User Guide** for details of creating print styles.



Overview

Uniplex makes it easy for you to produce printed copies of documents or files. You can print using either of two methods:

- o **Easi-Print.** Using Easi-Print, you need only specify the document or file name to print. Uniplex prints the document or file on a default printer in a default style.
- o **Print Form.** Complete a `Print` form to change the way that Uniplex normally prints out documents and files. Specify the *style* and printer you want to use. See below for more details. You can also specify additional requirements for the way you want the printed document to appear.

◇ Access Printing

You can access Uniplex printing in several ways. Pick and point the `Printing` option from the `Main` menu to display the `Print` menu.

To access printing while working in any application:

- 1 Press **ESC xu** or **F12** to access the `utilities Desk`. Uniplex displays the popup `utilities Desk` menu.
- 2 Pick and point the `Next Page` option. Uniplex displays the `Print Desk`.
- 3 Pick and point the print option you require.

To access printing while working with the Word Processor:

- 1 Press **F3**
- 2 Press **p** to select the print option. Uniplex displays the `Printing` menu.
- 3 Select the option you require.

◆ Print

You can print any document or file you have created, even if you created it outside of Uniplex.

Use Easi-Print to print out a document or file immediately, using the default style and printer. Easi-Print is described in the following section.

Complete the `print` form if you want to print out a document and use a style other than the default style or make modifications to the style. See *Print using Print Form*.

◇ Easi-Print

Print a document or file immediately using the default printer and style:

- 1 Pick and point the `printing` option.

Uniplex displays the `print` menu.

- 2 Pick and point the `Easi-Print` option.

Uniplex prompts for the document name.

- 3 Enter the document name and press **RETURN** (press **DOWN ARROW** to display a pick and point list of documents).

Uniplex prints the document using the default printer and style.

See *Print Defaults* for details of how to change these. See *Print Styles* for details of how to define the type of printing that you require.



Print

◇ Print Using Print Form

Use the `Print` form if you want to print a document using a different style or printer from the defaults or if you want to specify additional criteria such as the number of copies or the range of pages to print:

↘ See the **Printing** chapter in the **Uniplex II Plus User Guide** for complete details of all the options on the print menu.

- 1 Pick and point the `Printing` option.

Uniplex displays the `Print` menu.

- 2 Pick and point the `Print Using Form` option.

Uniplex prompts for a document name.

- 3 Enter the name of the document you want to print and press **RETURN**. Enter the full path of the document if the current folder is not the folder where the document is located.

Uniplex displays the `Print` form:

Name of Document	[my_graph_____]
Printer	[HP4PS_____]
Style	[Quality_____]
Print from Page Number	[1_____] to page number [99999] Page numbers: [As Printed____]
Number of Copies	[1____]
Left hand margin indent	[0____]

- 4 Complete the `print` form as described below. Use the arrow keys to move between fields.

Press any character key to display a pick and point list of the available options in each scrollable field.

Field	Entry
Name of Document	This field should contain the name of the document you want to print.
Printer	Press SPACEBAR to scroll the display of the printer names to the one you require. Scroll the entry in this field until the correct combination of printer and cartridge is displayed if the group or department uses several different printer cartridges (for example, to produce landscape or portrait printing). See the System Administrator for details.
Style	Press SPACEBAR to scroll the display of the names of styles available to the one you require. See <i>Print Styles</i> for details of how to specify the type of printing that you require.
Page Number	Enter the start and end pages here if you want to print only a range of pages.
Number of Copies	Enter the number of copies needed.
Left Hand Margin Indent	Uniplex offsets the whole page by the number of spaces you enter. Each space is the size of a single ten pitch character.

**Print**

- 5 Press **ESC e** to print the document, otherwise press **DOWN ARROW** to display the optional continuation of the form:

Field	Entry
Print to Screen First	Press SPACEBAR to scroll the entry to YES if you want the document displayed on the screen as it will be formatted when printed, otherwise leave the entry set to NO .
Prompt after Each Page	Press SPACEBAR to scroll the entry to YES if you are using a printer that can only print one page at a time, otherwise leave at NO .
Print Alternate Pages	Press SPACEBAR to scroll the entry to YES if you want alternate pages printed for a double-sided document (on a single-sided printer), otherwise leave the entry at NO .
Print from Section	Enter the section to begin printing if the document contains sections specified with Uniplex print-time commands and you only want a range of sections printed.
Print to Section	Enter the section to end printing.
Use Printers Copy Facility	Press SPACEBAR to scroll the entry to NO if the printer has copy facilities and you want to produce collated documents, otherwise leave the entry at YES .

- 6 Press **ESC e** to print the document if you have specified all the requirements. Press **DOWN ARROW** to display the next part of the form if you want to override the paper size and margins defined in the print style.

Uniplex first displays:

`Use style from Pre-Styled document`

Use the print style defined on page one of the print form by pressing **SPACEBAR** to scroll the entry to:

`Use current print style`

Use the settings on this page to override the default print style and the document's format details by pressing **SPACEBAR** to scroll the entry to:

`Override the current print style`

7 Now complete the form as follows:

Field	Entry
Paper Size	Press SPACEBAR to select a paper size.
Header Margin	Enter the number of lines.
Footer Margin	Enter the number of lines.
Left Margin	Enter the number of characters.
Right Margin	Enter the number of characters.
Gutter Margin	Enter the number of characters for alternate right and left binding margins.

✎ *It is only useful to change the page size and margins if you are using a style like `quality` that allows reformatting.*

8 Press **ESC e** to print the document.



Print Styles

◆ Print Styles

Uniplex is delivered with a variety of print styles which have been designed to meet a wide range of needs. In addition, the System Administrator may have set up additional print styles to suit the requirements of the department or organization.

Each print style defines the way that Uniplex prints out the document or file. For example, it specifies the printer you will use, the size of paper, the typeface, and the layout of the document on the page. In addition to these basic requirements, each style also defines the more complex aspects of producing printed documents of a professional quality.

Normally, you only need to know the name of the style that prints out documents to meet your needs. You can define your own styles if you have specific requirements that are not met by the styles on the system. See the **Printing** chapter in the **Uniplex II Plus User Guide** for details of creating print styles. Uniplex provides the following default print styles:

Print Style	Explanation
Quality	Prints documents proportionally spaced or with multiple fonts. Reformats, justifies, and scales the text to fit the page width.
Semi-Quality	Prints documents proportionally spaced or with multiple fonts. Justifies and scales the text to fit the page width, but does not reformat.
No-Reformat	Prints documents proportionally spaced or with multiple fonts. Does not justify, scale the text to fit the page width, or reformat.
Draft	Prints documents fixed pitch, does not reformat or justify the text. Disables printing of high-resolution graphics.

Print Style	Explanation
Fixed-Pitch	Prints documents fixed pitch, does not reformat, but does justify the text.
Spreadsheet	Prints spreadsheets in landscape mode. Does not reformat or justify.
Non-Uniplex	Prints documents that were not created using Uniplex. Does not reformat or justify the text.
Quality-5x8 or Quality-A5	Same as <i>quality</i> , but the text is scaled to fit 5" by 8" or A5 page size (5" by 8" is a standard American page size and A5 is a standard European page size).
Semi-Qual-5x8 or Semi-Qual-A5	Same as <i>semi-quality</i> , but the text is scaled to fit 5" by 8" or A5 page size (5" by 8" is a standard American page size and A5 is a standard European page size).

Each style also defines margins and other controls for printing. See the **Printing** chapter in the **Uniplex II Plus User Guide** for details of creating print styles.



Print Defaults

◆ Print Defaults

The System Administrator defines defaults for the printer and print style used with Easi-Print. Each user can change these defaults and define others for each application.

↘ *Uniplex documents can be Pre-Styled, so that the original author's desired style options can be preserved. See the **Printing** chapter in the **Uniplex II Plus User Guide** for more details.*

◇ Show Print Defaults

You can display the print defaults as follows:

- 1 Pick and point the `Printing` option to display the `Print` menu.
- 2 Pick and point the `show Print Defaults` option to display the current print defaults.

◇ Set Print Defaults

You can change the print defaults as follows:

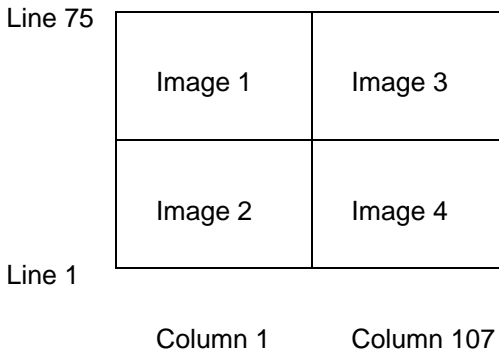
- 1 Pick and point the `Printing` option to display the `Print` menu.
- 2 Pick and point the `set Print Defaults` option to display the `Print Defaults` form.
- 3 Press any character key to display a pick and point list of the options in each field of the `Print Defaults` form:

Field	Entry
Default Printer	Press SPACEBAR to select a printer.
Default Style	Press SPACEBAR to select a style.

◆ Print to a Plotter

You can plot the graphs you have created using the Uniplex Advanced Graphics System if you have a plotter available on the system. You can plot up to four images on the same piece of paper.

Uniplex assumes you use A4 paper (which is 7.5 inches wide and 10.7 inches deep). It divides the paper into tenths of an inch and plots on the paper in Landscape mode. Therefore, there are 75 lines and 107 columns on the paper. Position one is in the bottom left corner. Uniplex plots the four images in the following order:



To plot a graph using a plotter:

- 1 Pick and point the `Plot Graph(s)` option from the `Advanced Graphics` menu.

Uniplex prompts for the name(s) of the graph(s) you want to plot. You can plot up to four graphs at one time.



Print to a Plotter

- 2 Enter the name(s) of the graph(s) you want to plot (ensure that you separate the names with a space) and press **ESC e**.

Uniplex displays the `Plot Graphs` form with the graph names in the `Image` fields. For example:

-- GRAPHIC IMAGE PLOTTING --	
Image A [graph1_____] Start line [40_] (max 75) Height [30_] (max 75) Start col [1_] (max 107) Width [50_] (max 107) Scale image?[yes]box?[yes]	Image C [graph3_____] Start line [40_] (max 75) Height [30_] (max 75) Start col [55_] (max 107) Width [50_] (max 107) Scale image?[yes]box?[yes]
Image B [graph2_____] Start line [1_] (max 75) Height [30_] (max 75) Start col [1_] (max 107) Width [50_] (max 107) Scale image?[yes]box?[yes]	Image D [graph4_____] Start line [1_] (max 75) Height [30_] (max 75) Start col [55_] (max 107) Width [50_] (max 107) Scale image?[yes]box?[yes]
Output plotter name [System Default Plotter_____]	

- 3 Complete each part of the form as follows. Press any character key to display a pick and point list of the available options in each scrollable field.

Field	Entry
Start Line	Enter the line on which you want to start plotting the image. There are 75 lines on the page, counting from the bottom.
Height	Enter the height, in lines, for the image.
Start Col	Enter the column on which you want to start plotting the image. There are 107 columns on a page, counting from the left side.
Width	Enter the width, in columns, for the image.
Scale Image	Use SPACEBAR to scroll this field to yes to scale the image to the size of the box.
Box	<p>Scroll this field to no to leave the image un-scaled.</p> <p>Use SPACEBAR to scroll this field to yes to plot a box around the image.</p> <p>Scroll this field to no to leave the image un-boxed.</p>
Output Plotter Name	Press SPACEBAR to scroll the entry to the name of the desired plotter.

- 4 Press **ESC e** when the form is as you require.

Uniplex plots the graph.

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- Alternate Page
 - Print 3-6
- Change
 - Printer 3-5
 - Style 3-5
- Collate 3-6
- Copies
 - Multiple 3-5
 - Number 3-5
 - Print 3-5
- Defaults
 - Print 3-10, 3-3
 - Set 3-10
 - Show 3-10
- Double-sided
 - Print 3-6
- Draft
 - Print 3-8
 - Style 3-8
- Easi-Print 3-3
- Edit (see Change)
- Fixed-Pitch 3-9
- Footer Margin 3-7
- Form
 - (see Print Form)
 - Graph 3-12
 - Plotter 3-12
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- Graph
 - Form 3-12
 - Plot 3-11
- Gutter Margin 3-7
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 - Left 3-5
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- Margin
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 - Left 3-7
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 - Override 3-6
 - Right 3-7
- Modify (see Change)
- Multiple Copies 3-5
- No-Reformat 3-8
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- Page
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- Print
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Printing

Print (continued)

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Semi-Quality 3-8

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Chapter 4

Integration

Integration

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◆ Overview

This chapter describes how to transfer skills and information between Uniplex applications and how to switch between them. There are four key components of Uniplex integration:

- o **Consistent Command Structure.** Uniplex uses the same command set in all of its applications. This means, for example, that you use the same commands to edit text created with the Word Processor or to edit an area of the Spreadsheet. You use the same commands to find a record stored in the Database or to find a file in the File Manager.
- o **External Windows.** The External Windows facility lets you switch between two or more Uniplex tasks or applications quickly and efficiently. For example, you can work with the Word Processor or the Spreadsheet and have your calendar always at hand. You can also work with two different Word Processor documents, transferring information between them.
- o **Cut and Paste.** You can cut out a portion of text, data, or graphics from any Uniplex application and transfer it to a different application. For example, you can cut out the result of a Database inquiry, perform calculations on it using the Spreadsheet, and incorporate it into a report using the Word Processor.
- o **Desk Options.** You can use the desk options to perform Uniplex tasks directly from another application. For example, you can add an event to your Calendar while you are working in the Spreadsheet or you can search through the Database while you are preparing a report using the Word Processor.

These components are described in detail in the **Integration** chapter of the **Uniplex II Plus User Guide**. Uniplex Advanced Graphics System provides additional facilities for graphics integration.

Integrate Graphics in Documents

◆ Integrate Graphics in Documents

You can include any graphics you have created using Uniplex in a Word Processing document. You include the graph as if it were a block of text, for example, within multiple columns, between two paragraphs of text, or to cover an entire page.

You can integrate any graphic image created using Uniplex graphics applications. You can also integrate any of the pre-designed images which are supplied with Uniplex. These are called *clip art*. See **Appendix C** for a gallery of these clip art images.

The Word Processor, by default, does not display the graph while you are editing the document. However, if you are using a high-resolution graphics terminal, you can view the graph using a key sequence. Additionally, you can include a Spreadsheet graphics representation of the graph while editing the document. When you print the document, Uniplex converts the Spreadsheet graphics representation to a high-resolution graph.

See the **Spreadsheet** chapter in the **Uniplex II Plus User Guide** for details of how to create graphs using the Spreadsheet.

See the chapters **Presentation Graphics** and **Presentation Editor** in this guide for details of how to create and modify presentation graphics. The following pages show some examples of graphs included in documents.

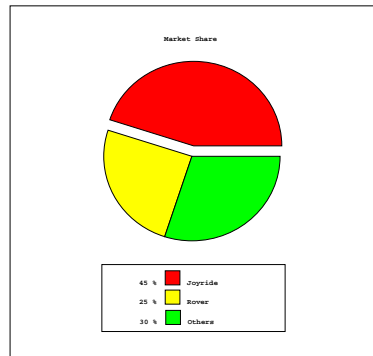
Integrate Graphics in Documents

Here is a graph integrated with multi-column text:

The Joyride Motorbike Corporation has announced astonishing profits for the first six months of its existence. They are convinced this is due to the quality of their sales staff. They have recruited experienced salesmen and saleswomen from areas unrelated to motorbikes. Their previous experience ranges from insurance to floristry. Customers of the corporation say the sales staff are always helpful and informed.

The corporation's main competitor, Rover Bikes, is said to be extremely concerned about these latest figures and is considering changing their sales strategy. It has even been suggested that they have tried tempting staff away from Joyride with increased salaries and unusual perks.

Long term observers of the motorbike market believe that Rover's anxiety is premature. It is well known that new motorbike sales approaches do well in the short term, but bikers normally return to old buying patterns after a few months.



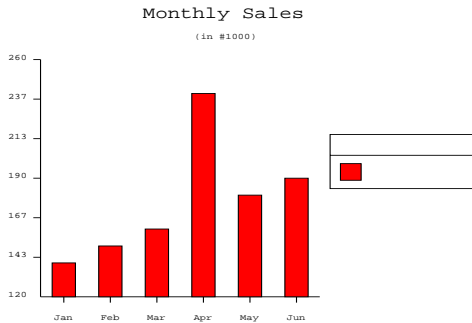
Cynics in the motorbike world have hinted that Joyride's success is due to their enormous discounts.



Integrate Graphics in Documents

This is a graph positioned between two paragraphs of text:

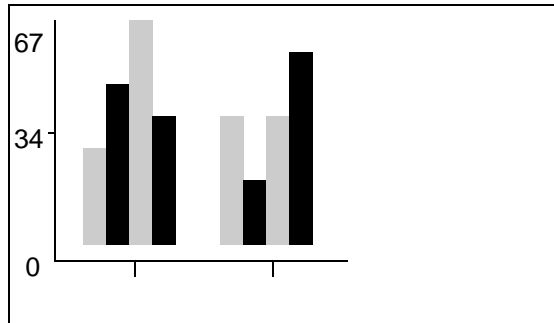
The Joyride Motorbike Corporation has announced astonishing profits for the first six months of its existence. They are convinced this is due to the quality of their sales staff. They have recruited experienced salesmen and women from areas unrelated to motorbikes. Their previous experience ranges from insurance to floristry. Customers of the corporation say the sales people are always helpful and informed.



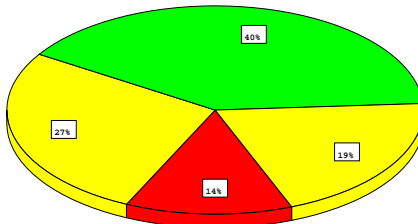
The corporation's main competitor, Rover Bikes, is said to be extremely concerned about these latest figures and is considering entirely changing their sales strategy. It has even been suggested that they have tried tempting staff away from Joyride with offers of increased salaries and unusual perks.

Integrate Graphics in Documents

This is a vertical bar chart plotted using Spreadsheet graphics:



This is the same graph printed using Presentation Graphics:

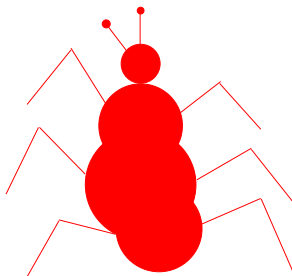




Integrate Graphics in Documents

Here is an image produced using the Presentation Editor and integrated with some text:

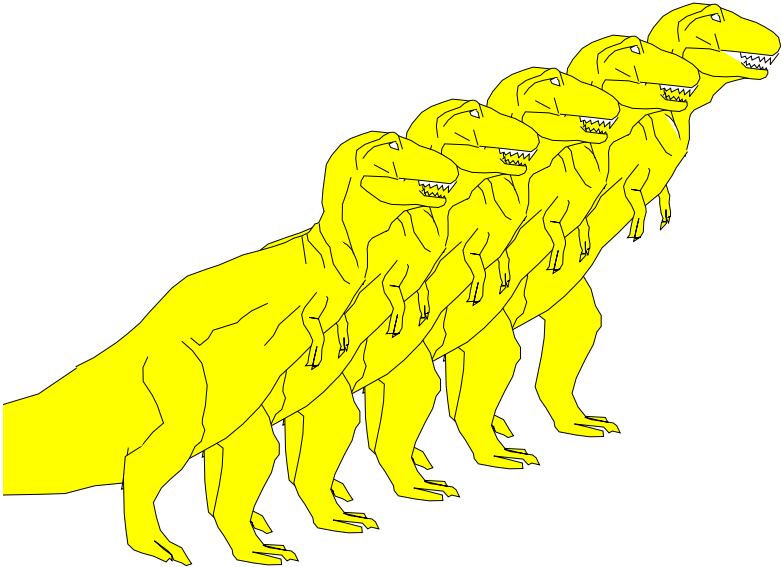
It is a well known fact that ants are the most successful creatures living on our earth. Although disliked by many people, they are a community-spirited and usually unaggressive species.



Ants are found in all parts of the world and adapt remarkably well to their environment.

Integrate Graphics in Documents

The following example shows how a single clip art image looks when printed offset and overlaid across the page.



There is a gallery of clip art images in **Appendix C**. Choose the clip art you want to insert and follow the instructions in *Specify the Graph to Integrate* below. You must include the full pathname of the image file when you specify a clip art image.



Integrate Graphics in Documents

Follow these steps to include a graph in a document:

1 Create the Graph

There are a number of different ways you can create the graph, depending on your needs and resources. See below for an explanation of these different methods.

2 Specify the Graph/Clip Art Image to Integrate

You must specify the graphic file you want included in the document. See *Specify the Graph to Integrate*.

3 Display and Check the Graph on the Screen

You can display the graph on your screen to check it is the correct graph and in the format you require. See *Display a Graph*.

✎ *You can only view high-resolution graphs if you are using a high-resolution graphics terminal.*

4 Print the Document

You print a document containing graphs just as you print other documents. However, there are a few checks to make before printing the document. See *Print a Graphics Document*.

Integrate Graphics in Documents

You can create graphs you want to include in a document using one of the following:

o **Create the Graph First**

Use Presentation Graphics to create and save the graph. See the **Presentation Graphics** chapter for details of creating graphs.

or

Create a graph or graphic image using the Presentation Editor. See the **Presentation Editor** chapter for details.

or

Create the graph using Spreadsheet graphics. See the chapter **Spreadsheet** in the **Uniplex II Plus User Guide** for details.

o **Access Graphics While Editing a Document**

You can access Presentation Graphics, Presentation Editor, or the Spreadsheet from the Word Processor to create a graph:

- 1 Press **F9** or **ESC xd** to display the `Desk` menu.
- 2 Pick and point the `Next Page` option.
- 3 Pick and point the `Graphics` option you require.
- 4 Create the graph.
- 5 Return to your document.

Use the cut and paste facility if you want to plot data from the document. See the **Presentation Graphics** chapter for details.



Integrate Graphics in Documents

◇ Specify the Graph to Integrate

Include the graph in the document:

- 1 Create or edit a Uniplex document.
- 2 Move the cursor to the line where you want the graph included.
- 3 Enter the following command with any required options in the order shown:

```
.GR graph_filename [,n b s r] [width height offset]
```

Option	Meaning
<i>graph_filename</i>	The name of the file containing the saved graph. This is the name you saved the graph with if you created it using Presentation Graphics or the Presentation Editor. This is the name of the save file if you created the graph using Spreadsheet Graphics.
<i>n</i>	The graph number if created with the Spreadsheet and there is more than one graph in the save file.
b	Specifies that you want the graph boxed when it is printed. Printing a boxed graph takes longer than a non-boxed graph.
s	Scales the graph to fit in the area you have assigned. The graph is centered within the area assigned if you do not specify <i>s</i> .
r	Uses characters, rather than lines, to define the height and inserts the graph in the position you specify.

Integrate Graphics in Documents

Option	Meaning
<i>width</i>	The width of the graph in characters. You do not need a box if you specify a width. There must be a box in which to place the graph if you do not specify a width.
<i>height</i>	The height of the graph in lines.
<i>offset</i>	The offset from the left margin in characters.

Specify the size and offset of a graph:

- o Enter the width, height, and offset of the graph as part of the command. For example, to create a scaled graph inside a box 24 characters wide, five lines high, and indented four spaces from the left-hand margin, you enter:

```
.GR sales_pie b s 24 5 4
```

- o Enter the graph filename and create a box on the line immediately below. This box determines the size and placement of the graph. You need to enter the appropriate parameters in the command line to scale a graph and enclose it in a box. For example, to create a scaled graph in a box you enter:

```
.GR sales_pie b s
```



This box can be any size. Each dot on the Word Processor ruler generally represents one tenth inch. Each line on the screen generally represents one sixth inch.

Integrate Graphics in Documents

Make sure this box does not run over a page break. Uniplex does not print graphs over page breaks. Uniplex prints the graph on the second page if a box does run over a page.

Use the `s` option to make sure the image prints the same size and shape as the box if you draw a box to specify the size of the graph.

You can include text within the box. When Uniplex prints the document, it does not print this text (unless the specified graph does not exist). Therefore, you can include notes for yourself in this box about the graph. For example:

```
.GR sales_pie
```

```
This box will contain
sales_pie, which
shows the sales figures
```

Uniplex prints the graph in this box when you print the document.

⚡ A box must be placed immediately below its .GR command.

Position Horizontal Graphs

Specify the graph files in separate `.GR` commands and position them with the `offset` command if you want to plot more than one graph or clip art image next to each other. For example:

```
.GR sales_pie 14 12 10
.GR sales_bar 14 12 30
```

The above `.GR` commands will print the two graphs the same size, side-by-side with six character spaces between them. The second graph is offset 30 characters across the page which equals the width of the first graph (14), the size of the first offset (10), and the size of the gap between the two graphs (6).

◇ Position Vertical Graphs

Position the second `.GR` command further down the page to print graphic images one above the other. You need to leave the same number of blank lines as the height of the image, or more. For example, to plot the two sales graphs listed previously so they print one below the other, leave at least twelve blank lines between the two `.GR` entries.

◇ Position Overlaid Graphs

Use the offset command to position the images so they print one on top of the other if you want to plot overlapping or overlaid graphic images. Use the following commands to achieve the picture of the dinosaurs shown as a clip art example at the beginning of this section:

```
.GR /usr/UAP/demo/CLIP_ART/animals/dinosaur.gr 45 24 28  
  
.GR /usr/UAP/demo/CLIP_ART/animals/dinosaur.gr 45 24 21  
  
.GR /usr/UAP/demo/CLIP_ART/animals/dinosaur.gr 45 24 14  
  
.GR /usr/UAP/demo/CLIP_ART/animals/dinosaur.gr 45 24 7  
  
.GR /usr/UAP/demo/CLIP_ART/animals/dinosaur.gr 45 24
```

The blank line between the `.GR` commands prints each successive dinosaur lower on the page. The decreasing offset number (28, 21, 14, 7, blank) prints each successive dinosaur seven characters closer to the margin with each image partly obliterating the previous one. Uniplex acknowledges the different offset commands and prints each image in the order listed.

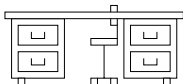


Integrate Graphics in Documents

Uniplex takes the last `.GR` command as the first image to print if you want to plot images exactly on top of each other using the same offset command. For example:

```
.GR /usr/UAP/demo/CLIP_ART/furniture/desk.gr 24 12 5  
.GR /usr/UAP/demo/CLIP_ART/furniture/chair.gr 24 12 5
```

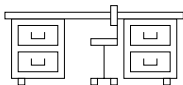
produces this combined picture:



Alternatively, reversing the order of the commands:

```
.GR /usr/UAP/demo/CLIP_ART/furniture/chair.gr 24 12 5  
.GR /usr/UAP/demo/CLIP_ART/furniture/desk.gr 24 12 5
```

produces this combined picture:



Remember, if the offset command is the same and the `.GR` commands are not separated by a blank line, Uniplex prints the images last to first. Uniplex prints the images from first to last if the `.GR` commands are separated by any number of blank lines. The order of the commands is irrelevant if the `.GR` commands are offset to print so they are beside each other without overlapping.

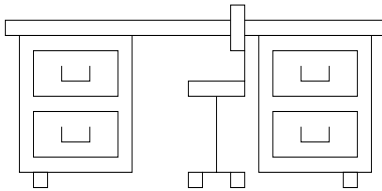
Integrate Graphics in Documents

◇ Scale a Graph

You can change the shape of a graph or image, make it look fatter or thinner, change the dimensions of the width and height offset to the shape you want, and use the `s` option to scale the image to the settings required. For example:

```
.GR /usr/UAP/demo/CLIP_ART/furniture/chair.gr s 50 20 30
.GR /usr/UAP/demo/CLIP_ART/furniture/desk.gr s 50 20 30
```

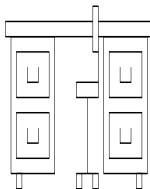
produces this combined picture:



Alternatively, reducing the width value:

```
.GR /usr/UAP/demo/CLIP_ART/furniture/chair.gr s 20 20 30
.GR /usr/UAP/demo/CLIP_ART/furniture/desk.gr s 20 20 30
```

produces this combined picture:



✎ *The image will be drawn to a fixed shape as big as the width and height settings allow if you do not include the `s` option.*

Integrate Graphics in Documents

◇ Frame a Graph

Add the `b` option to the `.GR` command if you want to include a box around the graph file. Alternatively, draw a box the size you want the image to scale to below the `.GR` command. You need to use the `s` option to make sure the image prints the same size and shape as the box. For example:

```
.GR sales_pie
```



✍ *You may get a second ghost line around the graph if you specify its size by drawing a box and the graph was generated with a frame box.*

◇ Integrate a Spreadsheet Graph

You can integrate a Spreadsheet graph in a document. Uniplex displays the Spreadsheet graphics representation of the graph while you are editing the document. Uniplex converts the representation to a high-resolution graph when you print the document.

Include a Spreadsheet graph as follows:

- 1 Create the graph in the normal way. Save the graph without leaving the Spreadsheet. See the **Spreadsheet** chapter in the **Uniplex II Plus User Guide** for details.
- 2 Use cut and paste to cut the graph from the Spreadsheet into a clipboard.

Integrate Graphics in Documents

- 3 Edit the document. Position the cursor in the document where you want the graph included. Paste in the contents of the clipboard. Uniplex pastes in the graph and automatically includes the `.GR` command to print the high-resolution graph.

Additionally, you can display the high-resolution representation of a character graph as follows:

- 1 Open the spreadsheet which contains the graph.
- 2 Move the cell pointer to the cell where you originally entered the graph command.
- 3 Press **ESC !**

Uniplex plots the graph in high resolution.

✎ You can only plot a high-resolution graph when using a high-resolution graphics terminal.

◇ Display a Graph

Uniplex does not display the graph on the screen when you include a graph in a document. However, you can view the graph on the screen and check that it is the correct graph and in the format you require. Display the graph on the screen as follows if you are using a high-resolution graphics terminal:

- 1 Position the cursor on the line containing:

`.GR graph_file`

- 2 Press **ESC !**

Uniplex displays the graph on the full screen.



Integrate Graphics in Documents

Uniplex beeps if you attempt to display a graph created with Spreadsheet graphics. See *Integrate a Spreadsheet Graph* for details of including a Spreadsheet graphics representation of the graph in the document.

3 Press **ESC q** to return to the document.

◇ **Print a Graphics Document**

You print a document containing graphs in the same way you print any document. However, before you print the document, check that there is a laser printer available and it is supported by Uniplex for printing graphs. See the System Administrator for details.

The printer on which you have attempted to print the graph does not have the capabilities to print graphs, the graph file does not exist, or the graph file is corrupt in some way if there is no graph printed at print-time. See the System Administrator for details.

.GR 4-10

Access

Graph 4-9

Box (see Frame)

Commands

.GR 4-10

Create

Graph 4-9

Display

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Examples

Clip Art 4-7

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Spreadsheet Graph 4-5

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Graph 4-16

Graph

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Display 4-17

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Include 4-8

Integrate 4-3

Text 4-3

Locate

Horizontal 4-12

Overlaid 4-13

Vertical 4-13

Print 4-18

Scale 4-15

Integrate

Graph 4-3

Spreadsheet Graph 4-16

Locate

Graph

Horizontal 4-12

Overlaid 4-13

Vertical 4-13

Print

Graph 4-18

Scale

Graph 4-15

Spreadsheet Graph

Integrate 4-16

Appendix A

Menu Maps



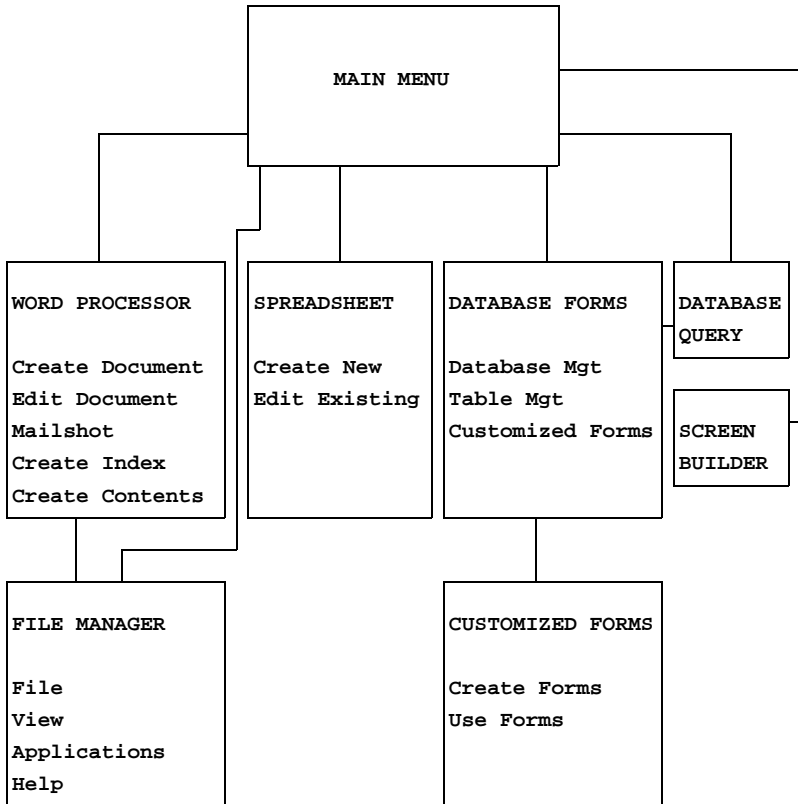
This appendix contains menu maps for all Uniplex combinations. Each map shows how you can access the major applications and utilities. The illustration of each menu shows the major functionality accessible from the menu, but does not list each option available from the menu.

There are menu maps for the following Uniplex combinations:

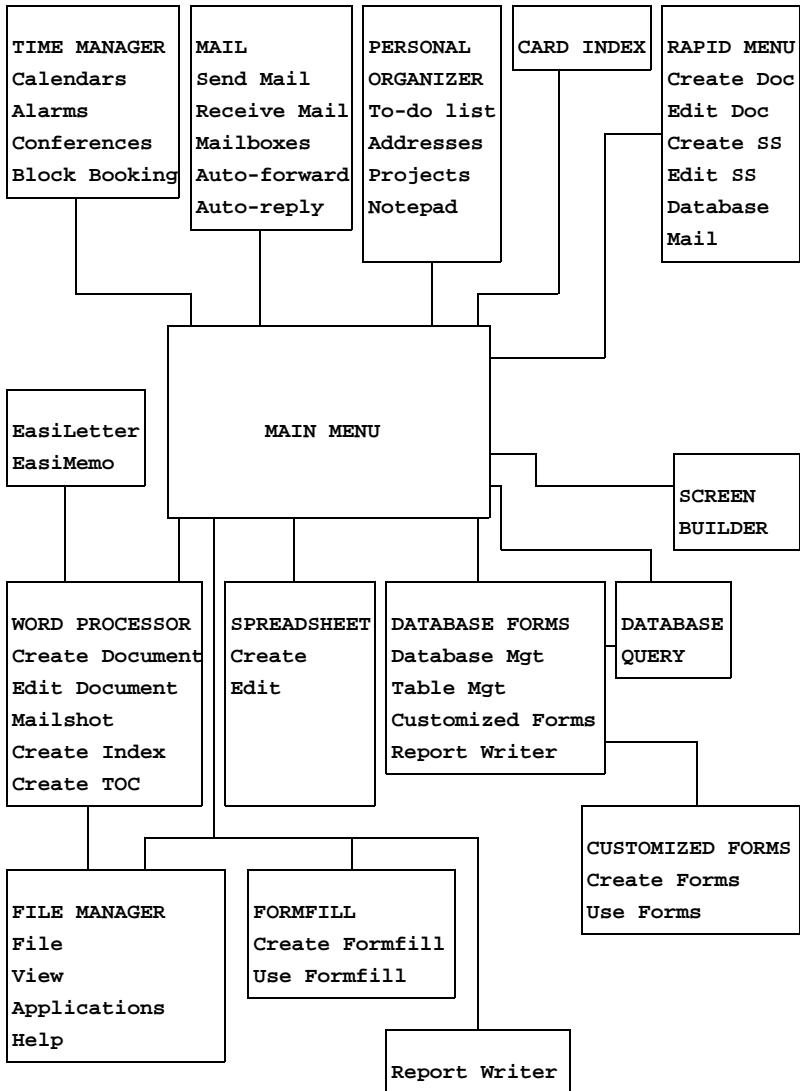
- o Uniplex II Plus
- o Uniplex II Plus with Uniplex Advanced Office System
- o Uniplex II Plus with Uniplex Advanced Office System and Uniplex Advanced Graphics System
- o Uniplex II Plus with Uniplex Advanced Graphics System



Uniplex II Plus Menu Map

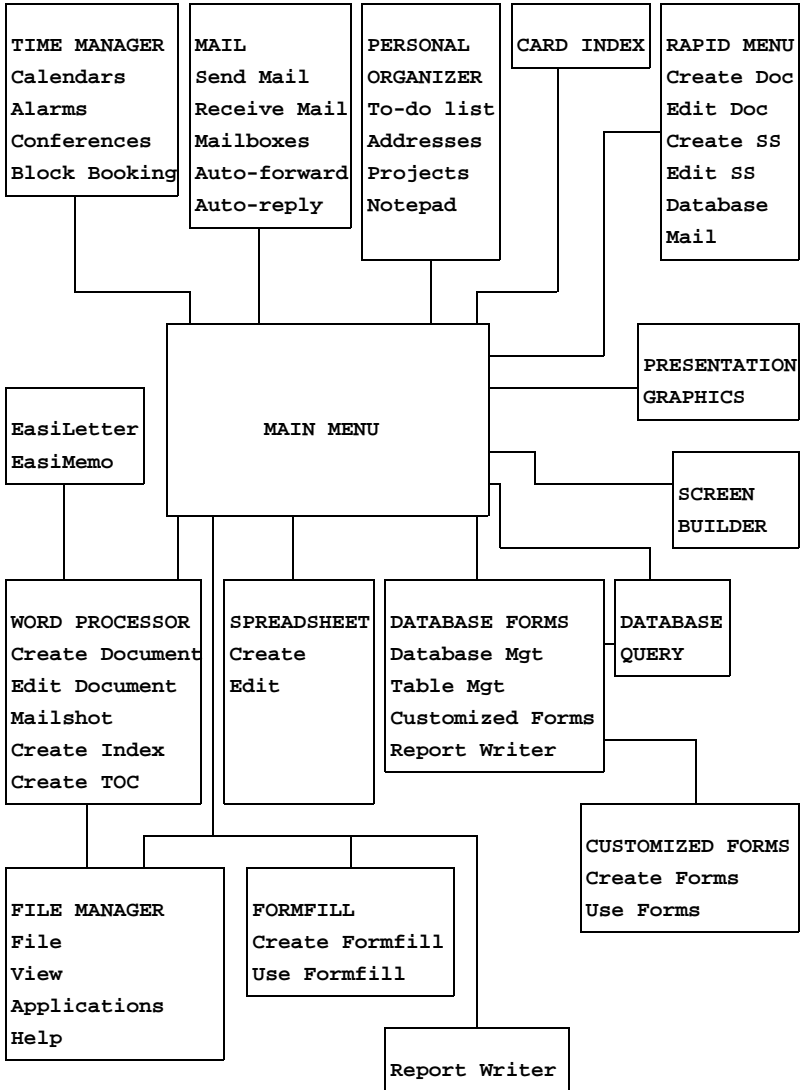


Uniplex II Plus with Advanced Office System Menu Map



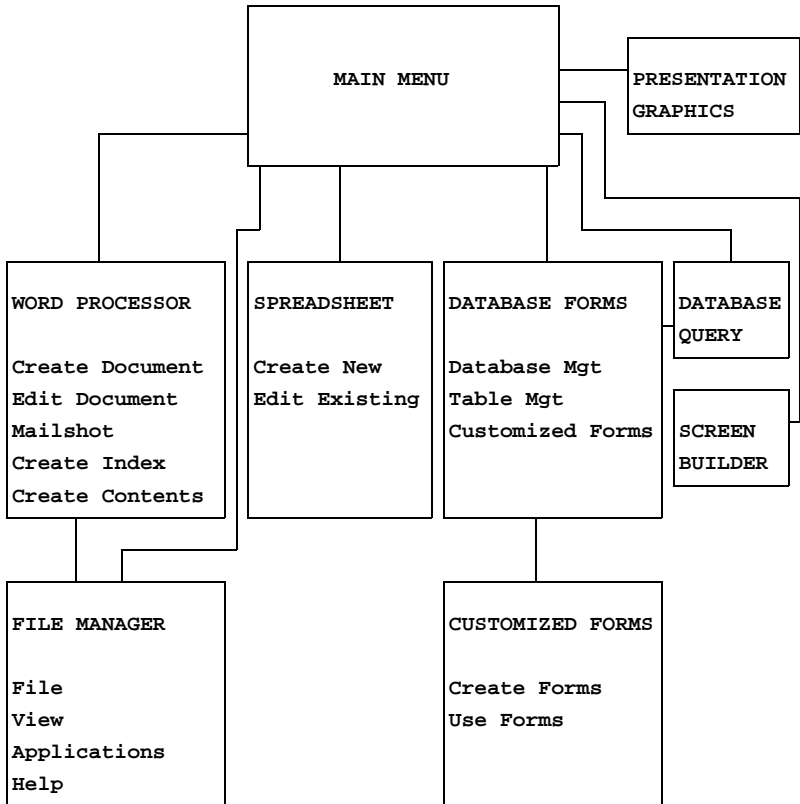


**Uniplex II Plus with Advanced Office System and
Advanced Graphics System Menu Map**





Uniplex II Plus with Advanced Graphics System Menu Map



Appendix B

Desk Maps



This appendix shows the Desk and Utility popup menus available. The options available on these menus depend on which Uniplex products are installed on your system. See your System Administrator for details.

You can access the Desk popup from any Uniplex application as follows:

- o Press **ESC xd** or **F9**

The Desk pops up on your screen. Press **9** to display the next page of the menu. Press **0** to display the previous page of a menu.

You can access the Utility popup from the Desk popup, and you can access them directly from any Uniplex application as follows:

- o Press **ESC xu** or **F12**

Move through the menus to find the option you require. See the maps below to see how the Desk and Utility popups are organized.



Uniplex II Plus Desk Maps

Uniplex DESK: Page 1 of 1

- 1 = Window WP
- 2 = Spreadsheet
- 3 = Database Forms
- 4 = Word Processor
- 5 = Window Spreadsheet
- 6 = Database Query
- 7 = Sketchpad

9 > Next Page

0 > Previous Page

ESC Q to Quit

Uniplex UTIL: Page 1 of 2

- 1 = List Files
- 2 = View Clipboards
- 3 = Clock
- 4 = File Manager
- 5 = Calculator

9 > Next Page

0 > Previous Page

ESC Q to Quit



Uniplex UTIL: Page 2 of 2

- 1 = Print Form
- 2 = Show Print Defaults
- 3 = Set Print Defaults
- 4 = Create New Print Style
- 5 = Edit Print Style
- 6 = Copy Print Style
- 7 = Delete Print Style
- 8 = Show Print Requests

9 > Next Page

0 > Previous Page

ESC Q to Quit



Uniplex II Plus with Advanced Office System Desk Maps

Uniplex DESK: Page 1 of 2

- 1 = Mail
- 2 = Add Calendar Event
- 3 = Phone/Information List
- 4 = Send a Letter
- 5 = While-you-were-out
- 6 = Window WP
- 7 = Spreadsheet
- 8 = Database Forms

- 9 > Next Page
- 0 > Previous Page

ESC Q to Quit

Uniplex DESK: Page 2 of 2

- 1 = Word Processor
- 2 = Window Spreadsheet
- 3 = Database Query
- 4 = Sketchpad
- 5 = Formfill
- 6 = Full Time Manager

- 9 > Next Page
- 0 > Previous Page

ESC Q to Quit



Uniplex II Plus with Advanced Office System Desk Maps

Uniplex UTIL: Page 1 of 2

- 1 = List Files
- 2 = View Clipboards
- 3 = Clock
- 4 = File Manager
- 5 = Calculator
- 6 = Phone & Address List
- 7 = Card Index
- 8 = Personal Organizer

- 9 > Next Page
- 0 > Previous Page

ESC Q to Quit

Uniplex UTIL: Page 2 of 2

- 1 = Print Form
- 2 = Show Print Defaults
- 3 = Set Print Defaults
- 4 = Create New Print Style
- 5 = Edit Print Style
- 6 = Copy Print Style
- 7 = Delete Print Style
- 8 = Show Print Requests

- 9 > Next Page
- 0 > Previous Page

ESC Q to Quit



Uniplex II Plus with Advanced Graphics System Desk Maps

Uniplex DESK: Page 1 of 1

- 1 = Window WP
- 2 = Spreadsheet
- 3 = Database Forms
- 4 = Word Processor
- 5 = Database Query
- 6 = Sketchpad
- 7 = Presentation Graphics
- 8 = Presentation Editor

- 9 > Next Page
- 0 > Previous Page

ESC Q to Quit

Uniplex UTIL: Page 1 of 2

- 1 = List Files
- 2 = View Clipboards
- 3 = Clock
- 4 = File Manager
- 5 = Calculator

- 9 > Next Page
- 0 > Previous Page

ESC Q to Quit



Uniplex II Plus with Advanced Graphics System Desk Maps

Uniplex UTIL: Page 2 of 2

- 1 = Print Form
- 2 = Show Print Defaults
- 3 = Set Print Defaults
- 4 = Create New Print Style
- 5 = Edit Print Style
- 6 = Copy Print Style
- 7 = Delete Print Style
- 8 = Show Print Requests

9 > Next Page

0 > Previous Page

ESC Q to Quit



Uniplex II Plus with Advanced Office System and Advanced Graphics System Desk Maps

Uniplex DESK: Page 1 of 2

- 1 = Mail
- 2 = Add Calendar Event
- 3 = Phone/Information List
- 4 = Send a Letter
- 5 = While-you-were-out
- 6 = Window WP
- 7 = Spreadsheet
- 8 = Database Forms

- 9 > Next Page
- 0 > Previous Page

ESC Q to Quit

Uniplex DESK: Page 2 of 2

- 1 = Word Processor
- 2 = Window Spreadsheet
- 3 = Database Query
- 4 = Sketchpad
- 5 = Formfill
- 6 = Full Time Manager
- 7 = Presentation Graphics
- 8 = Presentation Editor

- 9 > Next Page
- 0 > Previous Page

ESC Q to Quit

Uniplex II Plus with Advanced Office System and Advanced Graphics System Desk Maps

Uniplex UTIL: Page 1 of 2

1 = List Files
2 = View Clipboards
3 = Clock
4 = File Manager
5 = Calculator
6 = Phone & Address List
7 = Card Index
8 = Personal Organizer

9 > Next Page
0 > Previous Page

ESC Q to Quit

Uniplex UTIL: Page 2 of 2

1 = Print Form
2 = Show Print Defaults
3 = Set Print Defaults
4 = Create New Print Style
5 = Edit Print Style
6 = Copy Print Style
7 = Delete Print Style
8 = Show Print Requests

9 > Next Page
0 > Previous Page

ESC Q to Quit

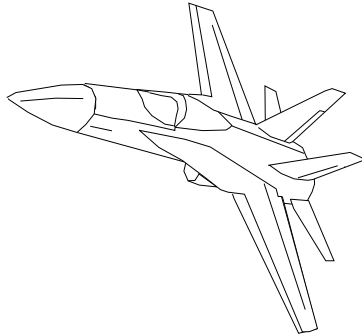
Appendix C

Integrating Clip Art



Integrating Clip Art

Uniplex includes a selection of *clip art* which you can incorporate into your document. Clip art is pre-designed graphic images which you can access on your system and integrate into any document, for example:



To integrate clip art into a document follow the instructions in *Specify the Graph to Integrate* in the **Integration** chapter.

Where *graph_name* is indicated, enter the full pathname of the clip art image you wish to include in your document. All the clip art images are stored in the directory **/usr/UAP/demo/CLIP_ART**. Below this directory are 31 subdirectories containing related images. For example, in the subdirectory **furniture**, there is an image of a chair, a desk, and a filing cabinet.

- ✎ *Check with the System Administrator if you cannot find the Uniplex clip art at the default location.*



Integrating Clip Art

The following pages show which clip art images are available. The images stored in each subdirectory are shown together, under the subdirectory name.

To find the pathname of the image you want to include in your file:

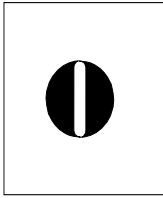
- 1 Go into the folder **/usr/UAP/demo/CLIP_ART**.
- 2 Enter the subdirectory name (the header in bold font above the image you want) followed by a forward slash (/).
- 3 Enter the file name of the image you want (the name under the image).

For example, if you want to include the clip art image of the jet shown previously, you enter the pathname:

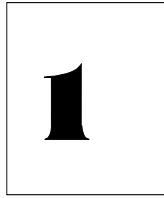
```
/usr/UAP/demo/CLIP_ART/planes/fighter.gr
```




alphabet



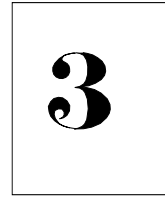
0.gr



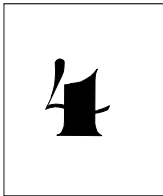
1.gr



2.gr



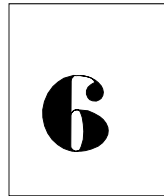
3.gr



4.gr



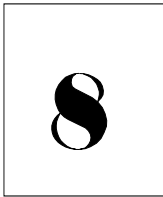
5.gr



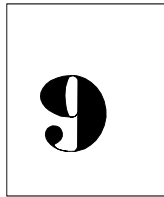
6.gr



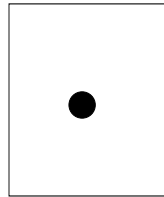
7.gr



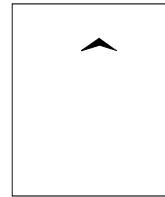
8.gr



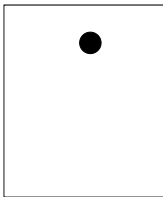
9.gr



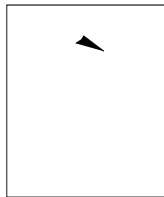
fstop.gr



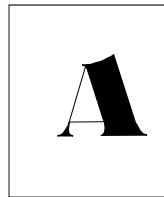
cflex.gr



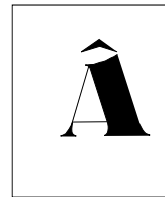
circ.gr



grave.gr



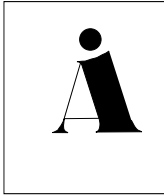
A.gr



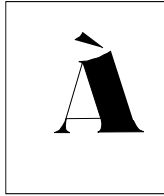
Acflex.gr



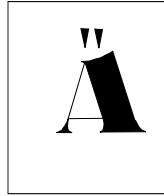
Integrating Clip Art



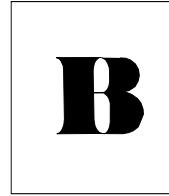
Acirc.gr



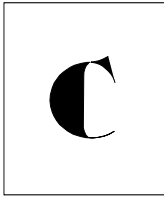
Agrave.gr



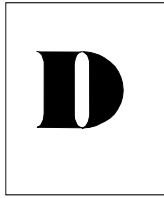
Aumlaut.gr



B.gr



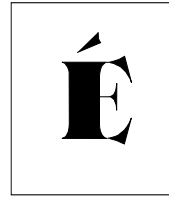
C.gr



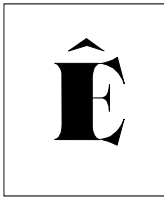
D.gr



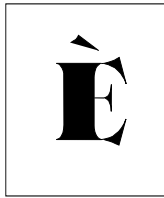
E.gr



Eacute.gr



Ecirc.gr



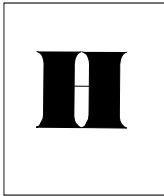
Egrave.gr



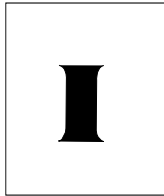
F.gr



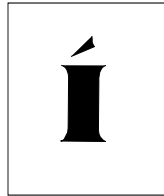
G.gr



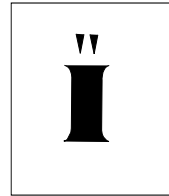
H.gr



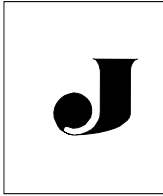
I.gr



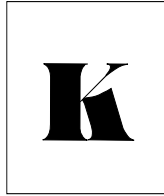
Iacute.gr



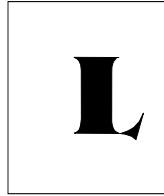
Iumlaut.gr



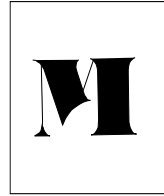
J.gr



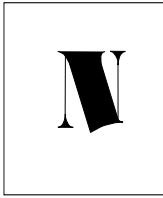
K.gr



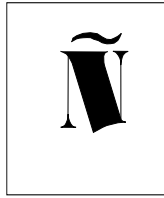
L.gr



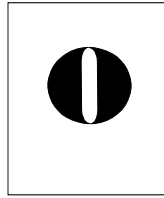
M.gr



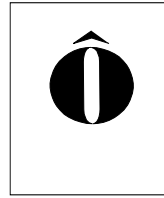
N.gr



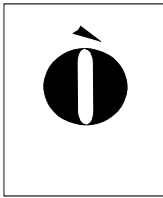
Nspan.gr



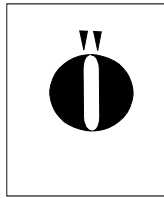
O.gr



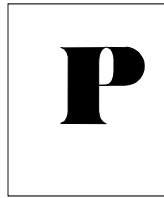
Ocflex.gr



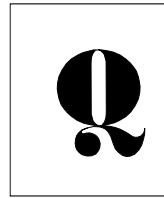
Ograve.gr



Oumlaut.gr



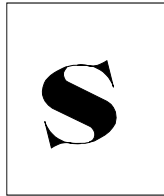
P.gr



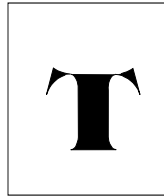
Q.gr



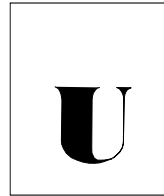
R.gr



S.gr



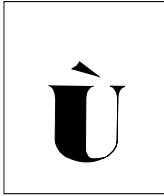
T.gr



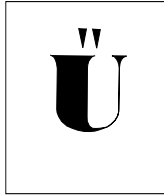
U.gr



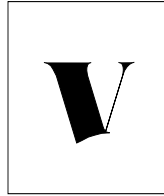
Integrating Clip Art



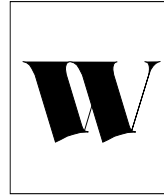
Ugrave.gr



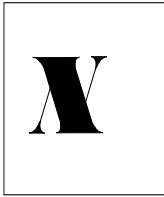
Uumlaut.gr



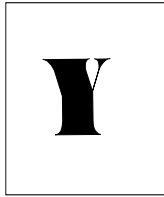
V.gr



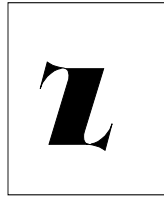
W.gr



X.gr



Y.gr



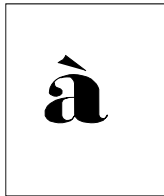
Z.gr



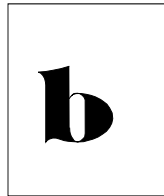
a.gr



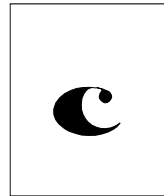
acflex.gr



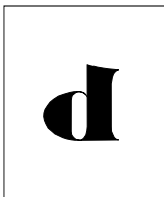
agrave.gr



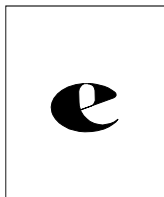
b.gr



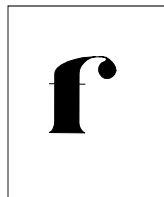
c.gr



d.gr



e.gr



f.gr



g.gr



h

h.gr



i

i.gr



j

j.gr



k

k.gr



l

l.gr



m

m.gr



n

n.gr



o

o.gr



p

p.gr



q

q.gr



r

r.gr



s

s.gr



t

t.gr



u

u.gr



v

v.gr

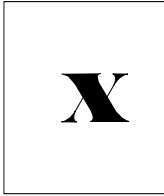


w

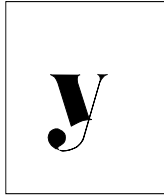
w.gr



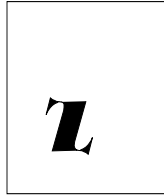
Integrating Clip Art



x.gr

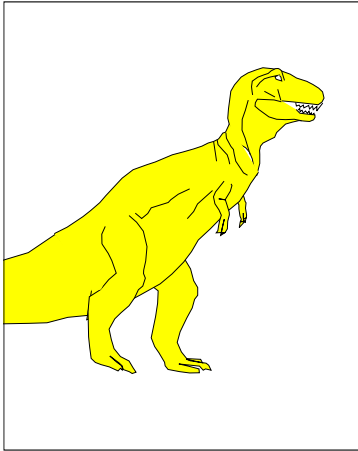


y.gr

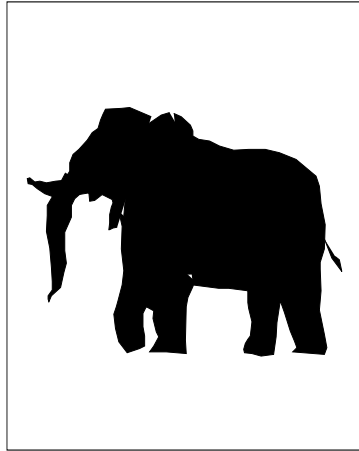


z.gr

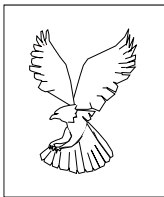
animals



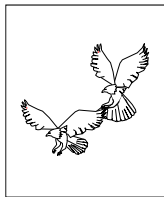
dinosaur.gr



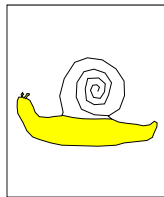
elephant.gr



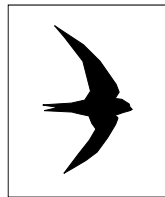
eagle.gr



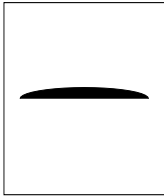
eagles.gr



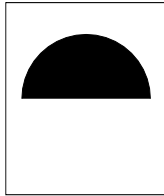
snail.gr



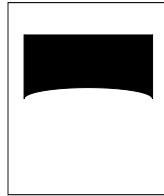
swift.gr

**arcs**

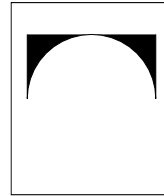
arc10.gr



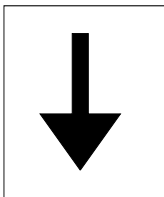
arc90.gr



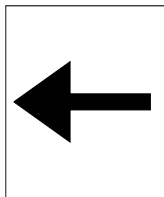
carc10.gr



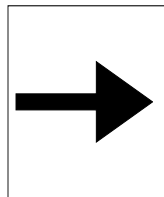
carc90.gr

arrows

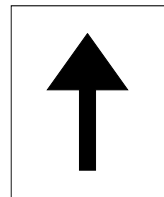
Darrow.gr



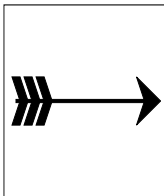
Larrow.gr



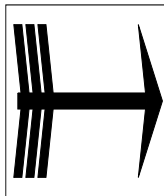
Rarrow.gr



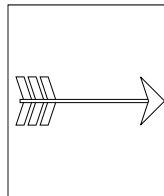
Uarrow.gr



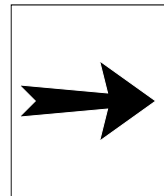
RFBarrow.gr



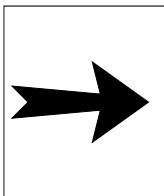
RFSBarrow.gr



RFarrow.gr



RVOarrow.gr

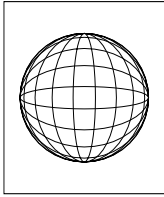


RVarrow.gr

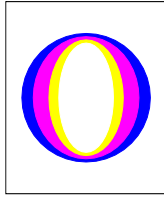


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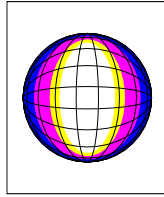
balls



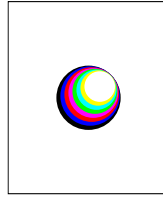
ball1.gr



ball2.gr

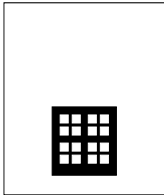


ball3.gr

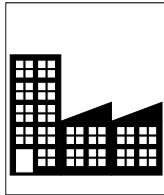


ball4.gr

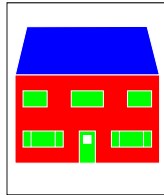
buildings



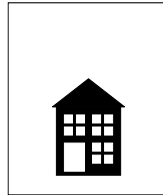
block.gr



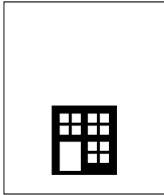
factory.gr



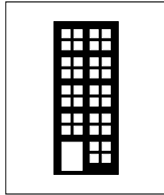
house1.gr



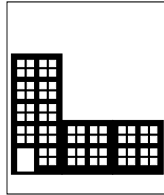
house2.gr



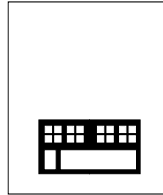
office.gr



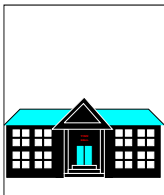
office2.gr



office3.gr



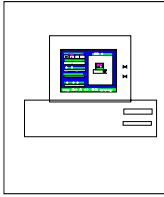
shop.gr



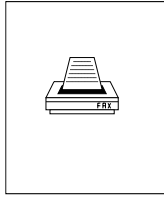
townhall.gr



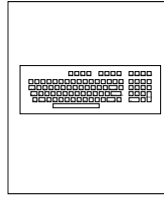
computers



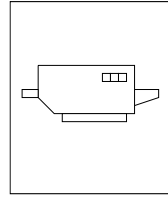
computer.gr



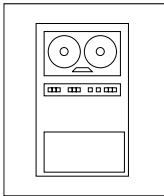
fax.gr



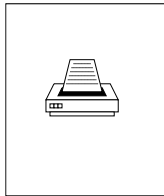
keyboard1.gr



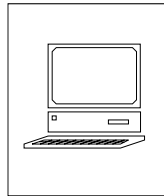
laser.gr



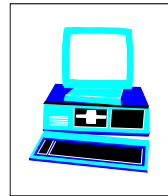
mainframe.gr



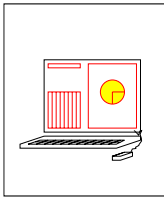
matrix.gr



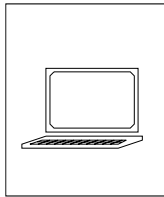
pc.gr



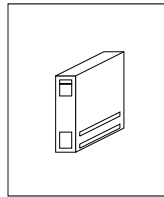
pc3d.gr



tektronix.gr

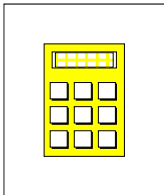


terminal.gr

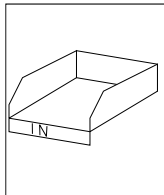


towercpu.gr

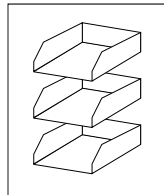
desktop



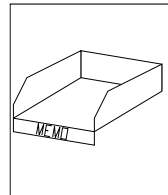
calculator.gr



inray.gr



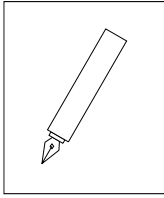
intrays.gr



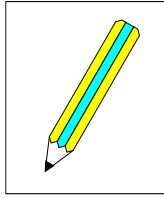
memotray.gr



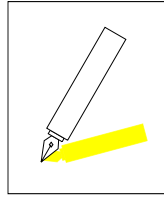
Integrating Clip Art



pen.gr



pencil2.gr

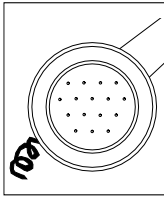


penshadow.gr



phone.gr

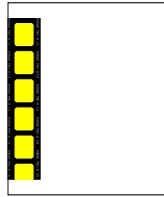
films



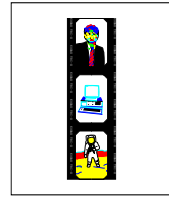
phone2.gr



filmstrip1.gr

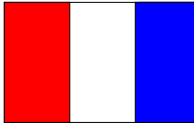


filmstrip2.gr



filmstrip3.gr

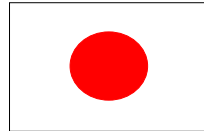
flags



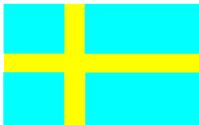
flagfrance.gr



flaggb.gr



flagjapan.gr



flagsweden.gr



flaggermany.gr



flash



flash1.gr



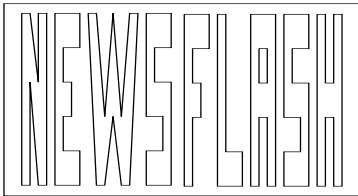
flash2.gr



flash3.gr

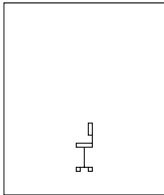


flash4.gr

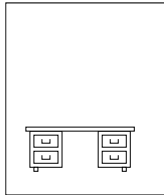


flash5.gr

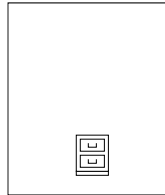
furniture



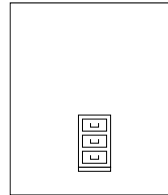
chair.gr



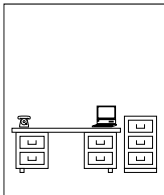
desk.gr



drawer.gr



file.gr

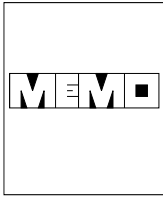


office.gr

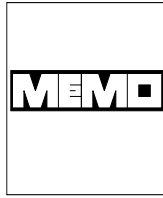


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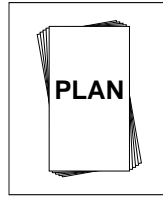
headers



memo.gr



memo2.gr



report1.gr



report2.gr



report3.gr



report4.gr

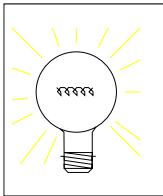


report5.gr

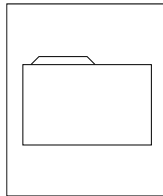


report6.gr

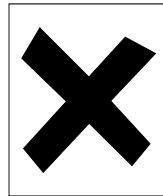
icons



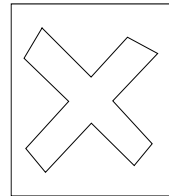
bulb.gr



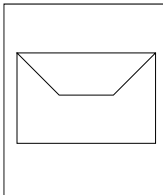
card.gr



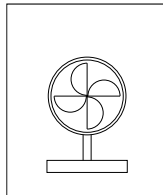
cross1.gr



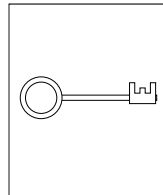
cross2.gr



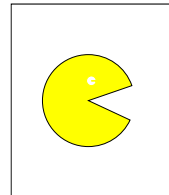
envelope.gr



fan.gr



key.gr



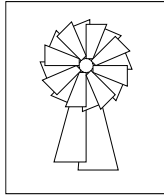
pacman.gr



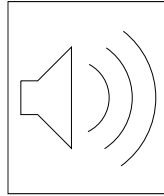
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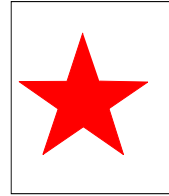
question1.gr



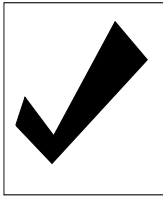
rosette.gr



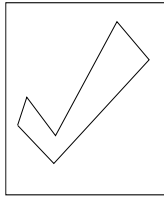
speaker.gr



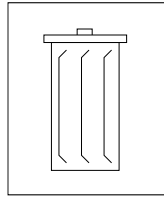
star.gr



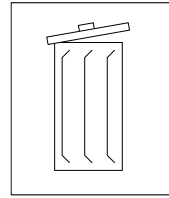
tick1.gr



tick2.gr

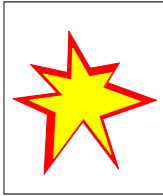


trashcan1.gr

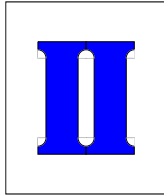


trashcan2.gr

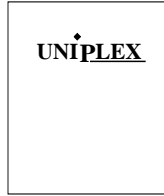
logos



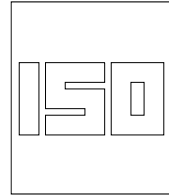
zap.gr



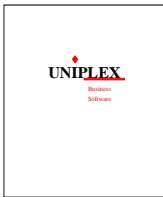
lllogo.gr



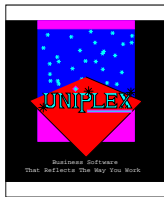
bwlogo.gr



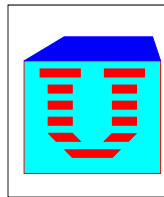
iso.gr



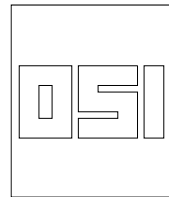
logo.gr



logo3.gr



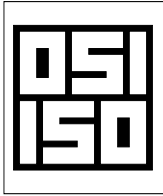
logo4.gr



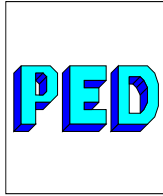
osi.gr



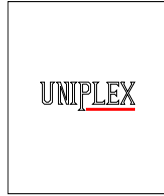
Integrating Clip Art



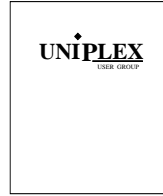
osiiso.gr



ped.gr



uniplex.gr

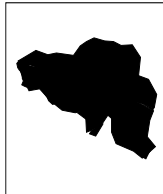


uug1.gr

maps



austria1.gr



belgium1.gr



egermany1.gr



eire1.gr



england1.gr



europa1.gr



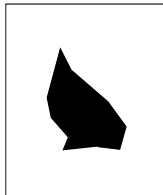
france1.gr



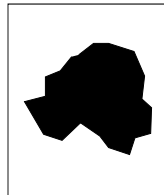
holland1.gr



italy1.gr



luxembourg1.gr



nireland1.gr



portugal1.gr



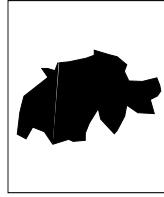
Integrating Clip Art



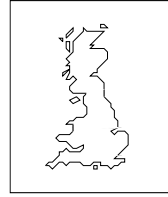
scotland1.gr



spain1.gr



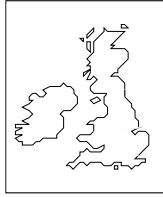
switzerland1.gr



uk.gr



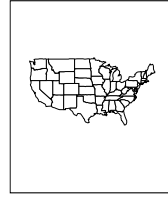
uk1.gr



ukall gr



ukgeo.gr



usdig1.gr



usdig2.gr



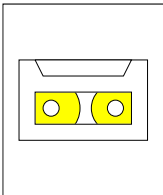
usdig3.gr



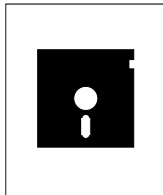
usgeo.gr



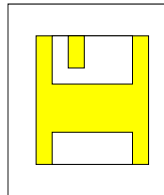
wgermany.gr

media

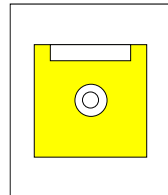
cassette.gr



floppy1.gr



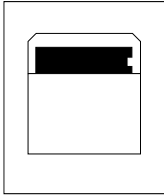
floppy2.gr



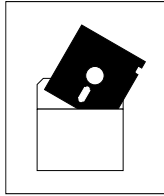
floppy3.gr



Integrating Clip Art

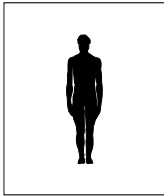


floppy4.gr

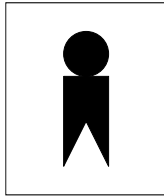


floppy5.gr

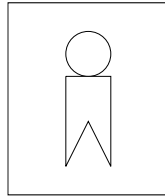
men



bwman.gr



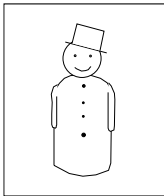
maniconb.gr



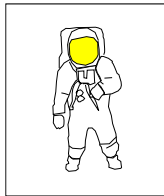
maniconw.gr



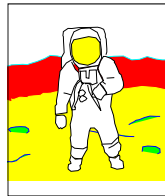
santa.gr



snowman.gr



spaceman1.gr



spaceman2.gr

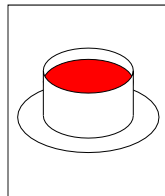
misc



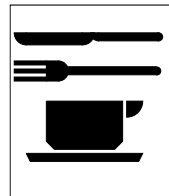
bottle1.gr



bottle2.gr



cup.gr



dining.gr



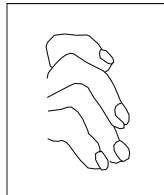
Integrating Clip Art



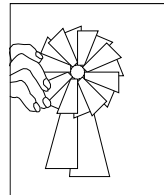
facedig1.gr



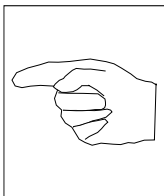
facedig2.gr



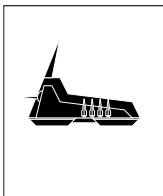
fingers.gr



fingersrose.gr



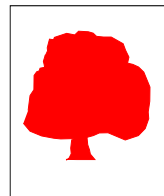
handdig1.gr



ogre.gr

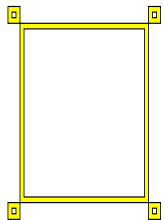


party.gr

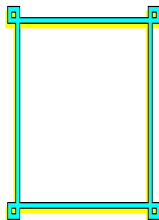


tree.gr

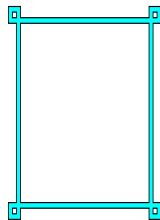
pages



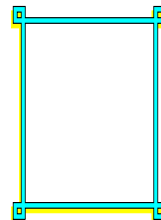
border1.gr



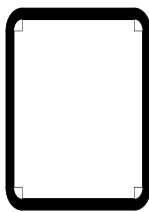
border2.gr



border3.gr



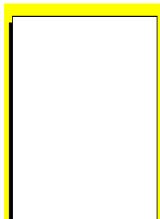
border4.gr



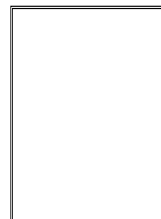
border5.gr



border6.gr



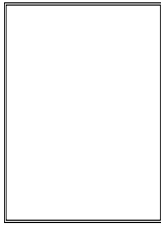
border7.gr



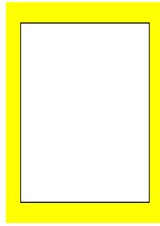
border8.gr



Integrating Clip Art



border9.gr



border10.gr



border11.gr



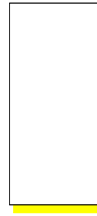
page.gr



page2.gr

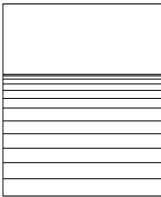


page3.gr

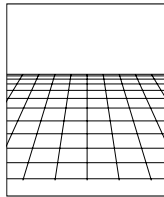


page4.gr

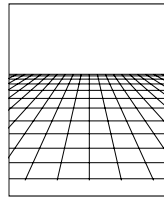
perspectives



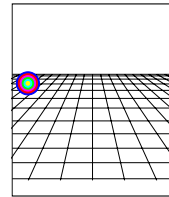
perspect1.gr



perspect2.gr

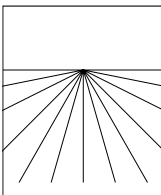


perspect3.gr

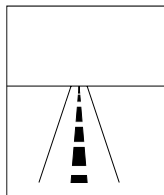


perspect4.gr

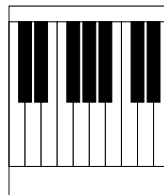
pianos



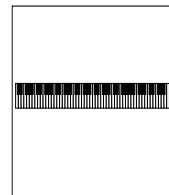
perspect5.gr



road.gr



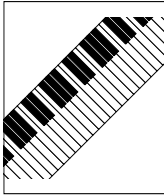
piano1.gr



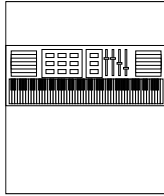
piano2.gr



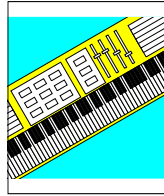
Integrating Clip Art



piano3.gr

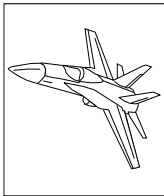


piano4.gr

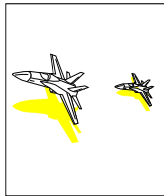


piano5.gr

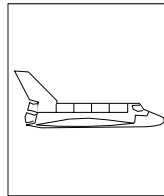
planes



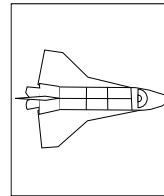
fighter.gr



fighters2.gr

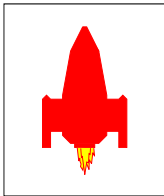


shuttle1.gr

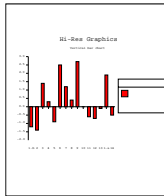


shuttle2.gr

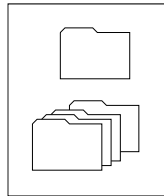
prod_logos



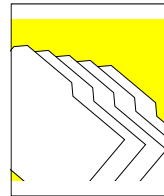
spaceship.gr



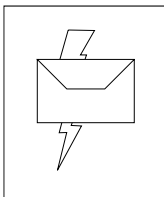
lg_bar.gr



lg_card.gr



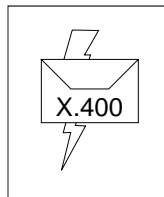
lg_card2.gr



lg_email.gr



lg_wp.gr

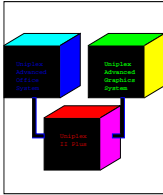


lg_x400.gr



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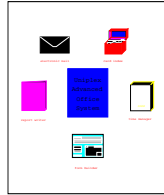
schematics



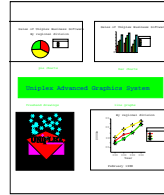
display1.gr



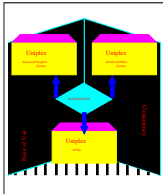
display2.gr



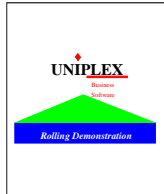
display3.gr



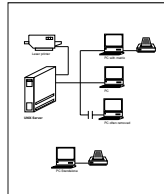
display4.gr



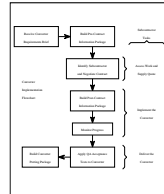
display5.gr



display6.gr



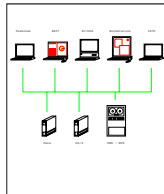
dosnet.gr



example1.gr



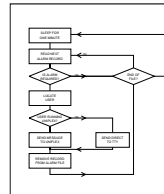
example2.gr



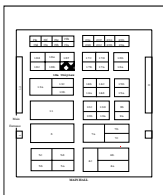
network.gr



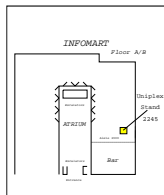
roommap1.gr



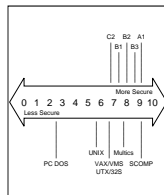
security2.gr



showmap1.gr



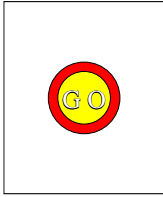
showmap2.gr



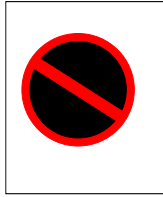
security1.gr



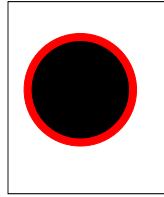
signs



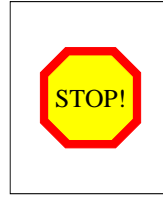
go_sign.gr



nosign.gr

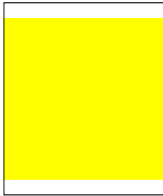


sign.gr



stop_sign.gr

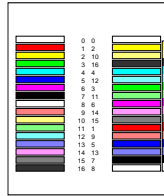
testcards



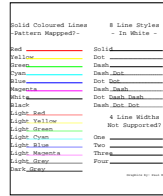
shade.gr



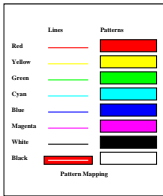
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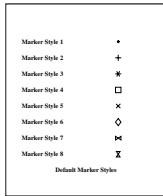
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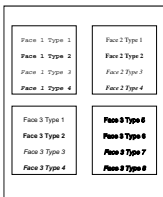
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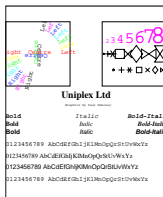
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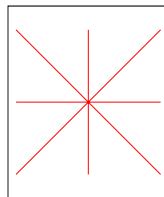
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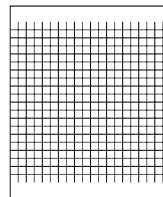
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tc.text2.gr



template.gr

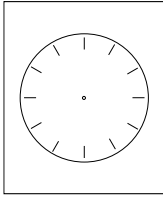


testgrid.gr

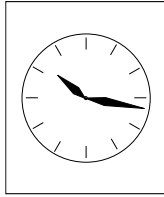


Integrating Clip Art

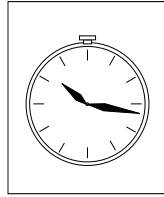
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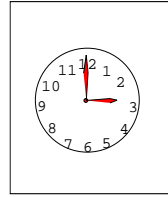
clock1.gr



clock2.gr

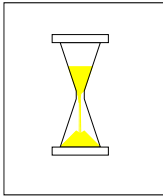


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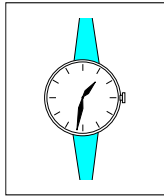


clock4.gr

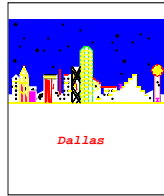
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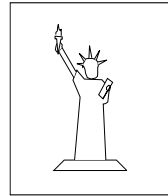
hourglass.gr



watch.gr



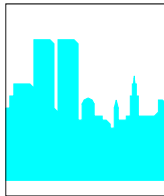
dallas.gr



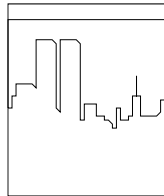
liberty1.gr



liberty2.gr



newyork1.gr

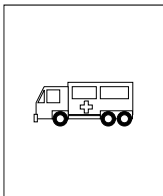


newyork2.gr

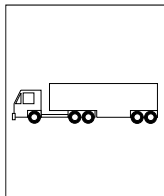


unixexpo.gr

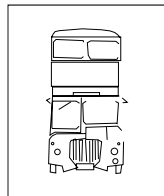
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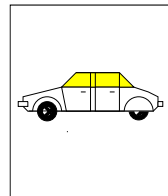
ambulance.gr



artic.gr



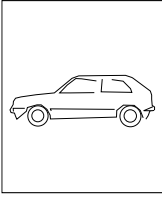
bus.gr



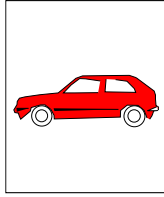
car1.gr



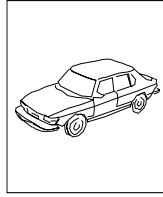
Integrating Clip Art



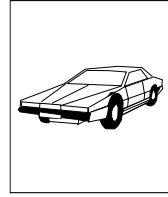
car2.gr



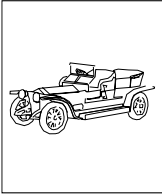
car3.gr



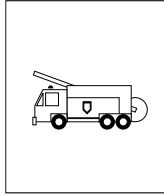
car4.gr



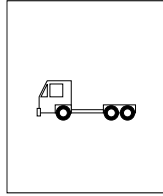
car5.gr



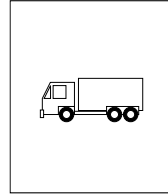
car6.gr



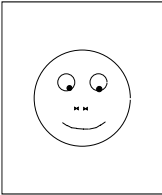
fireengine.gr



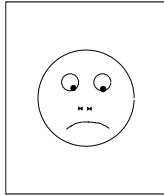
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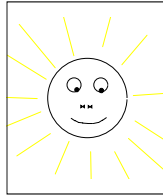
lorry2.gr

weather

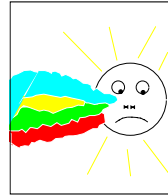
smiley.gr



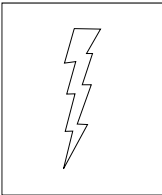
grumpy.gr



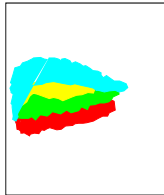
sunny.gr



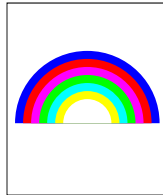
cloudy.gr



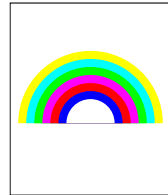
lightning.gr



cloud.gr



rainbow.gr



rainbow2.gr

Glossary



<i>Access</i>	A term used to refer to the type of privilege you have to any kind of information stored on the computer.
<i>Append</i>	Add some information to the end of a file or document.
<i>Application</i>	A term used to refer to a component of Uniplex, for example, the Spreadsheet.
<i>Arc</i>	A circular curve.
<i>Arrow Keys</i>	The four keys on the keyboard, normally labeled with an illustration of an arrow key, each pointing in a different direction. Generally, you use the arrow keys to move the cursor in the required direction.
<i>Center</i>	Move text or graphics to a central position on the screen or page.
<i>Click</i>	The press and release of a mouse button.
<i>Clipboard</i>	Used with <i>Cut and Paste</i> . A special area of computer memory where Uniplex stores information you cut. Uniplex enters the contents of the clipboard when you paste. There is a default clipboard which Uniplex always uses unless you specify otherwise. In addition, there are nine other clipboards.
<i>Cut and Paste</i>	The Uniplex facility for moving, rearranging, and reorganizing information. You can use Cut and Paste with most Uniplex applications to transfer information. You <i>cut</i> information to a <i>clipboard</i> and then <i>paste</i> it at the required point.



<i>Default</i>	The action or option used if you do not select otherwise.
<i>Desk Menu</i>	A popup menu that you can display while using most Uniplex applications. You can access other applications and Uniplex utilities from the Desk Menu.
<i>Field</i>	One or more blank spaces on a form that you complete with your requirements.
<i>File</i>	Where you store the work you carry out using Uniplex.
<i>Fixed Pitch</i>	A method of displaying or printing text where each character takes up the same amount of space.
<i>Folder</i>	A subdivision of the area of computer memory allocated to you and named by you that contains one or more related <i>documents</i> . A folder is sometimes referred to as a <i>subdirectory</i> .
<i>Font</i>	A general name describing the characteristics of printed characters.
<i>Footer</i>	Text that is placed at the bottom of each page of a document. This can be information like the document title and the page number.
<i>Footnote</i>	Text that you want printed outside the main body of text on a page. You can place a footnote at the bottom of a page or at the end of the document.
<i>Form</i>	A screen display containing <i>fields</i> . You complete the fields with your requirements.



<i>Format</i>	The general layout of text and data.
<i>Graph</i>	A graphic illustration of a table of values.
<i>Graphic Image</i>	A collection of graphical objects.
<i>Graphics Terminal</i>	A terminal with high-resolution graphical rendition capabilities.
<i>Grid</i>	Evenly spaced horizontal and vertical lines or points of intersection. Uniplex displays them across the length and width of the screen. They are similar to grids you have on graph paper.
<i>Group</i>	Collections of graphical objects you can manipulate as a single object.
<i>Mouse</i>	A small hand-controlled device you use to move the cursor on high-resolution graphics terminals.
<i>Object</i>	Any graphical element.
<i>Operating Modes</i>	A number of Uniplex applications can run in different modes. For example, the Word Processor can run in <i>insert</i> or <i>overtyp</i> e mode.
<i>Pan</i>	The process of moving the screen display over a zoomed graphical image.
<i>Pick and Point</i>	The method of selecting options from menu. You move the highlight to the required option and then press RETURN .
<i>Polygon</i>	A closed polyline.
<i>Polyline</i>	A sequence of joined lines.



<i>Popup Menu</i>	A menu that Uniplex can display while you are using most Uniplex applications. It pops up on the screen, overwriting only a portion of the screen. You can pick and point options from it like any other menu.
<i>Presentation Editor</i>	A Uniplex application for use on high-resolution graphics terminals. It lets you adjust graphs created using Presentation Graphics or create other graphic images.
<i>Print Time Commands</i>	Commands that you enter into a document or file that cause some action to take place when the document or file is printed.
<i>Refresh the Screen</i>	Where you request Uniplex to redraw the screen display. This does not affect the data that is currently being displayed.
<i>RGIP</i>	The protocol in which Presentation Editor graphs are stored.
<i>Rotation</i>	The process of turning a graphical object around a center point.
<i>Scaling</i>	The process of enlarging or decreasing the size of a graphical object.
<i>Segment</i>	A circular arc with lines joining the arc end points to the circle's center.
<i>Softkey</i>	A Uniplex function that you can invoke using the function key of the same number. A softkey menu is displayed on the bottom line of the screen while using most Uniplex applications.
<i>Solid</i>	A filled or closed object.



<i>Status Line</i>	Most Uniplex applications display a status line at the top of the screen. This provides information on the current status of the application.
<i>Template</i>	The required layout for input to an application that uses text-based instructions. Also a name used to describe examples of a variety of documents that are available within the File Manager.
<i>Terminal</i>	The keyboard and screen are collectively known as the terminal.
<i>Window</i>	A portion of the terminal screen. The screen can be divided into a number of windows, each displaying different information.
<i>Zoom</i>	The process of expanding the display of a portion of an object for working in fine detail.

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Additional information can be found in the on-line documentation available under the System Administration menu or through the File Manager's Help pull down menu.

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