CHARTON GUIDE

for Attache and Attache S

Portable Computer Systems

Published by Otrona Advanced Systems Corp.

Otrona Pub. No. 92051211 Version 2.0 July, 1983

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How to USE this Guide

This manual describes Charton programs and functions, including line charts, bar charts, and pie charts. Each function is described here in a separate chapter.

Charton functions can be used with both the Attache (dual drive) and Attache S (single drive) models. The only requirement is that the file "BRUN.COM" resides on the diskette in the logged drive. The file "CHARTON.COM" may reside on either disk.

The appendixes in the back of this guide contain a comprehensive glossary and a cross-referenced index.

Charton Guide

Introduction

Introduction

Overview

Charton provides the capability for creating screen graphics that can display almost any type of comparative information. Since you specify the type of chart to create for each display, your data can be displayed in different formats for different situations.

Charts are created by entering values in response to a series of screen prompts. The chart is displayed instantly when all values have been keyed. If your chart is not what you expected, just revise it and redisplay it.

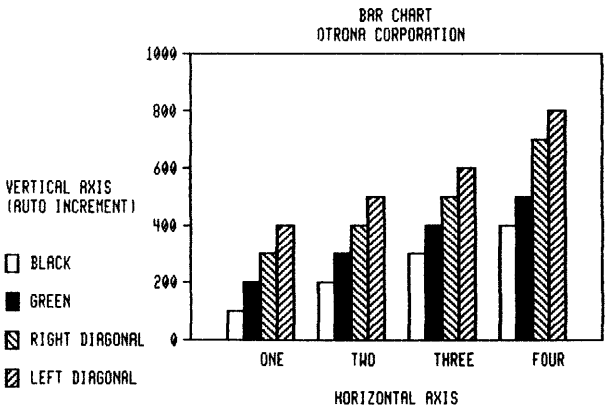
Once created, charts may be printed using the screen dump feature from Valet. You can also save the chart as a disk file for retrieval at a later time.

Charton Functions

Charton can create three different Chart types: Bar Charts, Line Charts, and Pie Charts. These Chart Types are illustrated in this section and discussed in detail in the sections that follow.

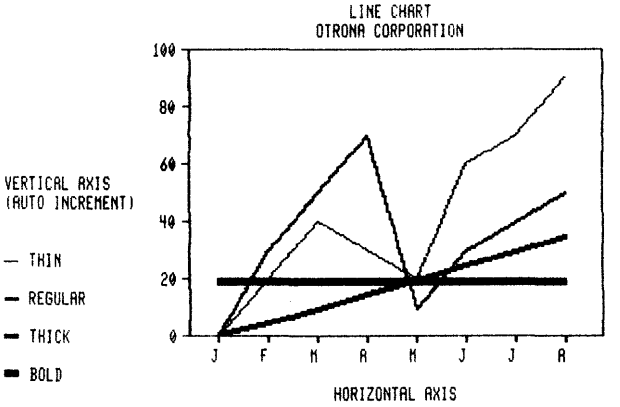
Bar Charts

Bar charts display data as vertical bars on a graph.



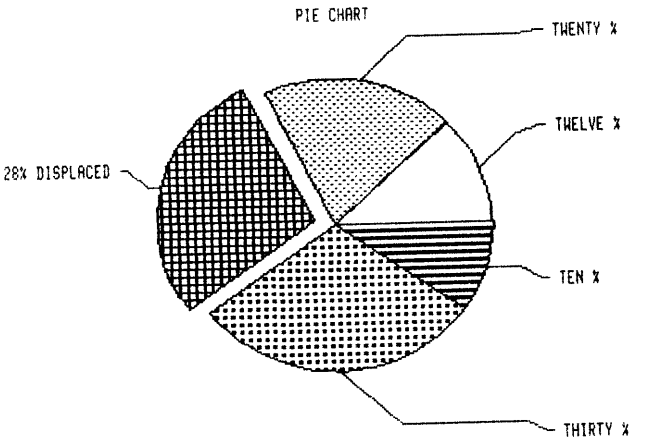
Line Charts

Line Charts display data as horizontal lines on a graph.



Pie Charts

Pie charts display data as slices of a pie.



Charton Files

Charton programs are located in two files on the Attache Software diskette (named CHARTON.COM and BRUN.COM). While Charton may be run from either Drive A or Drive B, BRUN.COM must reside on the diskette that is in the logged drive.

For printing, Valet's screen dump is used and the VALET.VL2 file is required. This file is also located on the Attache Software diskette. Even if Charton is activated from a diskette in the B Drive, the VALET.VL2 file must reside on the diskette in Drive A for the screen dump feature to work. The PRINTER.VL2 file is not required if the printer has already been installed.

Data files may be created during Charton processing. You create these files to save charts for later retrieval. Filenames for these data files are user-specified. The extension .CHT is supplied by Charton.

Charton data files (filename.CHT) will remain on the diskette until you delete them with the CP/M ERA utility program.

Activate Charton

Charton may be activated at any time when the system is under CP/M and the cursor is at the prompt A> (or B> if called from Drive B).

To activate Charton, insert the Attache Software diskette in Drive A and boot the system by pressing **RESET** and the **SHIFT** key on the right side of the keyboard simultaneously.

The display will look like the illustration below when the system has been booted.

```
CP/M x.x.x  Otrona ATTACHE <56K>
A>
```

With the cursor at A> (or B> if you have logged the B Drive), type **CHARTON** in either upper or lower case and press the **RETURN** key.

Charton's Main Menu

When the programs are loaded, Charton's Main Menu appears on the display. This menu provides three options: you can create a new chart, display an existing chart, or exit from Charton and return to CP/M.

```
Otrona CHARTON Version x.x

   (C)reate a new chart
   (D)isplay an existing chart
   Press ESC to exit
   ------------------------------

   Main Menu option:
```

Select an option from this menu by typing the letter shown in parenthesis (**C** = Create or **D** = Display), or press the **ESC** key to return to CP/M.

Create a New Chart

If you select option **C** from Charton's Main Menu, a prompt appears to select a chart type to create. From this display, you elect to create a bar chart, line chart, or pie chart.

```
Otrona CHARTON Version x.x

   (C)reate a new chart
   (D)isplay an existing chart
   Press ESC to exit
   ------------------------------

   Create What Kind of Chart?

   (B)ar Chart
   (L)ine Chart
   (P)ie Chart
   Press ESC to exit

   Option:
```

Select the chart type by typing the number shown in parenthesis or press **ESC** to return to the Main Menu.

Display an Existing Chart

If you select option **D** from Charton's Main Menu, a prompt appears to enter the filename to display. A directory of all Charton data files (filename.CHT) on the logged diskette appears above this prompt.

```
Otrona CHARTON Version x.x

   (C)reate a new chart
   (D)isplay an existing chart
   Press ESC to exit
   ------------------------------

   SALESBAR.CHT  SALESLIN.CHT  SALESPIE.CHT

   Filename of chart to DISPLAY (ESC returns to Main Menu)
```

Select the chart to display by typing its filename and pressing **RETURN.** You do not need to type the extension .CHT.

When a valid filename is keyed, the file is retrieved and the chart is displayed on the screen. Instructions for displaying, printing, and revising existing charts are detailed in the next three sections of this manual.

Note: the three sample charts at the beginning of this section are included on the Attache Software diskette. You can display these charts on the screen by typing the filenames BARSAMPL for the bar chart, LINSAMPL for the line chart, or PIESAMPL for the pie chart.

Exit from Charton

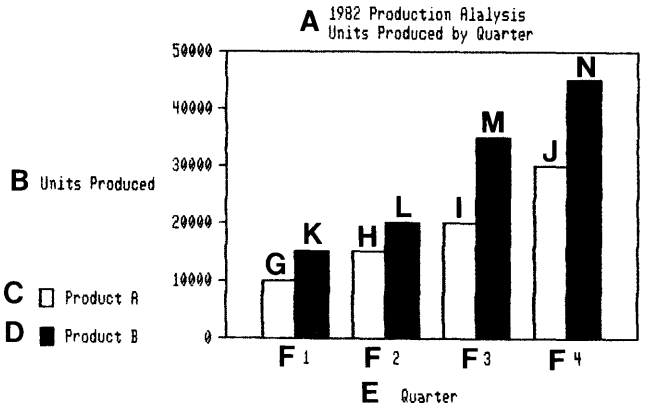
Exit from Charton at any time by pressing **ESC.** If you are at Charton's Main Menu, you will exit to CP/M. If you are creating a new chart, you will exit to the Main Menu. If you are revising a new or existing chart, you will exit to the chart display for that chart and then to the Main Menu.

Press **ESC** again at each menu to exit from Charton and return to CP/M.

Charton Guide

Bar Charts

Bar Charts



A = Chart Title
B = Vertical Axis Title
C = Bar Type #1
D = Bar Type #2
E = Horizontal Axis Title
F = Horizontal Axis Points (4)
G = Type #1 Horizontal Point #1
H = Type #1 Horizontal Point #2
I = Type #1 Horizontal Point #3
J = Type #1 Horizontal Point #4
K = Type #2 Horizontal Point #1
L = Type #2 Horizontal Point #2
M = Type #2 Horizontal Point #3
N = Type #2 Horizontal Point #4
O = Options to Continue

Create a New Bar Chart

Bar Charts are created from Charton's Main Menu by selecting option **C** to CREATE A NEW CHART.

When the prompt CREATE WHAT KIND OF CHART appears, select option **B** for BAR CHART.

A series of prompts will then appear on the screen. Answer each question as instructed on the next page. Use the chart on the previous page as a reference in determining which answers will affect which fields in the chart.

If you make a mistake, you can either press the **ESC** key to return to the Main Menu and start over, or you can finish the chart and then revise it.

Bar Chart Screen Prompts

The following prompts appear on the screen when the option to create a new chart is selected. Refer to the samples at the beginning and end of this chapter to see how the answers to these prompts appear on the displayed chart.

Chart Title - The Chart title will appear centered at the top of the chart.

Chart title - top line?
Chart title - second line?

Type the title (up to 40 characters) and press **RETURN.** Then type a second line of title information if desired, again using up to 40 characters. Press **RETURN** again to continue with the next prompt.

Bar Types - The number of Bar Types determines how many different bars will appear at each horizontal axis point.

How many types of Bars are required? (4 maximum)?

Bar Type #1 Name:
Bar Type #2 Name:
Bar Type #3 Name:

Type the number of Bar Types (up to 4 maximum) that will be included in the chart and press **RETURN.**

Then type the name for each Bar Type (up to 15 characters) as prompted and press **RETURN** after each entry.

The names typed here are displayed with the fill pattern for each selected Bar Type on the lower left portion of the chart.

Horizontal Axis Title - The Horizontal Axis title will appear centered at the bottom of the chart.

Horizontal Axis Title?

Type the title (up to 40 characters) and press **RETURN.**

Horizontal Axis Points - The number of Horizontal Axis Points determines how many sets of Bar Types will appear on the chart.

Number of Horizontal Axis Points? (16 Maximum)

Type the number of Horizontal Axis Points and press **RETURN.**

For example, the bar chart at the beginning of this section has two Bar Types and four Horizontal Axis Points, so the two sets of Bar Types are displayed at four different Horizontal Axis Points.

Axis Labeling - The label for each Horizontal Axis Point can be either numeric (n) or alphanumeric (a). The label appears beneath the Axis Point on the chart.

(n)umeric or (a)lphanumeric labeling of horizontal axis?

(n) = Enter numeric value of first point?
Enter increment?

(a) = Enter name of Horizontal point #1
Enter name of Horizontal point #2

If **N** is selected you are prompted for the numeric value of the first point.

Type the number and press **RETURN.** You are then prompted for the increment. Enter the number and press **RETURN.**

The number entered for the first point will be incremented by the increment number for each additional Horizontal Axis point.

For example, if the first number is 1981 and the increment is 1, the second point is 1982, the third point is 1983, etc.

If **A** is selected you are prompted for the name of the first Horizontal Axis Point.

Type the name (up to 15 characters) and press **RETURN.** Then enter the name for each successive Axis Point as prompted and press **RETURN** after each entry.

Note: Charton will use as much of the typed name as it can. The number of characters used depends upon the available space, which is determined by the number of Horizontal Axis Points.

Vertical Axis Title - The Vertical Axis title will appear on the left side of the chart.

Vertical Axis Title - line 1?
Vertical Axis Title - line 2?

Type the title (up to 20 characters) and press **RETURN.**

The number of Bar Types and the number of Horizontal Axis Points are now displayed at the top of the screen.

Vertical Scale - The vertical scale may be either automatic (based on values you input for each horizontal axis) or defined.

Select (A)uto or (D)efined Vertical Scale. (A or D)

Type **A** or **D** to identify the vertical scale. If Auto is selected, the top and bottom values on the chart will be determined by the horizontal axis values.

If Defined is selected, you are prompted to enter the base and top values for the chart.

Value for Base of Chart?
Value for Top of Chart?

Enter the base and top values as prompted and press **RETURN.**

If the base value entered here is greater than the value of the smallest horizontal axis point, the chart will appear flattened out at that point. Conversely, if the top value entered here is less than the value of the largest horizontal axis point, the chart will appear flattened out at that point.

Values at Horizontal Points - The first prompt is for the value that will represent Bar Type #1 for the first Horizontal Axis Point.

Bar Type #1 Name

Value at Horizontal point #1:
Value at Horizontal point #2:

Type the value and press **RETURN** for each entry.

When Bar Type #1 values have been entered for all Horizontal Axis Points, the prompt is for the value that will represent Bar Type #2 for the first Horizontal Axis Point.

Bar Type #2 Name

Value at Horizontal point #1:
Value at Horizontal point #2:

Type the value and press **RETURN** for each entry.

Continue entering values until you have defined the bar for each Bar Type at each Horizontal Axis Point. The Bar Chart will be displayed when all values have been entered.

Print Bar Charts

Bar Charts can be printed at any time using Valet's Screen Dump feature and a printer with graphics capability that has been installed for Valet. (Refer to the Valet Guide for printer installation instructions.)

With the Bar Chart on the display, press **CTRL** and **P** simultaneously. This removes the Charton options from the lower left side of the display.

Then activate Valet (press **CTRL** and **ESC** simultaneously and then press **TAB**). From Valet's Main Menu, select option **S** for Screen Dump. When the screen dump options appear, select option **E** to print the Entire Screen.

When Valet is activated, the graphics characters will be undisplayed on the screen until Valet is deactivated. Do not be alarmed. These characters will still be printed.

When printing is complete, the screen returns to Set-Up Mode. Press **CTRL** and **ESC** simultaneously again to return to the chart. Graphics characters are then redisplayed.

Press **CTRL** and **P** simultaneously again to redisplay the Charton options.

Change a Bar Chart to a Line Chart

The Bar Chart can be changed instantly to a Line Chart. With the Bar Chart on the display, select option **R** to revise.

When the screen prompts Chart Type OK?, press **C** to change. The chart is changed to a Line Chart. Press **ESC** to view the new chart.

Revise a New Bar Chart

Any of the values that were used to create the chart can be easily changed after the chart is displayed. With the chart on the display, select option **R** to revise.

When the screen prompts Chart Type OK?, press **C** to change the Chart Type, or press the **space bar** to leave the Chart Type as is and continue.

Chart type Ok?

Each value that was entered while creating the chart is then displayed individually with the prompt **Okay?** Press the **space bar** to leave a value as is and continue.

Press **C** to change the value. The value is deleted and the cursor moves to the entry field for that value. Type a new value and press **RETURN.**

Press the **BACK SPACE** key to scroll to the previous prompt and redo the entry, or press **ESC** to display the "new" chart.

```
Chart title:                                    Okay?
Number of Bar Types                             Okay?
Name of Bar Type #1:                            Okay?
Name of Bar Type #2:                            Okay?
Name of Bar Type #3:                            Okay?
Horizontal Axis title:                          Okay?
Number of Horizontal Axis Points?               Okay?
Alphanumeric labeling of Horizontal Axis:       Okay?
Name of Horizontal Point #1:                    Okay?
Name of Horizontal Point #2:                    Okay?
Vertical Axis Title:                            Okay?
Vertical Scaling:                               Okay?

Bar Type #1    Name
Value at Horizontal point #1:                   Okay?
Value at Horizontal point #2:                   Okay?

Bar Type #2    Name
Value at Horizontal point #1:                   Okay?
Value at Horizontal point #2:                   Okay?

Bar Type #3    Name
Value at Horizontal point #1:                   Okay?
Value at Horizontal point #2:                   Okay?
```

Notice the power in the Revise feature. You can use the **space bar** to scroll down through the values, or the **BACK SPACE** key to scroll back up.

Values are changed by pressing **C**, retyping the value, and pressing **RETURN.**

At any point, you can press **ESC** to redraw the chart with your revisions included.

If **ESC** is pressed when the cursor is in the entry field, the old value is retained.

If **ESC** is pressed after **RETURN**, the new value appears on the chart display.

Abandon a New Bar Chart

You can print or revise a new chart when it is displayed, but it is not stored on the disk. If you do not want to save the chart, press **ESC.** Charton will return to the Main Menu and the chart will be cleared from memory.

Save a New Bar Chart

If you want to save the chart for retrieval at a later time, select option **S** to Save. You will be prompted NAME OF FILE FOR SAVING CHART?

Type a filename (up to eight characters) that will help you remember the contents of the chart, such as SALESBAR or BUDGTBAR and press **RETURN.**

The chart will then be saved on the disk file and the display screen will return to Charton's Main Menu.

You can also save the file on a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

Note: Charton will add the file extension .CHT, so the file will be displayed on the file directory as SALESBAR.CHT or BUDGTBAR.CHT.

Display an Existing Bar Chart

To recall a chart that has been saved, activate Charton's Main Menu and select option **D** to display an existing chart. All .CHT files on the logged disk will be displayed on the directory with the prompt FILENAME OF CHART TO DISPLAY?

Type the name of the file containing the chart to display and press **RETURN.** The chart will be displayed with the (S)ave and (R)evise options displayed. Press **ESC** to return to the Main Menu.

Note: you can display a file from a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

To display a directory of .CHT files contained on the diskette in the alternate drive, type **B:** or **A:** and press **RETURN** at the prompt FILENAME OF CHART TO DISPLAY?

Revise an Existing Bar Chart

To revise an existing Bar Chart, display the chart as instructed above. When the chart is displayed, select option **R** to Revise.

The values that were used to create the chart are displayed individually, just as when revising a new chart. (Refer to the instructions for "Revising a New Bar Chart" on the previous pages for details on the revision process.)

Change values as appropriate and press **ESC** to display the "new" chart.

Abandon a Revised Bar Chart

You can print the revised chart when it is displayed, but the revisions are not stored on the disk. If you do not want to save the revised chart, press **ESC.** Charton will return to the Main Menu and the revised chart will be cleared from memory.

The file that was retrieved for revision remains on the disk with its original status intact, just as though no revisions had been made.

Save a Revised Bar Chart

If you want to save the revised chart, select option **S** to Save. You will then be prompted NAME OF FILE FOR SAVING CHART? At this point, you can either create a new file for the revised chart or overlay the old file.

If you type the same filename as when you retrieved the chart for revision, the revised chart will replace the original chart in the file.

If you type a filename that does not already exist on the diskette, the revised chart will be saved in that file and the original file will remain intact.

The display screen will return to Charton's Main Menu when the file has been saved.

You can save the file on a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

Note: Charton will add the file extension .CHT, so the file will be displayed on the file directory as SALESBAR.CHT or BUDGTBAR.CHT.

Delete Chart Files

Use the CP/M DIR command to display the file directory. Files containing charts (.CHT) can be deleted from the diskette with the CP/M ERA Utility program.

With the cursor at A>, type **ERA** and the name of the file to erase (such as SALESBAR.CHT) and then press **RETURN.**

If the file is on a diskette other than the logged disk, precede the filename with the drive letter (such as B:filename).

Bar Chart Examples

Sample #1

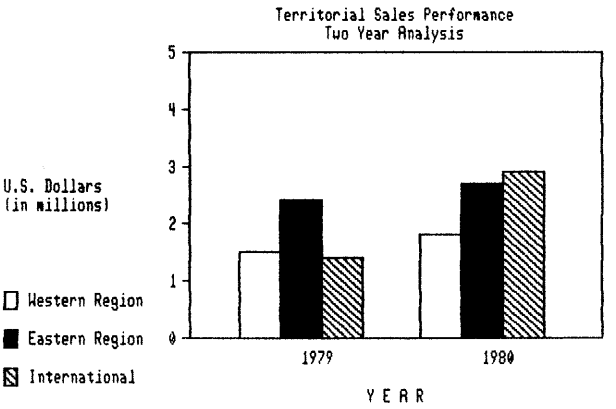
Chart type: BAR Chart title: Territorial Sales Performance
Two Year Analysis

Number of Bar Types = 3
Name of Bar Type #1: Western Region
Name of Bar Type #2: Eastern Region
Name of Bar Type #3: International

Horizontal Axis title: Y E A R
Number of Horizontal Axis Points = 2

Numeric Value for First Horizontal Point: 1979 Increment = 1
Vertical Axis Title: U.S. Dollars
(in millions)
Vertical Scale: Auto

Bar Type #1	Bar Type #2	Bar Type #3
Value at Horizontal point #1: 1.5	#1: 2.4	#1: 1.4
Value at Horizontal point #2: 1.8	#2: 2.7	#2: 2.9



Sample #2

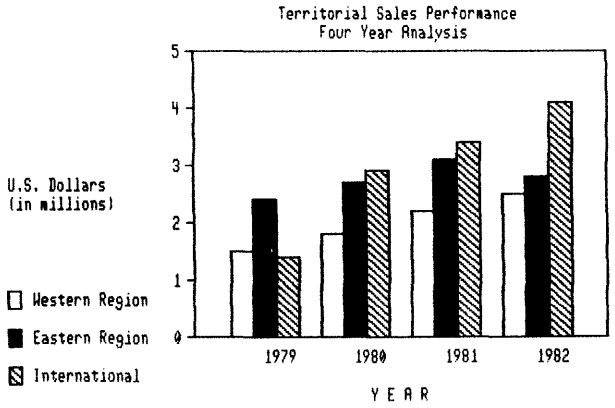
Chart type: BAR Chart title: Territorial Sales Performance
Four Year Analysis

Number of Bar Types = 3
Name of Bar Type #1: Western Region
Name of Bar Type #2: Eastern Region
Name of Bar Type #3: International

Horizontal Axis title: Y E A R
Number of Horizontal Axis Points = 4

Numeric Value for First Horizontal Point: 1979 Increment = 1
Vertical Axis Title: U.S. Dollars
(in millions)
Vertical Scale: Auto

Bar Type #1	Bar Type #2	Bar Type #3
Value at Horizontal point #1: 1.5	#1: 2.4	#1: 1.4
Value at Horizontal point #2: 1.8	#2: 2.7	#2: 2.9
Value at Horizontal point #3: 2.2	#3: 3.1	#3: 3.4
Value at Horizontal point #4: 2.5	#4: 2.8	#4: 4.1



Sample #3

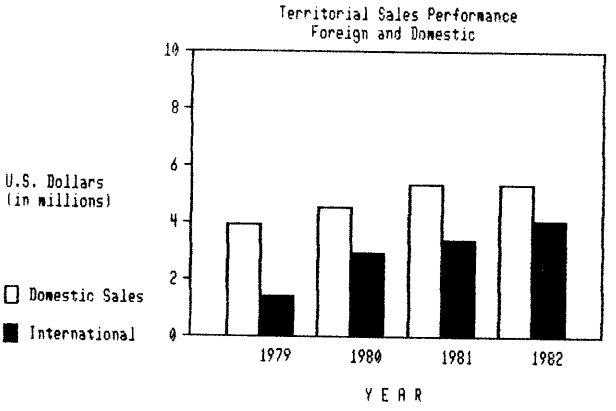
Chart type: BAR Chart title: Territorial Sales Performance
Foreign and Domestic

Number of Bar Types = 2
Name of Bar Type #1: Domestic Sales
Name of Bar Type #2: International

Horizontal Axis title: Y E A R
Number of Horizontal Axis Points = 4

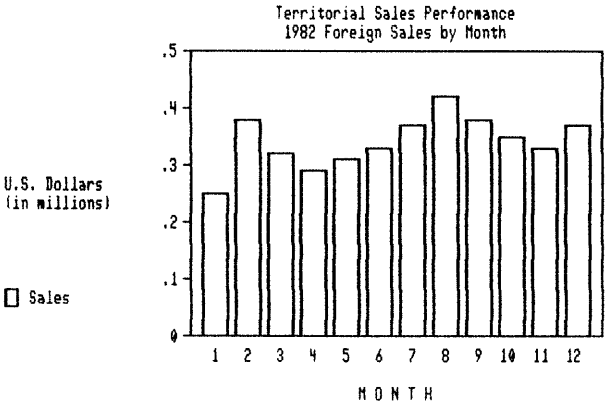
Numeric Value for First Horizontal Point: 1979 Increment = 1
Vertical Axis Title: U.S. Dollars
(in millions)
Vertical Scale: Auto

Bar Type #1	Bar Type #2
Value at Horizontal point #1: 3.9	#1: 1.4
Value at Horizontal point #2: 4.5	#2: 2.9
Value at Horizontal point #3: 5.3	#3: 3.4
Value at Horizontal point #4: 5.3	#4: 4.1



Sample #4

```
Chart type: BAR     Chart title: Territorial Sales Performance
                                 1982 Foreign Sales By Month

Number of Bar Types = 1
Name of Bar Type #1: Sales

Horizontal Axis title: M O N T H
Number of Horizontal Axis Points = 12

Numeric Value for First Horizontal Point : 1  Increment = 1

Vertical Axis Title: U.S. Dollars
                     (in millions)
Vertical Scale: Auto

Bar Type #1
-------------------------------------------------------------
Value at Horizontal point #1:  .25          #7:  .37
Value at Horizontal point #2:  .38          #8:  .42
Value at Horizontal point #3:  .32          #9:  .38
Value at Horizontal point #4:  .29          #10: .35
Value at Horizontal point #5:  .31          #11: .33
Value at Horizontal point #6:  .33          #12: .37
```



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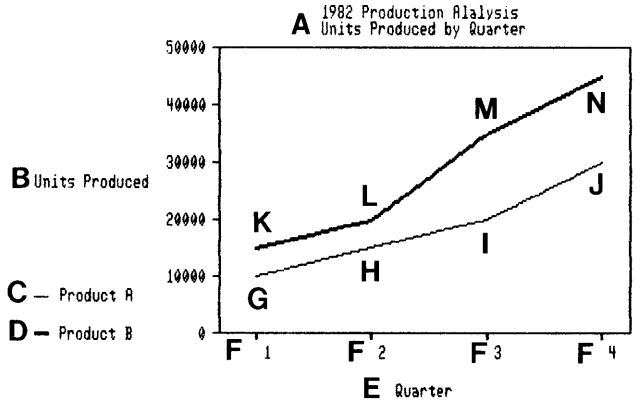
Line Charts

Line Charts



A = Chart Title
B = Vertical Axis Title
C = Line Type #1
D = Line Type #2
E = Horizontal Axis Title
F = Horizontal Axis Points (4)
G = Type #1 Horizontal Point #1
H = Type #1 Horizontal Point #2
I = Type #1 Horizontal Point #3
J = Type #1 Horizontal Point #4
K = Type #2 Horizontal Point #1
L = Type #2 Horizontal Point #2
M = Type #2 Horizontal Point #3
N = Type #2 Horizontal Point #4
O = Options to Continue

Create a New Line Chart

Line Charts are created from Charton's Main Menu by selecting option **C** to CREATE A NEW CHART.

When the prompt CREATE WHAT KIND OF CHART appears, select option **L** for LINE CHART.

A series of prompts will then appear on the screen. Answer each question as instructed on the next page. Use the chart at the top of this page as a reference in determining which answers will affect which fields in the chart.

If you make a mistake, you can either press the **ESC** key to return to the Main Menu and start over, or you can finish the chart and then revise it.

Line Chart Screen Prompts

The following prompts appear on the screen when the option to create a new chart is selected. Refer to the samples at the beginning and end of this chapter to see how your answers to these prompts appear on the displayed chart.

Chart Title - The Chart title will appear centered at the top of the chart.

Chart title - top line?
Chart title - second line?

Type the title (up to 40 characters) and press **RETURN.** Then type a second line of title information if desired, again using up to 40 characters. Press **RETURN** again to continue with the next prompt.

Line Types - The number of Line Types determines how many different lines will appear on the chart.

How many types of Lines are required (4 maximum)?

Line Type #1 Name:
Line Type #2 Name:
Line Type #3 Name:

Type the number of Line Types (up to 4 maximum) that will be included in the chart and press **RETURN.**

Then type the name for each Line Type (up to 15 characters) as prompted and press **RETURN** after each entry.

The names typed here are displayed with the fill pattern for each selected Line Type on the lower left portion of the chart.

Horizontal Axis Title? - The Horizontal Axis title appears centered at the bottom of the chart.

Horizontal Axis Title?

Type the title (up to 40 characters) and press **RETURN.**

Horizontal Axis Points - The number of Horizontal Axis Points determines how many values to measure for lines on the chart.

Number of Horizontal Axis Points (16 Maximum)

Type the number of Horizontal Axis Points and press **RETURN.**

For example, the line chart at the beginning of this section has two Line Types and four Horizontal Axis Points, so the two sets of Line Types are measured at four different Axis Points.

Axis Labeling - The label for each Horizontal Axis Point can be either numeric (n) or alphanumeric (a). The label appears beneath the Axis Point on the chart.

(n)umeric or (a)lphanumeric labeling of horizontal axis?

(n) = Enter numeric value of first point?
Enter increment?

(a) = Enter name of Horizontal point #1
Enter name of Horizontal point #2

If **N** is selected you are prompted for the numeric value of the first point.

Type the number and press **RETURN.** You are then prompted for the increment. Enter the number and press **RETURN.**

The number entered for the first point will be incremented by the increment number for each additional Horizontal Axis point.

For example, if the first number is 1981 and the increment is 1, the second point is 1982, the third point is 1983, etc.

If **A** is selected above, you are prompted for the name of the first Horizontal Axis Point.

Type the name (up to 15 characters) and press **RETURN.** Then enter the name for each successive Axis Point as prompted and press **RETURN** after each entry.

Note: Charton will use as much of the typed name as it can. The number of characters used depends upon the available space, which is determined by the number of Horizontal Axis Points.

Vertical Axis Title - The Vertical Axis title appears on the left side of the chart.

Vertical Axis Title - line 1?
Vertical Axis Title - line 2?

Type the title (up to 20 characters) and press **RETURN.**

The number of Line Types and the number of Horizontal Axis Points are now displayed at the top of the screen.

Vertical Scale - The vertical scale may be either automatic (based on values you input for each horizontal axis) or defined.

Select (A)uto or (D)efined Vertical Scale. (A or D)

Type **A** or **D** to identify the vertical scale. If Auto is selected, the top and bottom values on the chart will be determined by the horizontal axis values.

If Defined is selected, you are prompted to enter the base and top values for the chart.

Value for Base of Chart?
Value for Top of Chart?

Enter the base and top values as prompted and press **RETURN.**

If the base value entered here is greater than the value of the smallest horizontal axis point, the chart will appear flattened out at that point. Conversely, if the top value entered here is less than the value of the largest horizontal axis point, the chart will appear flattened out at that point.

Values at Horizontal Points - The first prompt is for the value that will represent Line Type #1 for the first Horizontal Axis Point.

Line Type #1 Name

Value at Horizontal point #1:
Value at Horizontal point #2:

Type the value for each entry and press **RETURN.**

When Line Type #1 values have been entered for all Horizontal Axis Points, the prompt is for the value that will represent Line Type #2 for the first Horizontal Axis Point.

Line Type #2 Name

Value at Horizontal point #1:
Value at Horizontal point #2:

Type the value for each entry and press **RETURN.**

Continue entering values until you have defined the line for each Line Type at each Horizontal Axis Point. The Line Chart will be displayed when all values have been entered.

Print Line Charts

Line Charts can be printed at any time using Valet's Screen Dump feature and a printer with graphics capability that has been installed for Valet. (Refer to the Valet Guide for printer installation instructions.)

With the Line Chart on the display, press **CTRL** and **P** simultaneously. This removes the Charton options from the lower left side of the display.

Then activate Valet (press **CTRL** and **ESC** simultaneously and then press **TAB**). From Valet's Main Menu, select option **S** for Screen Dump. When the screen dump options appear, select option **E** to print the Entire Screen.

When Valet is activated, the graphics characters will be undisplayed on the screen until Valet is deactivated. Do not be alarmed. These characters will still be printed.

When printing is complete, the screen returns to Set-Up Mode. Press **CTRL** and **ESC** simultaneously again to return to the chart. Graphics characters are then redisplayed.

Press **CTRL** and **P** simultaneously again to redisplay the Charton options.

Change a Line Chart to a Bar Chart

The Line Chart can be changed instantly to a Bar Chart. With the Line Chart on the display, select option **R** to Revise.

When the screen prompts CHART TYPE OK?, press **C** to change. The chart is changed to a Bar Chart. Press **ESC** to view the new chart.

Revise a New Line Chart

Any of the values that were used to create the chart can be easily changed after the chart is displayed.

With the chart on the display, select option **R** to Revise. When the screen prompts CHART TYPE OK?, press **C** to change the Chart Type, or press the **space bar** to leave the Chart Type as is and continue.

Chart type Ok?

Each value that was entered while creating the chart is then displayed individually with the prompt **Okay?** Press the **space bar** to leave a value as it was and continue.

Press **C** to change the value. The value is deleted and the cursor moves to the entry field for that value. Type a new value and press **RETURN.**

Press the **BACK SPACE** key to scroll to the previous prompt and redo the entry, or press **ESC** to display the "new" chart.

Chart title:	**Okay?**
Number of Line Types	Okay?
Name of Line Type #1:	**Okay?**
Name of Line Type #2:	Okay?
Name of Line;Type #3:	**Okay?**
Horizontal Axis title:	Okay?
Number of Horizontal Axis Points?	**Okay?**
Alphanumeric labeling of Horizontal Axis:	Okay?
Name of Horizontal Point #1:	**Okay?**
Name of Horizontal Point #2:	Okay?
Vertical Axis Title:	**Okay?**
Vertical Scaling:	Okay?
Line Type #1	
Value at Horizontal point #1:	**Okay?**
Value at Horizontal point #2:	Okay?
Line Type #2	
Value at Horizontal point #1:	**Okay?**
Value at Horizontal point #2:	Okay?
Line Type #3	
Value at Horizontal point #1:	**Okay?**
Value at Horizontal point #2:	Okay?

Notice the power in the Revise feature. You can use the **space bar** to scroll down through the values, or the **BACK SPACE** key to scroll back up.

Values are changed by pressing **C,** retyping the value, and pressing **RETURN.**

At any point, you can press **ESC** to redraw the chart with your revisions included.

If **ESC** is pressed when the cursor is in the entry field, the old value is retained.

If **ESC** is pressed after **RETURN,** the new value appears on the chart display.

Abandon a New Line Chart

You can print or revise a new chart when it is displayed, but it is not stored on the disk. If you do not want to save the chart, press **ESC.** Charton will return to the Main Menu and the chart will be cleared from memory.

Save a New Line Chart

If you want to save the chart for retrieval at a later time, select option **S** to Save. You will be prompted NAME OF FILE FOR SAVING CHART?

Type a filename (up to eight characters) that will help you remember the contents of the chart, such as SALESLIN or BUDGTLIN and press **RETURN.**

The chart will then be saved on the disk file and the display screen will return to Charton's Main Menu.

You can save the file on a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

Note: Charton will add the file extension .CHT, so the file will be displayed on the file directory as SALESLIN.CHT or BUDGTLIN.CHT.

Display an Existing Line Chart

To recall a chart that has been saved, activate Charton's Main Menu and select option **D** to display an existing chart. All .CHT files on the logged disk will be displayed on the directory with the prompt FILENAME OF CHART TO DISPLAY?

Type the name of the file containing the chart to display and press **RETURN.** The chart will be displayed with the (S)ave and (R)evise options displayed. Press **ESC** to return to the Main Menu.

Note: you can display a file from a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

To display a directory of .CHT files contained on the diskette in the alternate drive, type **B:** or **A:** and press **RETURN** at the prompt FILENAME OF CHART TO DISPLAY?

Revise an Existing Line Chart

To revise an existing Line Chart, display the chart as instructed above and select option **R** to revise when the chart is displayed.

The values that were used to create the chart are displayed individually, just as when revising a new chart. (Refer to the instructions for "Revising a New Line Chart" on the previous pages for details on the revision process.)

Change values as appropriate and press **ESC** to display the "new" chart.

Abandon a Revised Line Chart

You can print the revised chart when it is displayed, but the revisions are not stored on the disk. If you do not want to save the revised chart, press **ESC.** Charton will return to the Main Menu and the revised chart will be cleared.

The file that was retrieved for revision remains on the disk with its original status intact, just as though no revisions had been made.

Save a Revised Line Chart

If you want to save the revised chart, select option **S** to Save. You will then be prompted NAME OF FILE FOR SAVING CHART? At this point, you can either create a new file for the revised chart or overlay the old file.

If you type the same filename as when you retrieved the chart for revision, the revised chart will replace the original chart in the file.

If you type a filename that does not already exist on the diskette, the revised file will be saved in that file and the original file will remain intact.

The display screen will return to Charton's Main Menu when the file has been saved.

You can save the file on a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

Note: Charton will add the file extension .CHT, so the file will be displayed on the file directory as SALESLIN.CHT or BUDGTLIN.CHT.

Delete Chart Files

Use the CP/M DIR command to display the file directory. Files containing charts (.CHT) can be deleted from the diskette with the CP/M ERA Utility program.

With the cursor at A>, type **ERA** and the name of the file to erase (such as SALESLIN.CHT).

If the file is on a diskette other than the logged disk, precede the filename with the drive letter (such as B:filename).

Line Chart Examples

Sample #1

Chart type: LINE Chart title: Territorial Sales Performance
Two Year Analysis

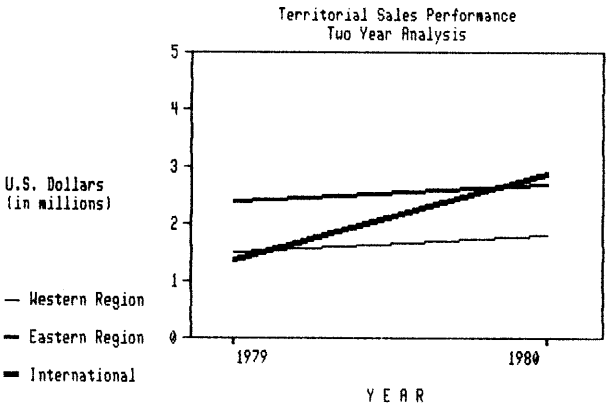
Number of Bar Types = 3

Name of Bar Type #1: Western Region
Name of Bar Type #2: Eastern Region
Name of Bar Type #3: International

Horizontal Axis title: Y E A R
Number of Horizontal Axis Points = 2
Numeric Value for First Horizontal Point: 1979 Increment = 1

Vertical Axis Title: U.S. Dollars
(in millions)
Vertical Scale: Auto

Bar Type #1	Bar Type #2	Bar Type #3
Value at Horizontal point #1: 1.5	#1: 2.4	#1: 1.4
Value at Horizontal point #2: 1.8	#2: 2.7	#2: 2.9



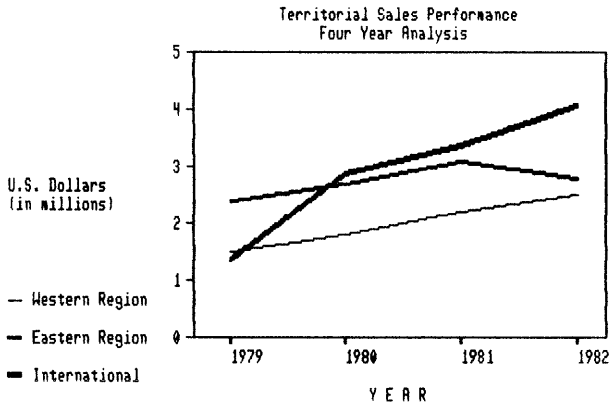
Sample #2

Chart type: LINE Chart title: Territorial Sales Performance
Four Year Analysis
Number of Bar Types = 3
Name of Bar Type #1: Western Region
Name of Bar Type #2: Eastern Region
Name of Bar Type #3: International

Horizontal Axis title: Y E A R
Number of Horizontal Axis Points = 4

Numeric Value for First Horizontal Point: 1979 Increment = 1
Vertical Axis Title: U.S. Dollars
(in millions)
Vertical Scale: Auto

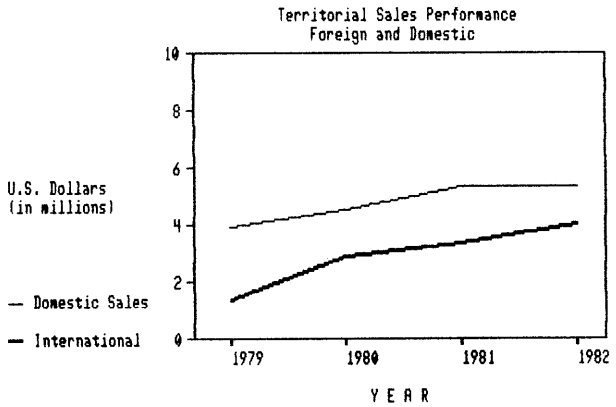
Bar Type #1	Bar Type #2	Bar Type #3
Value at Horizontal point #1: 1.5	#1: 2.4	#1: 1.4
Value at Horizontal point #2: 1.8	#2: 2.7	#2: 2.9
Value at Horizontal point #3: 2.2	#3: 3.1	#3: 3.4
Value at Horizontal point #4: 2.5	#4: 2.8	#4: 4.1



Sample #3

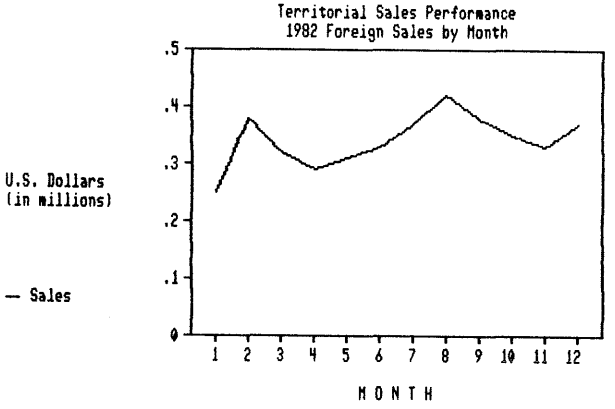
```
Chart type: LINE   Chart title: Territorial Sales Performance
                                Foreign and Domestic
Number of Bar Types = 2
Name of Bar Type #1: Domestic Sales
Name of Bar Type #2: International

Horizontal Axis title: Y E A R
Number of Horizontal Axis Points = 4

Numeric Value for First Horizontal Point: 1979  Increment = 1
Vertical Axis Title: U.S. Dollars
                     (in millions)
Vertical Scale: Auto
```

Bar Type #1	Bar Type #2
Value at Horizontal point #1: 3.9	#1: 1.4
Value at Horizontal point #2: 4.5	#2: 2.9
Value at Horizontal point #3: 5.3	#3: 3.4
Value at Horizontal point #4: 5.3	#4: 4.1



Sample #4

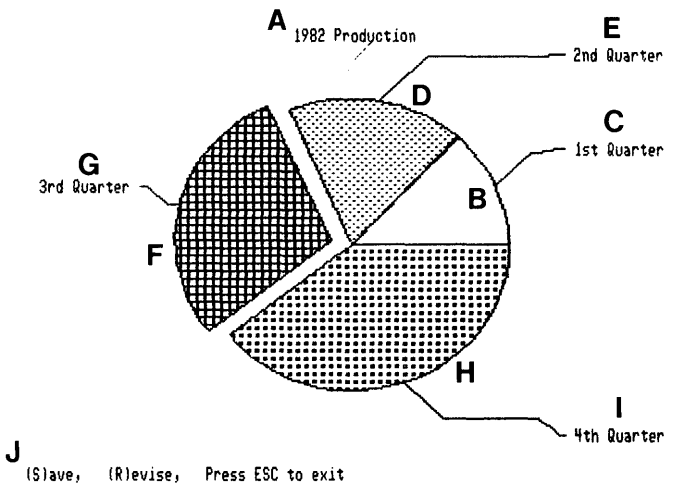
```
Chart type: LINE   Chart title: Territorial Sales Performance
                                1982 Foreign Sales By Month
Number of Bar Types = 1
Name of Bar Type #1: Sales

Horizontal Axis title: M O N T H
Number of Horizontal Axis Points = 12

Numeric Value for First Horizontal Point : 1     Increment = 1
Vertical Axis Title: U.S. Dollars
                     (in millions)
Vertical Scale: Auto

Bar Type #1
-------------------------------------------------------------
Value at Horizontal point #1: .25                  #7:  .37
Value at Horizontal point #2: .38                  #8:  .42
Value at Horizontal point #3: .32                  #9:  .38
Value at Horizontal point #4: .29                  #10: .35
Value at Horizontal point #5: .31                  #11: .33
Value at Horizontal point #6: .33                  #12: .37
```



Charton Guide

Pie Charts

Pie Charts



A = Chart Title

B = Slice 1

C = Slice 1 Title

D = Slice 2

E = Slice 2 Title

F = Slice 3

G = Slice 3 Title

H = Slice 4

I = Slice 4 Title

J = Options to Continue

Create a New Pie Chart

Pie Charts are created from Charton's Main Menu by selecting option **C** to CREATE A NEW CHART.

When the prompt CREATE WHAT KIND OF CHART appears, select option **P** for Pie Chart.

A series of prompts will then appear on the screen. Answer each question as instructed on the next page. Use the chart at the top of this page as a reference in determining which answers will affect which fields in the chart.

If you make a mistake, you can either press the **ESC** key to return to the Main Menu and start over, or you can finish the chart and then revise it.

Pie Chart Screen Prompts

The following prompts appear on the screen when the option to create a new chart is selected. Refer to the samples at the beginning and end of this chapter to acquaint yourself with the ramifications of your answers to these prompts.

Chart Title - The chart title appears centered at the top of the chart.

PIE CHART

Chart title:

Type the title (up to 24 characters) and press **RETURN.**

Number of Slices - The number of slices determines how many "pieces" will make up the pie. Up to 24 slices are allowed.

Number of Slices:

Type the number of slices and press **RETURN.**

Slice Displacement

The pie is displayed whole except for slices that you specify to displace. These slices are exploded from the rest of the pie.

Slices may be displayed in three different ways:

- **Whole** (option **W**) displays the pie intact.
- **Exploded** (option **E**) displays all slices displaced.
- **Displaced** (option **D**) combines the first two options.

(W)hole, (E)xploded, or (D)isplaced Slices?

Type the letter (**W, E,** or **D**) for your desired option.
The number of slices and the display type are then displayed on the screen with a prompt to enter the size for Slice #1.

```
Slice 1
-------
Size?
Title?

Slice 2
-------
Size?
Title?

Slice 3
-------
Size?
Title?
```

Type a value for the size of the first slice as prompted and press **RETURN.** Then type the title for that slice (up to 13 characters) as prompted and press **RETURN** again.

Continue defining slices as prompted, pressing **RETURN** after each entry. The Pie Chart will be displayed when all slices have been defined.

Print Pie Charts

Pie Charts can be printed at any time using Valet's Screen Dump feature and a printer with graphics capability that has been installed for Valet. (Refer to the Valet Guide for printer installation instructions.)

With the Pie Chart on the display, press **CTRL** and **P** simultaneously. This removes the Charton options from the lower left side of the display. Then activate Valet (press **CTRL** and **ESC** simultaneously and then press **TAB**).

From Valet's Main Menu, select option **S** for Screen Dump. When the screen dump options appear, select option **E** to print the Entire Screen. When Valet is activated, the graphics characters will be undisplayed on the screen until Valet is deactivated. Do not be alarmed. These characters will still be printed.

When printing is complete, the screen returns to Set-Up Mode. Press **CTRL** and **ESC** simultaneously again to return to the chart. Graphics characters are then redisplayed.

Press **CTRL** and **P** simultaneously again to redisplay the Charton options.

Revise a New Pie Chart

Any of the values that were used to create the chart can be easily changed after the chart is displayed. With the chart on the display, select option **R** to Revise. Each value that was entered while creating the chart is then displayed individually with the prompt **Okay?**

Press the space bar to leave a value as it was and continue.

Press **C** to change the value. The value is deleted and the cursor moves to the entry field for that value. Type a new value and press **RETURN.**

Press the **BACK SPACE** key to scroll to the previous prompt and redo the entry, or press **ESC** to display the "new" chart.

PIE CHART

Chart title:	**Okay?**
Number of Slices:	**Okay?**
(W)hole, (E)xploded, or (D)isplaced Slices?	**Okay?**
Slice 1	
Size?	**Okay?**
Title?	**Okay?**
Slice 2	
Size?	**Okay?**
Title?	**Okay?**
Slice 3	
Size?	**Okay?**
Title?	**Okay?**

Notice the power in the Revise feature. You can use the **space bar** to scroll down through the values, or the **BACK SPACE** key to scroll back up.

Values are changed by pressing **C,** retyping the value, and pressing **RETURN.**

Press **ESC** at any time to redraw the chart with your revisions included.

If **ESC** is pressed while the cursor is in the entry field, the old value is retained.

If **ESC** is pressed after **RETURN,** the new value appears in the chart display.

Abandon a New Pie Chart

You can print or revise a new chart when it is displayed, but it is not stored on the disk. If you do not want to save the chart, press **ESC.** Charton will return to the Main Menu and the chart will be cleared from memory.

Save a New Pie Chart

If you want to save the chart for retrieval at a later time, select option **S** to Save. You will be prompted NAME OF FILE FOR SAVING CHART?

Type a filename (up to eight characters) that will help you remember the contents of the chart, such as SALESPIE or BUDGTPIE and press **RETURN.**

The chart will then be saved on the disk file and the display screen will return to Charton's Main Menu.

You can save the file on a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

Note: Charton will add the file extension .CHT, so the file will be displayed on the file directory as SALESPIE.CHT or BUDGTPIE.CHT.

Display an Existing Pie Chart

To recall a chart that has been saved, activate Charton's Main Menu and select option **D** to display an existing chart. All .CHT files on the logged disk will be displayed on the directory with the prompt FILENAME OF CHART TO DISPLAY?

Type the name of the file containing the chart to display and press **RETURN.** The chart will be displayed with the (S)ave and (R)evise options displayed. Press **ESC** to return to the Main Menu.

Note: you can display a file from a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

To display a directory of .CHT files contained on the diskette in the alternate drive, type **B:** or **A:** and press **RETURN** at the prompt FILENAME OF CHART TO DISPLAY?

Revise an Existing Pie Chart

To revise an existing Pie Chart, display the chart as instructed above and select option **R** to revise when the chart is displayed.

The values that were used to create the chart are displayed individually, just as when revising a new chart. (Refer to the instructions for "Revising a New Pie Chart" on the previous pages for details on the revision process.)

Change values as appropriate and press **ESC** to display the "new" chart.

Abandon a Revised Pie Chart

You can print the revised chart when it is displayed, but the revisions are not stored on the disk. If you do not want to save the revised chart, press **ESC.** Charton will return to the Main Menu and the revised chart will be cleared.

The file that was retrieved for revision remains on the disk with its original status intact, just as though no revisions had been made.

Save a Revised Pie Chart

If you want to save the revised chart, select option **S** to Save. You will then be prompted NAME OF FILE FOR SAVING CHART?

At this point, you can either create a new file for the revised chart or overlay the old file. If you type the same filename as when you retrieved the chart for revision, the revised chart will replace the original chart in the file.

If you type a filename that does not already exist on the diskette, the revised chart will be saved in that file and the original file will remain intact.

The display screen will return to Charton's Main Menu when the file has been saved.

You can save the file on a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

Note: Charton will add the file extension .CHT, so the file will be displayed on the file directory as SALESPIE.CHT or BUDGTPIE.CHT.

Delete Chart Files

Use the CP/M DIR command to display the file directory. Files containing charts (.CHT) can be deleted from the diskette with the CP/M ERA Utility program.

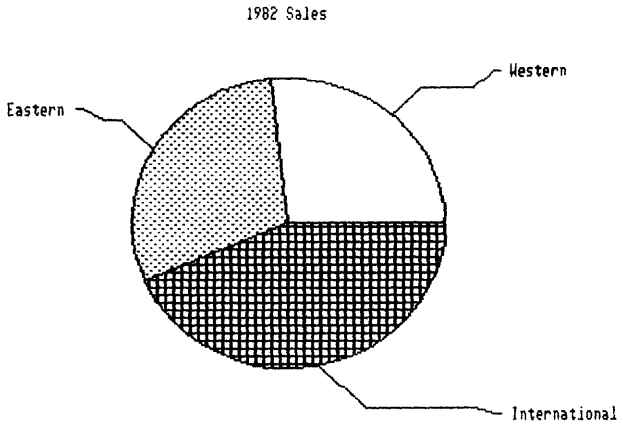
With the cursor at A>, type **ERA** and the name of the file to erase (such as SALESLIN.CHT).

If the file is on a diskette other than the logged disk, precede the filename with the drive letter (such as B:filename).

Pie Chart Examples

Sample #1

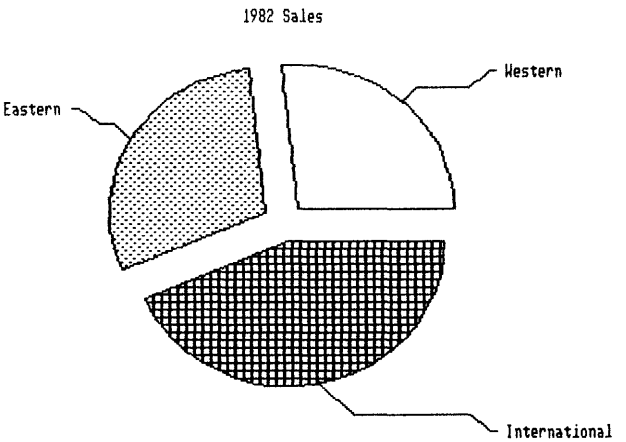
```
Chart type: PIE
Number of Slices: 3
Chart Title:  1982 Sales
Chart Format: Whole

Slice 1                 Slice 2                 Slice 3
-------                 -------                 -------
Size:  2.5              Size:  2.8              Size:  4.1
Title: Western          Title: Eastern          Title: International
```



Sample #2

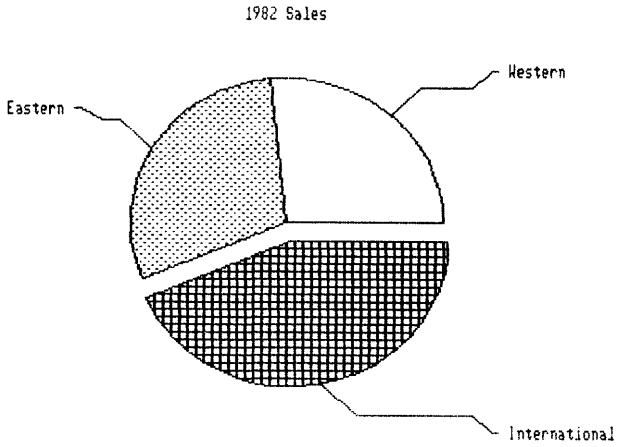
Chart type: PIE
Number of Slices: 3
Chart Title: 1982 Sales
Chart Format: Exploded

Slice 1	Slice 2	Slice 3
Size: 2.5	Size: 2.8	Size: 4.1
Title: Western	Title: Eastern	Title: International



Sample #3

```
Chart type: PIE
Number of Slices: 3
Chart Title:  1982 Sales
Chart Format: Displaced

Slice 1              Slice 2              Slice 3
-------              -------              -------
Size:  2.5           Size:  2.8           Size:  4.1
Title: Western       Title: Eastern       Title: International
Not Displaced        Not Displaced        Displaced
```

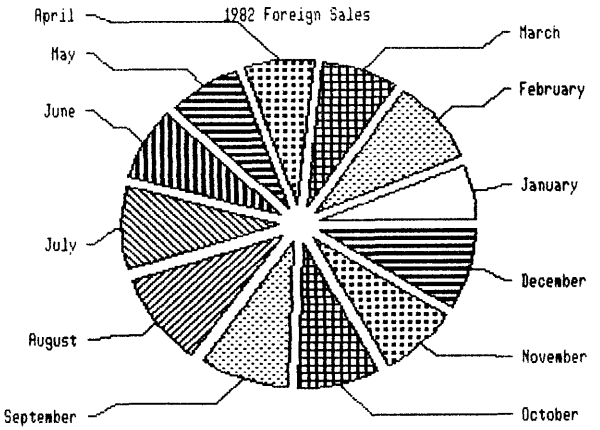


Sample #4

Chart type: PIE
Number of Slices: 12

Chart Title: 1982 Foreign Sales
Chart Format: Exploded

Slice 1:	.25	January	Slice 7:	.37	July
Slice 2:	.38	February	Slice 8:	.42	August
Slice 3:	.32	March	Slice 9:	.38	September
Slice 4:	.29	April	Slice 10:	.35	October
Slice 5:	.31	May	Slice 11:	.33	November
Slice 6:	.33	June	Slice 12:	.37	December



Charton Guide

Appendixes

Glossary

Abandon New Chart Process of exiting from a newly created chart without saving it.

Abandon Revised Chart Process of exiting from an existing chart that has been revised without saving it. The original chart remains intact in the disk file as though no revisions were made.

Activate Charton Process of activating Charton by typing CHARTON and pressing **RETURN** when the cursor is at A> (or B> if called from that drive).

Bar Chart A chart that displays data as vertical bars in a numerically scaled rectangle.

Bar Type Values that determine how many bars will appear at each Horizontal Axis Point on a bar chart.

Bar Type Name The name given to each Bar Type in a bar chart.

Charton Attache software programs that provide the capability for creating bar charts, line charts, and pie charts.

CHARTON.COM The file on the Attache Software diskette that contains Charton programs.

Charton Files Files that are required for running Charton programs.

Chart Files .CHT files created to store charts that you have created with Charton.

Chart Title The one or two line chart description that is keyed during chart creation and appears at the top of the screen when the chart is displayed.

Chart Type Either a bar chart, line chart, or pie chart.

Create The Charton Main Menu option for creating a new chart.

Delete Charts The process of deleting files that were created with Charton for storing charts.

Displaced Slices Pie Chart option that displays specified slices of the pie exploded from the rest of the pie.

Display — The Charton Main Menu option for displaying an existing chart that was previously created and saved in a chart file.

ESC Key — Used to exit from Charton, return to Charton's Main Menu, or redisplay a chart after revision.

Exit Charton — Process of returning from a chart to Charton's Main Menu, and from the Main Menu to CP/M.

Exploded Slices — Pie Chart option that displays slices of the pie separated from each other other on the display.

Horizontal Axis — The horizontal line at the bottom of a chart.

Horizontal Axis Points — Points on the Horizontal Axis where bars are displayed in a bar chart, and where values are displayed to measure lines in a line chart.

Horizontal Axis Title — The title that appears below a chart.

Horizontal Points — Horizontal Axis Points.

Increment — The amount of increase in numeric values from one Horizontal Point to another.

Line Chart — A chart that displays data as horizontal lines in a numerically scaled rectangle.

Line Type — Values that determine the number of lines that will appear on a line chart.

Main Menu — Charton Menu that provides options to create a new chart, display an existing chart, or return to CP/M.

Pie Chart — A chart that displays data as slices in a pie.

Print — Process of printing a chart, using Valet's Screen Dump feature.

Revise New Chart — Process of revising a newly created chart that has not been saved in a disk file.

Revise Existing Chart — Process of revising an existing chart that has been saved in a disk file.

Save New Chart — Process of storing a newly created chart in a disk file.

Save Revised Chart — Process of storing an existing chart that has been retrieved from a disk file and revised.

Screen Dump Valet feature that prints the contents of the display screen.

Slice Size The size of an individual slice in a pie chart.

Slices Pieces of the pie in a pie chart.

Valet Attache software programs that allow temporary interruption from a program to perform other operations and then return automatically to the interrupted program.

Vertical Axis Title Title that appears on the left side of a bar or line chart.

Whole Slices Pie Chart option that displays the pie without displacing any of the pieces.

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