Help Index

This index lists all Help topics available for reference. To learn how to use Help, press F1 or choose Using Help from the Help menu.

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Program Keys

The following describes the specific keypress sequences available while running the program.

Key(s)	Function			
F1	Displays the Help window.			
F4	Shows and hides the popup Data Window.			
Ctrl+O	Selects a new chart.			
Ctrl +D	Display the active chart as daily information.			
Ctrl +W	Display the active chart as weekly information.			
Ctrl +M	Display the active chart as monthly information.			
Ctrl +A	Displays the "Attachments" dialog box for the current graph.			
Ctrl +P	Displays the "Parameters" dialog box for the current graph.			
Ctrl +I	Displays the "Indicators" dialog box for the current graph.			
Ctrl +Z	Toggles the zoom mode for the active chart.			
Ctrl +S	Saves the currently active charts configuration as the default.			
Ctrl+Left Arrow	Moves the chart's slide to the left.			
Ctrl +Right Arrow	Moves the chart's slide to the right.			
Tab	Changes the active graph within a chart.			
Shift+Tab	Changes the active graph within a chart			
Home	Scrolls to the first page of security information.			
End	Scrolls to the last page of security information.			
PgUp	Scrolls backwards twenty (20) units of security data.			
PgDn	Scrolls forward twenty (20) units of security data.			
Up Arrow	Scrolls backwards five (5) units of security data.			
Down Arrow	Scrolls forward five (5) units of security data.			

The following key sequences are used when drawing lines or placing text onto a graph.

Key(s)	Function
Shift+Left Button	Selects a graph area to zoom.
Ctrl Key Pressed	Holding down the Ctrl key while drawing either freehand or speed resistance lines will extend the line to the edge of the graph.

File Menu Commands

The File menu includes functions for opening and closing charts, exporting chart data, and printing a chart.

Open Chart...

Opens a securities chart using existing financial data in one of the supported file formats.

Close Chart

Closes the active chart, removing it from the current group.

Save Chart As Default...

Allows you to specify default chart configurations which are used when you open new charts (charts which have not been previously saved within a group).

Export Chart Data...

Exports the active charts price data in various ASCII file formats, including the price import format used by Quicken.

Page Setup...

Allows you to select or set page specific information related to the printing of a chart.

Printer Setup...

Allows you to select and configure the printer that you want to use for printing your securities charts.

Print Active Chart...

Prints the active chart to the printer.

Exit

Exits the program.

Group Menu Commands

The Group menu includes functions used specifically for security groups.

New

Create a new group.

Open...

Open a previously saved securities group.

Save

Save the current group.

Save As...

Save the current group as a new group name.

Print All Charts...

Print all charts contained within the group.

Tools Menu Commands

The Tools menu includes functions used for drawing lines and text to a graph.

Normal

Reset the current drawing mode to normal.

Auto Line Extension

Enables or disables the automatic extension of lines drawn on a chart. If this selection is checked, lines are automatically extended to the edge of the graph.

Select

Select an area of the graph to zoom into.

Text...

Draw text onto a chart.

Trend Line

Draw a free-hand trendline on the graph.

Parallel Trend Lines

Draws parallel trend lines on the graph.

Vertical Line

Draw a vertical line at a specific location on a graph.

Horizontal Line

Draw a horizontal line at a specific location on a graph.

Speed Resistance

Draw speed resistance lines between two points on a graph.

Options Menu Commands

The Options menu includes functions for configuring your use of the program.

Chart

Allows you to specify various characteristics associated with securities charts; including text display, scrolling limits, chart grid lines, and Point & Figure marker size. <u>Chart Options</u>

File Import

Allows you to specify the number of most recent financial data units used when opening a chart, and identifying the default ASCII data formats for files lacking the standard header. <u>File Import Options</u>

Fonts

Use this function to select the style of fonts you want to use for chart labeling, data display, and the status bar. Font Options

Graph

Allows you to select the default colors and number of grids used for new charts. Graph Options

Toolbar

Allows you to show and hide the application toolbar.

Status Bar

Allows you to show and hide the application status bar.

Data Window

Allows you to show and hide the popup Data Window. As the vertical cursor slide is moved back and forth, the Data Window displays the values of all graphs for that day.

Graph Menu Commands

The Graph menu includes selections that control the appearance of a graph; including the type of graph, parameters specific to the graph, the graph's colors, and if the graph should display its data.

Attachments...

Allows the editing and removal of existing graph attachments.

Parameters...

Allows you to change graph-specific data parameters.

Indicators...

Allows you to add or remove indicators from a chart. The availability of specific indicators is dependent upon the data content of the security. For example, if volume information is not available for a security, volume-related indicators will not be provided for selection.

High/Low Bar

Line

Histogram

Candlestick

These menu selections allow you to change the appearance of the current graph. The availability of each option is dependent upon the type of graph (i.e. the High/Low Bar graph is only available on the Price Graph).

Zoom In

Zoom Out

Toggle between the display of all chart data, and the display of a fixed amount of data (scrollable).

Daily

Weekly

Monthly

These menu selections allow you to display the current charts price data as a daily, weekly, or monthly frequency.

List of Technical Indicators

Window Menu Commands

The Window menu provides functions for managing the display of all charts in a group.

Cascade

Displays all charts as cascading windows.

Tile Vertical

Displays all charts as vertically tiled windows.

Tile Horizontal

Displays all charts as horizontally tiled windows.

Arrange Icons

Arranges the display of all minimized charts.

Close All

Closes (removes) all charts from the group.

List of Technical Indicators

The following alphabetic list identifies the available technical indicators.

Commodity Channel Index (CCI)

Moving Average Convergence/Divergence (MACD)

Moving Averages (Exponential, Simple, Weighted)

Multiple Data Graph

Negative Volume Index (NVI)

Negative Volume Trend (NVT)

On-Balance Volume

Open Interest

Point & Figure

Positive Volume Index (PVI)

Positive Volume Trend (PVT)

Price Channel (Trading Band)

Price Momentum

Price Oscillator

Price Performance

Rate of Change (Price and Volume)

Relative Strength

Relative Strength Indicator (RSI)

Stochastic

Volume

Volume Accumulation

Volume Oscillator

Weighted Close

For detailed information on technical indicator theory and practice, we highly recommend that you consider the following publications:

Technical Analysis Explained

Martin J. Pring

Technical Analysis of the Futures Markets

John J. Murphy

The New Commodity Trading Systems and Methods

Perry J. Kaufman

The Encyclopedia of Technical Market Indicators

Robert W. Colby & Thomas A. Meyers

Technical Analysis of Stock Trends

Robert D. Edwards & John Magee

New Concepts in Technical Trading Systems

J. Welles Wilder.

Supported Data Formats

The following data formats are directly supported for import into the program. For further information about these data files, please consult the supplied User's Guide.

```
TeleChart 2000 (TC2000)
Comma Separated Value (CSV) ASCII Format
Technical Tools
Commodity Systems, Inc. (CSI)
MetaStock
```

ASCII Format

The general format for all ASCII data files is as follows:

```
Format_String Optional record

Data_Record_1

Data_Record_2

-
Data_Record_N
```

Format_String is a description of the format of each data record in the file. This record is optional in the ASCII data file. See <u>File Import Options</u> for further information on configuring the program to support ASCII files which do not contain the *Format_String*.

If used, the *Format_String* consists of two or more of the characters "**DVOHLCI**" (**DC** - or Date and Close - is the minimum required for any file), which specifies both the sequence and type of data fields in each record:

D represents a Date field

This entry is actually one of the following; 'D' for daily data, 'W' for weekly data, 'Q' for quarterly data, 'M' for monthly data, or 'Y' for yearly data.

Additionally, a modifier can follow the date specification character to identify a specific date format from the list below:

- 0 mm/dd/yy (also the default if '0' is omitted)
- 1 mmddyy
- 2 yy/mm/dd
- 3 yymmdd
- 4 dd/mm/yy
- 5 ddmmyy
- 9 Serialized date format (Lotus-style)

V represents a Volume field (or short interest).

O represents an Open field.

H represents a *High* field.

L represents a *Low* field.

C represents a Close field.

I represents an Open Interest field.

Data_Record represents each ASCII record in the file (up to *Record_Count* entries if included in the file). All data records must be of the same field sequence and contain identical types of fields. Each field in the data record is separated from the next using a <u>comma</u>, <u>tab</u>, or <u>space</u> character.

THE FOLLOWING NOTES APPLY TO ALL IMPORTED DATA:

1. The program reads and interprets ASCII numeric values in a variety of formats:

Floating point decimal values (i.e., 34.65) for data related to such items as market indexes (i.e., DJIA, SP500), mutual funds, and various currency information.

Standard fractional values (i.e., 64 1/8, 20 1/2) for representing data specific to stocks, options, and corporate bonds. *NOTE: These fractional formats are not supported unless you check the box Support ASCII Fractional Values (34 7/8) in the Options/File Import... dialog.*

Special fractional values (i.e., 76:18) for data representing 1/32ths; such as Government Agency Issues (i.e. FNMA, GNMA, World Bank) and Treasury Bonds, Notes and Bills.

- 2. Numeric values (i.e. volume, open, close, etc.) may not be formatted with a comma (e.g. Use 12900 instead of 12,900).
- 3. Holiday data, data that includes zero (0) numeric values for all fields in a particular data record volume should not be included in any of your data files.
- 4. Data is not automatically adjusted for splits or ex-dividends.

Example ASCII Data

The following are examples of the contents of several different ASCII data files supportable by the program. In each example, the use of the comma to separate individual fields can be replaced by a tab or space character. The first record in each example (the Format String) is optional.

Market Index

```
DVHLC
1/2/92, 238169, 3184.7, 3119.86, 3172.41
1/3/92, 236228, 3221.38, 3156.31, 3201.48
1/6/92, 272785, 3230.32, 3166.59, 3200.13
1/7/92, 255148, 3224.73, 3165.25, 3204.83
1/8/92, 290369, 3245.53, 3164.58, 3203.94

D9VHLC
33605, 238169, 3184.70, 3119.86, 3172.41
33606, 236228, 3221.38, 3156.31, 3201.48
33609, 272785, 3230.32, 3166.59, 3200.13
33610, 255148, 3224.73, 3165.25, 3204.83
33611, 290369, 3245.53, 3164.58, 3203.94
```

The above illustrates two examples of files containing 5 data records. Each data record contains five fields identified by the "DVHLC" line. The sequence of the fields is "D"aily Date (the first example is in *mm/dd/yy* format, the second in *serial date* format), "V"olume, "H"igh, "L"ow, and "C"lose. Decimal values are used. Note that 'D0' could have also been used to represent this date format.

Mutual Fund

W1C 010389, 14.28 011089, 14.69 011789, 14.67 012489, 14.90 013189, 15.28

The above illustrates a file containing 5 data records. Each data record contains two fields identified by the "W1C" line. The sequence of the fields is "W"eekly Date (in *mmddyy* form) and "C"lose. Decimal values are used for numerics.

Stock

D3VHLC

```
900102, 3913, 52 7/8, 52 3/8, 52 3/8
900103, 3628, 53 3/8, 52 1/8, 53 3/8
900104, 5057, 54 1/4, 53 1/4, 53 7/8
900105, 4624, 53 5/8, 53 1/8, 53 3/8
900106, 5203, 53 1/4, 51 5/8, 52 3/4
```

The above illustrates a file containing 5 data records - each record contains five fields identified by the "D3VHLC" line. The sequence of the fields is "D"aily Date (in *yymmdd* form), "V"olume, "H"igh, "L"ow, and "C"lose. Volume information is represented as a decimal value, while fractional values are used for all others. . *NOTE: These fractional formats are not supported unless you check the box Support ASCII Fractional Values* (34 7/8) in the **Options/File Import...** dialog.

DDE Command Summary

The following summarizes the available DDE commands supported by the program. For further details about each transaction or command, refer to the supplied User's Guide.

Application (Service) Name

For all DDE communication connections established with the program, use the name "STABLE" as the application or service name.

Topics

Two classes of topics are supported; the "SYSTEM" topic related to the primary application, and *ChartName* topics associated with the individual chart windows.

Request Transactions

A client can send request (XTYP_REQUEST) transactions to a specific topic in order to receive information about that topic.

Topic	Item
"SYSTEM"	SZDDESYS_ITEM_TOPICS Returns a list of the available topics; which includes the "SYSTEM" topic, and the names ChartName of all currently open charts. SZDDESYS_ITEM_SYSITEMS Returns a list of supported items for the SYSTEM topic. SZDDESYS_ITEM_FORMATS Returns a list of the supported clipboard formats. SZDDESYS_ITEM_STATUS Returns the busy or ready status of the server.
ChartName	SZDDESYS_ITEM_ITEMLIST Returns a list of supported items for the chart. SZDDESYS_ITEM_STATUS Returns the busy or ready status of the chart. DATERANGE Returns the date range associated with the charts data as two dates of the format YYMMDD. As an example, a chart consisting of data for all of 1993 would return 930104,931231. "FIELDDEF" Returns a description of the data content associated with the chart (i.e. "DVHLC").

Execute Transactions

A client application can send execute (XTYP_EXECUTE) transactions to a particular topic in order to execute a command or series of commands.

Topic	Command String
"SYSTEM"	"[MINIMIZE]"
	Minimize the application window to an icon.
	"[MAXIMIZE]"
	Maximize the application window to full screen.
	"[SHOW]"
	Redisplays the application window if it was previously an icon.
	"[CLOSE]"
	Terminates the program.
	"[CASCADE]"
	Redisplay all charts as cascaded windows.

"[TILEVERTICAL]"

Redisplay all charts as vertically tiled windows.

"[TILEHORIZONTAL]"

Redisplay all charts as horizontally tiled windows.

"[OPEN(type,path,file)]"

Opens a new technical chart identified by *file* in the directory named *path* of data import type *type*.

ChartName

"[SHOW]"

Displays the chart if it was an icon.

"[CLOSE]"

Closes the chart removing it from the desktop.

"[PRINT]"

Prints the chart to the currently selected printer. The chart must be shown or maximized before issuing this command.

"[UPDATE]"

Forces the chart to redisplay its contents.

"[MINIMIZE]"

Minimize the chart window to an icon.

"[MAXIMIZE]"

Maximize the chart window.

"[EXPORT(file,symbol,format,startdate,enddate,header)]"

Exports the price data of the chart to an ASCII file.

Poke Transactions

A client application can send unsolicited data to a chart through use of the DDE poke (XTYP_POKE) transaction. This is the method by which new or real-time data can be submitted to a chart for display and update.

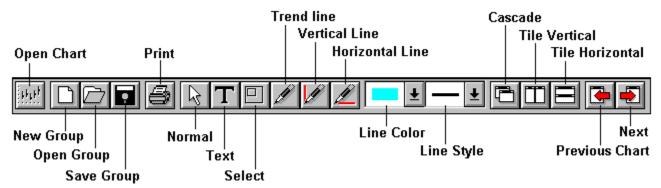
Topic	Item	Data
ChartName	"NEWDATA"	"ASCII Data Record"

ASCII Data Record represents an individual day of data formatted to the chart's reported "FIELDDEF" format. Assuming a reported field definition of "DVHLC", the following would be an example of a valid record:

12/20/91, 180906, 34 1/2, 32 1/8, 33

Application Toolbar

The toolbar provides an efficient mechanism for performing those operations and functions performed most frequently.



Open Chart

Opens a securities chart using existing financial data in one of the supported file formats.

New Group

Create a new group.

Open Group

Open a previously saved securities group.

Save Group

Save the current group.

Print Chart

Prints the active chart to the printer.

Normal

Reset the current drawing mode to normal.

Text

Draw text onto a chart.

Select

Select an area of the graph to zoom into.

Trend Line

Draw a free-hand trendline on the graph.

Vertical Line

Draw a vertical line at a specific location on a graph.

Horizontal Line

Draw a horizontal line at a specific location on a graph.

Line Color

Select the color to be used for all subsequent line drawing.

Line Style

Select the style to be used for all subsequent line drawing.

Cascade

Displays all charts as cascading windows.

Tile Vertical

Displays all charts as vertically tiled windows.

Tile Horizontal

Displays all charts as horizontally tiled windows.

Previous Chart

Make the previous chart the active chart.

Next Chart

Make the next chart the active chart.

Limited Warranty

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Product Description

Written for experienced and novice users alike, this product provides powerful - yet easy to use - stock market technical analysis capabilities ideal for the technical trader with existing (or access to) historical financial data for stocks, bonds, commodities, mutual funds, indexes, and options.

Along with the many popular technical indicators found in the program, features such as DDE (Dynamic Data Exchange), chart printing, selectable graph styles, various data import/export formats, popup graph menus, enhanced desktop management - and more - are combined into a single, powerful application.

TeleChart 2000 (TC2000), CSI, Technical Tools, MetaStock, and ASCII formatted data files are supported; allowing you to use your existing data more effectively. All charts support selectable zoom and horizontal scrolling - giving you the ability to study as many as 16,384 units (days, weeks, etc.) of data in a single graph. And when you identify a chart worthy of more attention, simply print it to your system printer.

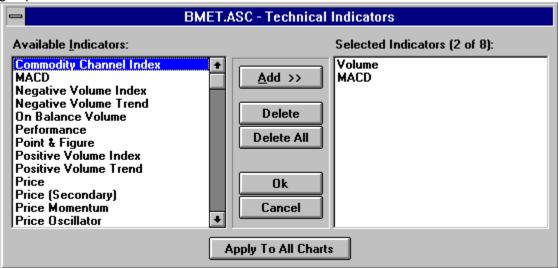
All charts provide an easy to use "slider" for accurately comparing a specific day's activity across several graphs. Also available is an application "toolbar" providing single mouse click operation of frequently used charting operations and tools.

Other standard features you will find are:

- o Financial groups can be created for organizing and collecting any number of individual charts into a common group
- Multi-data charts can be created for analyzing several underlying securities in the same chart.
- o Interactive chart drawing tools; including trend lines, speed resistance lines, and text attachments can be drawn and saved with any chart.
- o All charts are scalable along the X and Y axis and include chart zoom and selectable area functionality. As many as 16,384 days of data are supported for each and every chart.
- o New indicators have been added including Point & Figure, Stochastic, and Performance graphs.
- o Chart data can be exported to various ASCII file formats; including the price history format used to import into Quicken(TM).
- o Improved desktop chart management has been provided using the standard Microsoft Windows Multiple Document Interface (MDI).
- o Up to 8 technical analysis indicators can be created on each chart.
- o Dynamic Data Exchange (DDE) support has been built in allowing you to communicate directly with any chart through the use of third-party software (such as Microsoft Excel) to open, print, display or to dynamically add new data to a chart.
- o "Drag and Drop" support is available allowing CSV and Technical Tools data files to be opened simply by "dragging" a file from the File Manager directly to the application window or icon.
- o User-selectable graph styles; including High/Low Bar, Line, and Histogram graphs.
- o Popup menu support within any graph allowing you to quickly perform many common graph functions.
- o On-line help documentation using the standard Window's Help program.
- o All chart and graph colors are easily selected and changed to suit your own personal preference.

Adding and Removing Technical Indicators

You can have as many as eight (8) technical indicators on each chart for analyzing and studying the underlying financial data. Once you have selected the indicators you want to study, you have the choice of creating the indicators on the individual chart - or on all existing charts within the current financial group.



To add or remove technical indicators:

- 1. Select the graph by clicking within the graph, or by "tabbing" to the graph.
- 2. Select Indicators... from the Graph Menu.
 - -OR-
 - Click on the Ind button at the lower right corner of the chart.
- 3. In the Technical Indicators dialog, add indicators from the list on the left or remove indicators from the list on the right.
- 4. Accept your changes by clicking the **OK** button to create the indicators on the current chart, or clicking the **Apply To All Charts** button to create the indicators on every chart in the financial group.

List of Technical Indicators

Adding New Attachments

Attachments are graphical elements such as lines and text which you place on a graph. To add an attachment, perform the following procedures.

To add an attachment:

- 1. Select the attachment you want to add from the Tools menu.
 - -OR-
 - Click the desired attachment button on the toolbar.
- 2. Move the mouse to the location on the graph where you want to place the attachment. *The mouse cursor appearance changes to the selected attachment type*.

Once the above steps have been performed, various actions occur depending on your selected attachment type:

Text attachment:

- 3. Click the left mouse button to drop the attachment onto the graph.
- 4. Enter the text and select the colors, alignment, and other styles from the available options then press the OK button.

Trend line attachment:

- 3. Click and hold the left mouse button to anchor the first endpoint, then move the mouse to the location where you want the second endpoint to be.
- 4. Release the left mouse button to complete the trend line.

Tip: Holding the Ctrl key down during the above procedure will extend the line beyond the second endpoint to the edge of the graph.

Parallel Trend lines attachment:

- 3. Click and hold the left mouse button to anchor the first endpoint, then move the mouse to the location where you want the second endpoint to be.
- 4. Release the left mouse button to complete the trend line (in fact, two parallel trend lines have been created one on top of the other).
 - **Tip:** Holding the Ctrl key down during the above procedure will extend the line beyond the second endpoint to the edge of the graph.
- 5. Click and hold the left mouse button anywhere along the new trend line, then drag one of your parallel trend lines to a new location on the graph.

Vertical and horizontal line attachment:

3. Click the left mouse button to draw the vertical or horizontal line. The line is drawn to the edges of the graph.

Speed resistance line attachment:

- 3. Click and hold the left mouse button to anchor the first endpoint, then move the mouse to the location where you want the second endpoint to be.
- 4. Release the left mouse button to complete the speed resistance line. Two lines originating from the earlier endpoint are drawn, each representing the 1/3 and 2/3 speed resistance points.

Tip: Holding the Ctrl key down during the above procedure will extend the lines beyond the second endpoint to the edge of the graph.

Additional Notes:

- o Trend and speed resistance line extension can be performed either by holding the Ctrl key down while drawing the line, or by selecting Auto Line Extension from the Tool menu before selecting the attachment type.
- o The color and style of all lines can be selected prior to drawing from the color and style combo boxes found in the programs toolbar.

Displaying Graph Data

Adjusting Chart and Graph Sizes

As more charts are added to a financial group, you may want to change the size of the charts to accommodate the optimal viewing of each chart. When new technical indicator graphs are placed within a chart, the size of the price graph changes to make room for these additional graphs.

To adjust the size and location of charts:

Charts are effectively standard windows that support the normal window management techniques found in the Microsoft Windows environment.

You can resize any chart window by clicking on the border of the window and dragging the sizing rectangle until the desired size is set. You can reposition a window by clicking on the windows title and dragging the window to a new location.

Additionally, you can perform standard tiling and cascading of financial chart windows by choosing the appropriate selection from the Window menu.

To interactively change the size of the Price Graph (only when one or more technical indicators are visible):

- 1. Move the mouse to the location between the Price Graph and the first technical indicator graph until the mouse cursor changes to a double vertical arrow.
- 2. Press and hold down the left mouse button.
- 3. Move the mouse vertically to set the new bottom of the Price Graph. As you move the mouse, a horizontal line is drawn to identify the new bottom of the Price Graph.
- 4. Release the mouse to set the new Price Graph size.

Automatic Price Graph Labeling

When this option is selected, the program determines the available space on the Price graph and automatically generates horizontal grids and labels that optimally fit within this space.

To select automatic labeling for your charts:

- 1. Select Chart... from the Options menu.
- 2. Check the box labeled "Automatic Price Graph Labeling".

To use normal text labeling on your charts:

- 1. Select Chart... from the Options menu.
- 2. Clear the box labeled "Automatic Price Graph Labeling".

Changing a Graph's Drawing Style

The drawing style for a graph can be changed so that you can interpret the data more easily. Four basic drawing styles are supported; a High/Low Bar graph, a Line graph, a Histogram graph, and Candlesticks. The High/Low Bar and Candlestick styles are available only for the Price graph (Candlesticks require open, high, low, and close data).

To change the drawing style for a graph:

- 1. Select the graph by clicking within the graph, or by "tabbing" to the graph.
- 2. Select High/Low Bar, Line, Histogram, or Candlestick from the Graph menu on the chart.

-OR-

Activate the <u>popup graph menu</u> and select High/Low Bar, Line, or Histogram from the menu.

Changing Graph Colors (and Horizontal Grids)

You can change the colors (and the number of horizontal grids) for any graph displayed in a chart.

To change a graph's colors:

- 1. Select the graph by clicking within the graph, or by "tabbing" to the graph.
- 2. Choose Parameters... from the Graph menu.

-OR-

Activate the popup graph menu and select Parameters... from the menu.

Selecting the Number of Horizontal Grids

Changing and Removing Attachments

Attachments are graphical elements such as lines and text which you place on a graph. To remove or make changes to an attachment, perform the following steps.

To access the list of all attachments on a graph:

1. Select Attachments... from the Graph menu.

-OR-

Click the right mouse button on the graph and select Attachments... from the popup menu.

2. Choose Delete or Edit... to remove or change the attachment.

To change the location of an attachment:

1. Click and hold the left mouse button over the attachment and drag it to the new location.

To delete an attachment:

Option 1

1. Select Attachments... from the Graph menu.

-OR-

Click the right mouse button on the graph and select Attachments... from the popup menu.

2. Select the attachment from the list and choose the Delete button.

Option 2

- 1. Double-click on the attachment in the graph.
- 2. Choose Delete from the displayed dialog to remove the attachment.

To delete all attachments:

1. Select Attachments... from the Graph menu.

-OR-

Click the right mouse button on the graph and select Attachments... from the popup menu.

2. Choose the Delete All button.

To change the color or style of an attachment:

Option 1

1. Select Attachments... from the Graph menu.

-OR-

Click the right mouse button on the graph and select Attachments... from the popup menu.

2. Select the attachment from the list and choose the Edit... button.

Option 2

1. Double-click on the attachment in the graph.

2. Make changes to the information in the displayed dialog and choose the Ok button.

Displaying Graph Data

Default Chart Templates

You can specify default chart configurations which are used when you open new charts (charts which have not been previously saved in a group). The charts configuration represents items such as chart colors and selected technical indicators.

Default chart configurations can be established at both the program level, and within your individual financial groups. The default configuration you specify at the program level is used when a new chart is opened in an untitled group.

To specify the chart configuration you want to use at the program level:

- 1. Select or open any financial chart.
- 2. Configure the chart as you want the other new charts to look when they are opened (including any technical indicators).
- 3. Select Save Chart As Default... from the File menu. Click the Standard Default button.

To specify the chart configuration you want to use in a particular group:

- 1. Open an exisiting group, or create and save a new group.
- 2. Select or open any financial chart.
- 3. Configure the chart as you want the other new charts to look when they are opened (including any technical indicators).
- 4. Select Save Chart As Default... from the File menu. Click the Group Default button.

 The Group Default button is only available when you are working within an existing group.

Displaying Graph Data

For any financial chart, you can display the underlying data of each graph for one day or unit of data. The "day" that is displayed is based on the current position of the slide, found at the top of each chart.

To display a day of data based on the current position of the slide:

- 1. Select the chart by clicking anywhere within its window border, or by pressing Ctrl+F6 to activate each chart in succession.
- 2. If the popup Data Window is not displayed, press F4 or select Options/Data Window from the menu.
- 3. To move the slide, press CTRL+Left Arrow or CTRL+Right Arrow on the keyboard.

-OR-

Press and hold down the mouse button over the slide, and move the mouse horizontally from side to side.

Using the Slide

Displaying Moving Averages on a Graph

As many as three (3) individual moving averages can be displayed on a price or indicator graph. In addition to specifying the number of units for these averages, the type of average (Simple, Weighted, or Exponential), any shift factors, and its color can be indicated.

To select and specify a moving average:

- 1. Select the graph by clicking within the graph, or by "tabbing" to the graph.
- 2. Select Parameters... from the Graph Menu on the chart.

-OR-

Press CTRL+P on the keyboard.

-OR-

Activate the popup graph menu and select Parameters... from the menu.

To remove a moving average:

* Set the number of units to zero (0) for the specific average.

Displaying a Price Channel

Displaying a Price Channel

A price channel can be displayed on a graph along with moving averages. In addition to specifying the number of units for the channel, the type of average (Simple, Weighted, or Exponential), the shift factors, and its color can be specified.

To select and specify a price channel:

- 1. Select the graph by clicking within the graph, or by "tabbing" to the graph.
- 2. Select Parameters... from the Graph menu on the chart.

-OR-

Press CTRL+P on the keyboard.

-OR-

Activate the popup graph menu and select Parameters... from the menu.

To remove the price channel:

* Set the number of units to zero (0) for the price channel.

Displaying Moving Averages on the Price Graph

Drag and Drop

Charts can be opened using "Drag and Drop". By simply selecting a file from the File Manager, and "dragging" that file using the mouse into the program window or icon, you can easily create new charts without the need to interact with the Open Chart dialog.

"Drag and Drop" supports the use of two types of historical data files; **ASCII** (files with the extension CSV, TXT, and ASC) and **Technical Tools** data files. Any other data file format is ignored.

Refer to your Windows 3.1 documentation for more information on the Drag and Drop facility of Windows 3.1.

Dynamic Data Exchange (DDE)

The program functions as a DDE server application; responding to client applications by providing technical graph services in the areas of chart display management and real-time data update.

In the area of display management, basic control over the creation and display of technical charts is available:

- o Charts can be opened or created by a DDE client application through the use of execute transactions issued to the program as the "SYSTEM" topic.
- o The application window can be controlled using DDE execute transactions. Supported commands allow the window to be minimized, shown (normal), and closed.
- o Individual charts can be controlled visually through DDE execute transactions. Among the supported command actions are minimize, maximize, print, show, close, update, and export.

Real-time data update of your charts is also supported. By passing ASCII data record information conforming to the underlying security's content, new financial data can be submitted to a chart for immediate update and display.

For further details about DDE functionality, refer to the User's Guide, or DDE Command Summary.

Exporting Chart Data To An ASCII Data File

Once a chart has been opened, the underlying financial data (i.e., volume, close, etc.) used to draw the chart can be saved as an ASCII data file. This allows you to share the data with other third-party products such as Quicken(tm), various spreadsheet programs, and even other technical analysis applications. This feature also provides a way of converting financial data in one format (i.e., TeleChart 2000, MetaStock, CSI, etc.) to an ASCII file.

Supported Data Formats

To export the active charts financial data:

- Choose Export Chart Data from the File Menu.
- 2. Specify the name of an output ASCII data file.
- 3. Select other export options from the dialog.
- 4. Select Export New or Export Append to write the ASCII data.

To export the charts price data to a file that can be imported into Quicken:

- Enter a file name in the File Name box (or choose Browse to search for an existing file).
- 2. Select Quicken Historical as the export format.
- 3. Enter the symbol id (i.e., IBM, HRB, etc.) matching the id used in your Quicken database.
- 4. Select a data export range.
- 5. Choose Export New to create a new file, or Export Append to add the data to the end of an existing ASCII file.

To export the charts price data to an ASCII file that can be used by the program:

- 1. Enter a file name in the File Name box (or choose Browse to search for an existing file).
- 2. Select CSV (ASCII) as the export format.
- 3. Verify or change the data format to match your new files requirements. *If you are creating a file to be used by the program, you should accept the displayed default* (Supported Data Formats).
- 4. Check the box for Include Format Header.
- 5. Select a data export range.
- 6. Choose Export New to create a new file.

Printing Charts

You can print individual or every financial chart in a group. All printing is performed in a "fit to page" mode - where the chart is printed to fill the entire printed page within your specified margins.

When you print all of the charts within the current group, you additionally have the choice of printing either one, two, or four charts per printed page.

To print an individual financial chart:

1. Choose Print... from the File menu.

-OR-

Click on the Print button in the toolbar.

To print all charts in a financial group:

1. Select Print All Charts... from the File menu.

To set the number of charts printed on each page:

1. Select Page Setup... from the File menu.

Changing Printers and Print Options

Scrolling Through a Graph

In some instances you will find that the securities data you are displaying extends beyond the left and/or right borders of your graph. You can gain access to all of the data using the scroll bar displayed at the bottom of the chart window, or by using the supported navigation keys.

To scroll forward through your graph data:

- * Click the right arrow on the scroll bar, or press the **Down Arrow** key, to move forwards your selected arrow distance.
- * Click the page right area of the scroll bar, or press the **PgDn** key, to move forward by your selected page distance.
- * Press the **End** key to move to the last page of data.

To scroll backwards through your graph data:

- * Click the left arrow on the scroll bar, or press the **Up Arrow** key, to move backwards your selected arrow distance.
- Click the page left area of the scroll bar, or press the **PgDn** key, to move backwards your selected page distance.
- * Press the **Home** key to display the first page of data.

To scroll to any location within your graph data:

* Drag the scroll bar's thumb horizontally along the scroll bar and position the date text for the desired time range, then release the mouse.

Program Keys

Selecting a Graph

You can select a graph as the active graph in a chart for the purpose of changing its display characteristics; including the display of its underlying data, the type of chart, its colors, and any other indicator-specific parameters.

To select a graph within a chart:

1. Click anywhere within the graph's border; including its display area and label.

-OR-

Press Tab or SHIFT+Tab to sequence through all the graphs in a chart.

Selecting a Printer and Options

You can select any attached printer to print your securities charts and also select options specific to the printer.

To change printers and/or specify printer options:

- 1. Choose Printer Setup... from the File menu.
- 2. Select the printer you want to use for printing.
- 3. Choose Options... to change the printers options.
- 4. Select OK to save the new settings.

Printing a Chart

Setting the Number of Horizontal Grids

You can specify the number of horizontal grids displayed on a graph. For every displayed grid line, a corresponding value is shown in the label area of the graph. If *Automatic Price Graph Labeling* has been selected in Chart Options, the number of horizontal grids will automatically be determined and this value ignored.

To change the default number of horizontal grids for all new charts:

1. Choose Default Graph Colors from the Configure Menu on the Logo window to set the default number of horizontal grids displayed on all new Price and Indicator Graphs.

To change the number of horizontal grids for a displayed graph:

- 1. Select the graph by clicking within the graph, or by "tabbing" to the graph.
- 2. Choose Parameters... from the Graph Menu.

-OR-

Press CTRL+P on the keyboard.

-OR-

Activate the popup graph menu and select Parameters... from the menu.

Changing Graph Colors

Popup Graph Menu

There is a technique by which you can more effeciently use your technical charts. This feature allows you to access some of the more frequently used graph functions while you concentrate your attention directly on the graph.

To take advantage of the popup menu support:

- 1. Move the mouse within any visible graph and click and hold the right mouse button.
- 2. Make a selection from the popup menu by selecting an item, then releasing the right button.

The Slide

The slide (which is positioned at the top of each chart) is used for focusing on a particular day on a chart. "Attached" to the slide is a vertical line or *hair* that provides a mechanism for precise vertical alignment across all graphs displayed on the chart. As you move the slide horizontally, the hair will follow and all data display areas will be updated with the actual graph data for that day.

To move the slide horizontally:

1. Press CTRL+Left Arrow or CTRL+Right Arrow on the keyboard.

-OR-

Press and hold down the mouse button over the slide, and move the mouse horizontally from side to side.

Displaying Graph Data

Opening Financial Charts

Financial charts are created from existing financial data. The creation of new financial data files is not supported.

To create or open a new chart:

- 1. Select Open Chart... from the File menu.
 - -OR-
 - Click on the Open Chart button in the toolbar.
- 2. Choose one of the supported Import File Types and navigate through your system directories to the directory containing the financial data for your selected type.
 - You can assign a specific directory for each of the supported import file types. Using this feature, the program will automatically navigate to the directory youve specified for each import file type. See <u>File Import Options</u>
- 3. Select the security name or data file from the File Name list box and click the OK button.
 - -OR-

Double-click on the security name or data file listed in the File Name list box.

Displaying Graph Data

Formatting the Printed Page

You can specify the margins used for printing a financial chart as well as a standard title you want to print on each chart.

To specify a chart title and page margins:

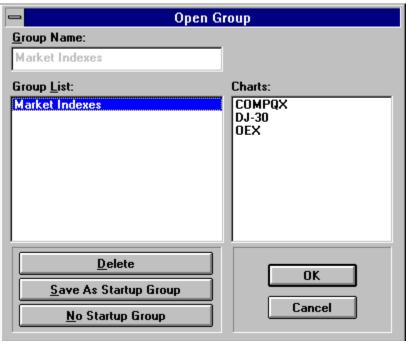
- 1. Select Page Setup... from the File menu.
- 2. Enter the report heading you want printed on each financial chart (Optional).
- 3. Enter the top, bottom, left, and right margin values in inches for the chart.
- 4. Select either one, two, or four charts per printed page (for printing all charts within a group).
- 5. Click OK to save your new settings.

Financial Chart Groups

There is a feature for organizing and collecting a number of individual charts into a common group. These financial groups can contain almost any collection of one or more securities meeting your specific analysis needs.

For example, a group might contain a collection of market indexes. Another group might contain all the securities in your portfolio, while another might include mutual funds of a particular sector group. The choice of securities is totally up to you.

Additionally, you can choose to have a single financial group automatically opened each time the program is run.



To create a new financial group:

- 1. Select New from the Group menu
 - -OR-

Click on the New Group button in the toolbar.

- 2. Add new charts to your group by opening each chart using the Open Chart... selection on the File menu or clicking the Open Chart button on the toolbar.
- 3. Organize the charts in the group by adjusting the sizes and positions of each chart. Include any technical indicators with each chart. <u>List of Technical Indicators</u>
- 4. Save your new group by selecting Save or Save As... from the Group menu (or by clicking the Save button on the toolbar).
- 5. Enter a descriptive name for your new group and choose the OK button to save the information.

To open an existing financial group:

1. Select Open from the Group menu

-OR-

Click on the Open Group button in the toolbar.

2. Select an existing group to open by choosing a name from the Group List and clicking the OK button.

-OR-

Double-click on the name of the group in the Group List box.

To delete an existing financial group:

1. Select Open from the Group menu

-OR-

Click on the Open Group button in the toolbar.

- 2. Select an existing group to open by choosing a name from the Group List.
- 3. Click the Delete button to remove the group.

To select the financial group you want opened at program startup:

1. Select Open from the Group menu

-OR-

Click on the Open Group button in the toolbar.

- 2. Select an existing group by choosing its name from the Group List.
- 3. Click the Save As Startup Group button. The next time the program is run, this group will automatically be opened for you.

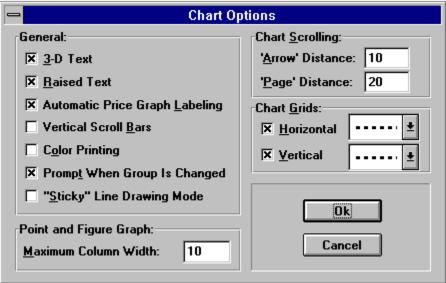
NOTE: Click the No Startup Group button to disable the initial loading of a financial group.

To change which charts are in the financial group:

1. Simply open or delete existing charts from the display, and then save the group by selecting Save or Save As... from the Group menu - or click the Save Group button on the toolbar.

Chart Options

Many of the operational characteristics associated with your financial charts can be configured to meet your own needs and preferences.



To modify any of the available chart options:

- 1. Select Chart... from the Options menu.
- 2. Modify or choose from the various configuration options.
- 3. Choose OK to save the new settings.

Chart Option Settings and Their Use:

3-D Text and Raised Text

These options allow you to configure the appearance of text used in labeling your charts. Select 3-D text to use three-dimensional text labels. Raised or recessed text is controlled uusing the Raised Text checkbox.

Automatic Price Graph Labeling

Select this option if you want to automatically determine the price values and number of horizontal grids for your price graphs. If this option is not selected, you can select the number of horizontal grids individually for each price graph (<u>Selecting the Number of Horizontal Grids</u>).

Vertical Scroll Bars

This option adds vertical scroll bars to every graph. Normal use of the program will not require these.

Color Printing

Select this option only if you have a color printer and want to print graph lines in color. The background color for all printed graphs is white. If you fail to get satisfactory results using this option - or if you have a black and white printer - turn this option off.

Prompt When Group is Changed

When any change occurs to a group - such as window resizing, color changes, additions or the removal of charts - that group is tagged as "changed". If you move to another group, try to create a new group, or exit the program, you are automatically notified by the program that the group has changed - allowing you to save or ignore the changes you have made.

If this selection is checked, you will be notified by the program that changes to a group have been made. If this selection is not checked, you will not be notified by the program. In this case, you are responsible for saving any changes you make to a group.

Sticky Line Drawing Mode

When using the line drawing tools (ie., Trend, Vertical, Horizontal, and Resistance), the tool normally remains in the selected mode so that you can freely draw to the chart without having to continually reselect that tool. In some cases, this may not be the ideal mode of operation. This option is used for selecting "sticky" line drawing mode (as described above), or for having the line drawing tool reset immediately after the line is drawn.

Chart Scrolling

You can specify the number of data units you want your charts to scroll by setting these values. The Arrow Distance is the amount to scroll when the scroll bar arrow is clicked. The Page Distance is the amount to scroll when the page area of the scroll bar is clicked.

Chart Grids

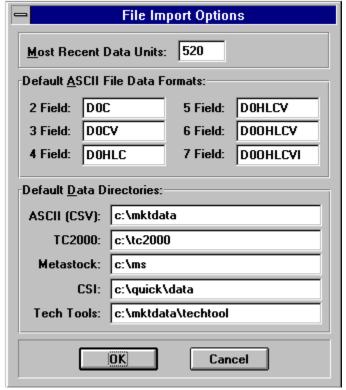
Select the usage of, and line style, for both the vertical and horizontal grids displayed in every graph.

Point & Figure Graph - Maximum Marker Width

Assign the maximum width (in pixels) of the X and O markers used in Point & Figure graphs. This value is the largest display size you will accept for use within the graph.

File Import Options

You can specify the number of most recent data units you want graphed in each of your charts, as well as providing a mechanism for importing ASCII files that do not conform to the normal ASCII file specification.



Selecting the number of recent data units used in your charts:

The amount of data loaded into Windows memory for all charts is configurable to meet your own personal analysis needs, or to address any specific memory constraints or problems you might encounter when running the program.

When you open a chart, the most recent data is loaded, up to a selected number of units. The number of units is specified by you and can range from 2 up to 16,384.

To specify the number of graph units:

- 1. Select File Import... from the Options menu.
- 2. Indicate the maximum number of data units you want each graph to contain by entering a value from 2 to 16,384 in the edit box labeled Most Recent Data Units.
- 3. Choose OK to save your selection. Any chart opened after this change is made will contain a maximum of the number you specified.

Support for Non-Standard ASCII File Formats:

Support is provided for reading some ASCII data files that do not conform to its normal format - such as those used by other third-party analysis programs or some spreadsheet applications. Normally, these ASCII files do not contain the Data Format record specified as the first record in an ASCII file (<u>Supported Data Formats</u>).

Through File Import Options, you can specify the default ASCII file formats to be assumed when the program encounters a file that does not contain the normal data format record.

To specify default file formats:

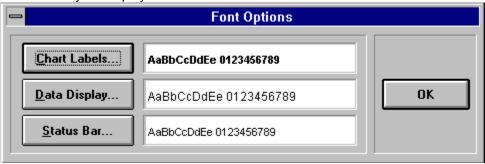
- 1. Select File Import... from the Options menu.
- 2. Enter the default file format definitions you want to assume for ASCII files containing 2, 3, 4, 5, 6, and 7 fields.
- 3. Choose OK to save your selections.

Establishing Default Directories for Data Files:

Financial charts can be created using several different import data file types. Normally, you will have a specific (or master) directory containing your financial data files.

Font Options

You can select the font styles used for chart labels, data display, and the status bar located at the bottom of the program window. This feature allows you to optimize your charts appearance based on the resolution of your display.

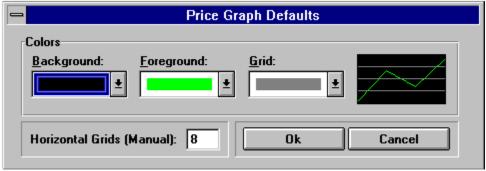


To select a font style:

- 1. Select Font... from the Options menu.
- 2. The currently selected font styles are displayed for each appearance selection type. Choose the appearance type to change by clicking on its descriptive button.
- 3. Select the font style from the Font dialog and choose the OK button to accept the new setting.
- 4. Choose the OK button of the Font Options dialog to redisplay using your new font choices.

Graph Color Options

You can select the default colors (and the number of manual horizontal grids) used when a chart is opened by selecting Graph... from the Options menu.



To select the default graph colors:

- 1. Select Price... or Indicators... from the Graph selection on the Options menu.
- 2. Select the background, foreground, and grid colors. If you are not using the automatic labeling feature, enter the number of horizontal grids you want for your default graphs.
 - **Tip**: The automatic chart labeling feature should normally be used.
- 3. Choose the OK button to save your selected settings.

Selecting the Number of Horizontal Grids