

Introduction

About Personal Analyst™

Simply the Best Charting and Analysis

Personal Analyst puts a multitude of classic charting and analysis tools at your fingertips. Professional traders love the Computer Generated Trendlines that automatically track and chart significant highs and lows. This same intelligence automatically draws Fibonacci, Gann, Trident Linear Regression and Speed Lines. Personal preferences for study smoothing and display characteristics are stored independently for each security, allowing this simple to operate, sophisticated research resource to be customized to your unique specifications.

Powerful, Innovative Features include...

Candle Pattern Analysis... Yes, **Personal Analyst** will identify significant candle patterns on chart with pop-up explanations providing invaluable instruction to the novice and confirmation to the expert.

Technical Screening... imagine your software searching your list for securities with volume greater than average volume, that are within 90% of their 12 month highs and whose RSI value is less than 30. Now imagine that you have this capability with dozens of rankings and virtually unlimited control of the criteria used and the order of preference. Stop imagining, it's all here and it is as easy to set-up and use as font controls in a word processor.

Computer Generated Ratings... apply multiple technical studies to your list of securities en masse, producing numerical ratings that can be used to find trading opportunities.

Classic Charting... From Point & Figure to Semi-log scaling, Japanese Candlestick to traditional bar, **Analyst** does it all with the speed, precision and flexibility you need.

Innovative Features... like EquiView, Compare and General Market charts found only in our products. EquiView displays two years of prices on the same security on the same chart. Perfect for viewing seasonal tendencies. Compare displays 1 to 4 separate securities on the same chart for comparison. Our General Market charts display an advance-decline line, up volume versus down volume, the TRIN, McClellan Oscillator and Summation Index. And analytics developed by Trendsetter like our True Range Oscillator, CycleFinder, Trendsetter Momentum Index and Computer Generated Trendlines give you the edge over other traders and investors.

Master Analysis - The Trader's Edge

Our Master analysis report summarizes the day from a technical perspective. Better than having your personalized financial section in the newspaper! The report shows how each of your securities performed today, including the values of the most widely used technical tools, whether there were any new candle patterns and the results of **Analyst's** rating systems. At the end of the report is a summary of the top ten gainers, losers and volume leaders, based on your portfolio!

Flexible AND Easy to Use

Nearly every facet of our charting and analysis is user-selectable. Personal preferences for smoothing and display characteristics are stored independently for each security. Custom layouts "remember" every aspect of your personal design. With unlimited charts per layout and dozens of indicators per chart, the combinations are endless. Shift from one layout to another in seconds. **Personal Analyst** will get you from point A to B to C before your competition has even warmed up.

Designed by Traders for Traders

Because we trade, our products are filled with unique features designed to make more efficient use of your time. Our AutoRun feature is just one example. It allows you to peruse your entire portfolio without lifting a finger. Select a layout, set the timer and off you go. Sort and rank your list of securities over 35 ways and **Personal Analyst** will scan through your charts in ranked order!

Secured Ordering

Purchase or lease... order online at [http:// www.trendsoft.com](http://www.trendsoft.com) or give us a call, 800-825-1852.

How is the Demo Version Different?

The most significant difference is that data in the demo version is static. We have disabled the ability to: create new data files; add data to the files included; edit the data that is included. The full version ships on a CD containing historical data on hundreds of stocks, indexes, mutual funds and commodities.

The purpose of this demo is not to demonstrate all of **Analyst's** features and benefits to you, after all, the full manual contains over 150 pages. We believe we can demonstrate that sophisticated analysis software can be easy to learn and use. We know, if you take that first step and order **Personal Analyst**, you will become a more successful trader/investor and the longer you use our software the more you will appreciate its benefits.

Getting Started

A Tour

The purpose of this tour is to demonstrate the mechanics of using **Personal Analyst** on the simplest level as well as highlighting some of our unique features. Additional features are covered in detail in the user guide. Please feel free to call or e-mail if you have questions that are not covered in this guide.

We have included sample data files for you to work with in this tour.

During this tour you will learn to...

- Manipulate securities in groups (Lists).

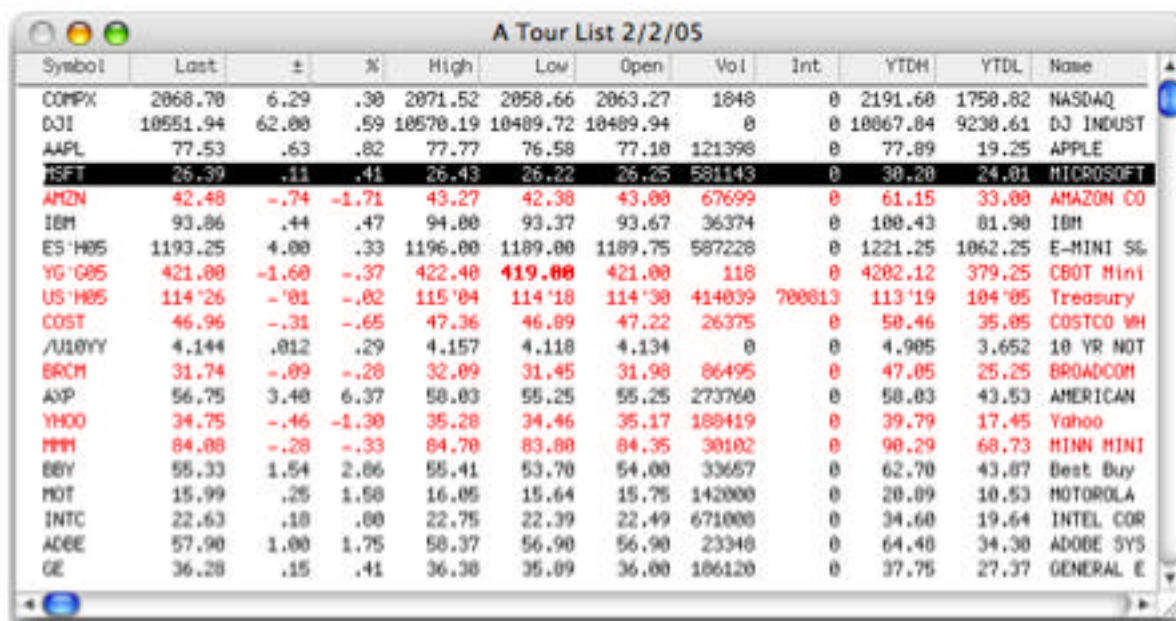
- Create simple charts.

- Apply analysis tools to the charts.

- Customize Charts.

- Create and use custom layouts.

Double click on the **Personal Analyst** icon to launch the application. The demo version of **Analyst** should open with a welcome window. When you close the window, it should automatically open our Tour List which looks something like this...



Symbol	Last	±	%	High	Low	Open	Vol	Int	YTDH	YTDL	Name
COMEX	2068.70	6.29	.30	2071.52	2058.66	2063.27	1848	0	2191.60	1750.82	NASDAQ
DJI	10551.94	62.88	.59	10570.19	10489.72	10489.94	0	0	10067.84	9230.61	DJ INDUST
AAPL	77.53	.63	.82	77.77	76.58	77.10	121398	0	77.89	19.25	APPLE
MSFT	26.39	.11	.41	26.43	26.22	26.25	581143	0	30.20	24.01	MICROSOFT
AMZN	42.48	-.74	-1.71	43.27	42.38	43.00	67699	0	61.15	33.00	AMAZON CO
IBM	93.86	.44	.47	94.00	93.37	93.67	36374	0	100.43	81.90	IBM
ES:H05	1193.25	4.00	.33	1196.00	1189.00	1189.75	587228	0	1221.25	1062.25	E-MINI S&
YG:H05	421.00	-1.60	-.37	422.40	419.00	421.00	118	0	4202.12	379.25	CBOT Mini
US:H05	114.26	-.01	-.02	115.04	114.18	114.30	414039	700813	113.19	104.05	Treasury
COST	46.96	-.31	-.65	47.36	46.89	47.22	26375	0	50.46	35.05	COSTCO WH
/UI0YY	4.144	.012	.29	4.157	4.118	4.134	0	0	4.905	3.652	10 YR NOT
BRCH	31.74	-.09	-.28	32.09	31.45	31.98	86495	0	47.05	25.25	BROADCOM
AXP	56.75	3.40	6.37	58.03	55.25	55.25	273760	0	50.83	43.53	AMERICAN
YHOO	34.75	-.46	-1.30	35.28	34.46	35.17	189419	0	39.79	17.45	Yahoo
MMM	84.08	-.28	-.33	84.70	83.80	84.35	30102	0	90.29	68.73	MINI MINT
BBY	55.33	1.54	2.86	55.41	53.70	54.00	33657	0	62.70	43.87	Best Buy
MOT	15.99	.25	1.58	16.05	15.64	15.75	142000	0	20.09	10.53	MOTOROLA
INTC	22.63	.10	.00	22.75	22.39	22.49	671000	0	34.60	19.64	INTEL COR
ADBE	57.90	1.00	1.75	58.37	56.90	56.90	23340	0	64.40	34.30	ADOBE SYS
GE	36.28	.15	.41	36.38	35.89	36.00	106120	0	37.75	27.37	GENERAL E

Lists

Analyst works with groups of securities we call Lists. Lists can range in size from one to fifteen hundred symbols. There is no limit to the number of Lists that **Analyst** can maintain. Data for each security is stored in its own separate file on your hard disk. By creating and maintaining Lists, you can group securities together for data entry, charting, analysis and other functions that need to be accomplished on multiple files. Other applications you use probably do not need to work with associated files in groups. When you type a document in a word processor, you might need to cut and paste some or all the information into another document but rarely would you have to alter or view every document, every day. **Analyst**, on the other hand, must update each symbol with new data every day and you will want to view charts on many, if not all the symbols you are tracking. These special needs require a

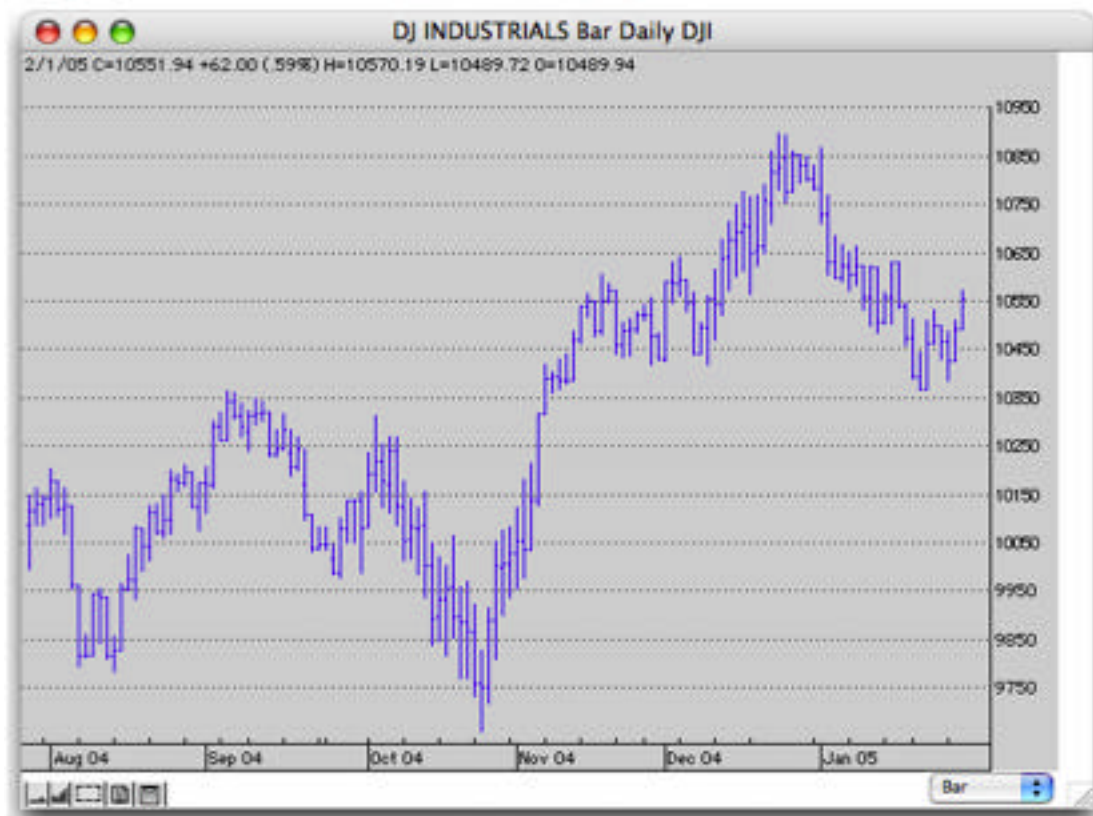
different type of design. The data and associated information are still stored in separate files. The Lists are simply a way of grouping them to make your life easier.

The tour List contains reference to multiple securities of differing types (i.e., indices, stocks and futures). The data contained in these files is real, however, these files all end on 2/2/05. This insures that the examples you see on your screen will be virtually the same as those shown in this guide.

Charts

Charts are a tool to analyze an instrument's performance over time. Analyst can display that information in a variety of different forms: bar; line; candle; point & figure; semi-log; EquiView; Compare; and MarketView. Most of you are familiar with bar and candle charts. The time frame of a chart refers to the amount of time each bar or candle represents. A daily chart can cover months of market activity where each point in the chart represents one day.

Under the **Charts** menu, you will see most of these charts listed. During this tour we will create Bar, Candle and Compare charts. Double click on the symbol DJI in the Tour List which should open a Daily Bar Chart of the Dow Jones Industrials.



Along the top of the chart is a legend displaying the date and numbers relating to the last bar in the chart. Point and click on any other bar. The legend at the top of the chart will change to reflect your selection. The name of the security, DJ Industrials, the type of chart and the symbol appear in the window title.

While the chart was drawing, **Analyst** was busy. Take a peek under the **Windows** menu. The last menu item is new and contains a description of the chart. You can have dozens of charts, all in separate windows or you can reuse a window to view a different security. As new windows are created, their respective menu item will be added to the Windows menu.

When selected, that window will be brought to the front. When you close a window, its memory is released and the menu item is removed.

List Mgmt Tools

Lets learn another of the benefits of our List structure by example. Press the down arrow on your keyboard or select **Next** from the List Mgmt menu. Our chart will change from the DJI to Apple. Press the up arrow or select **Previous** from the List Mgmt menu and our chart changes back to the DJI. These List Mgmt features allow you to scroll forwards and backwards through your List of securities. Our Tour List is not large enough to demonstrate the real value of our sorting and ranking features, however, as your List of securities grows, this feature will become extremely valuable. For now, pull down the **Sort & Rank** menus (both are located in the List Mgmt menu) to see the categories. **Analyst** can change the ordering of your List based on all of these criteria. We bring this up now because the **Next** and **Previous** functions work with the ordering of the List. As you become familiar with the variety of features at your fingertips, the flexibility and functionality of our design will become apparent. As you learn to use **Analyst** you will also discover that there are at least two ways to do just about everything. For example, you can sort and rank your List by clicking on the column headings in the List display. You can also move a single security any place in the List simply by dragging its symbol with your mouse.

Analysis

Lets take a look at the the **Analysis** menu. Since these tools require a chart to be used, they will appear gray unless a chart is the front window. While our chart was drawing, **Analyst** turned on all the menu items in this menu. Each of the tools in this menu was designed to assist you in analyzing the various charts that **Analyst** can create. A description of how to use these tools is included in our manual which contains a primer on technical analysis. For now, our purpose is to demonstrate how easy it is to add and remove these studies from your charts.

Select **Stochastics** from the **Analysis** menu. Stochastics is a study designed to measure the momentum of price movement. Weakening momentum can point to an impending reversal in price direction, like a car going up a hill. Even though the car continues to move forward we might be concerned if it can make it to the top if its speed is decreasing.

Technical studies, in our software, are overlaid directly on or below the charts and do not use a separate window. The front (or active) window is used for displaying these studies. We designed the software this way because it makes it easier to compare the study to price bars of the chart. Your chart should redraw allowing space for Stochastics underneath. A new color coded legend appears directly above the study. Again, clicking on any point in the chart will adjust the legend to reference your click.

Selections in the **Analysis** menu above the separator line are added below the chart. The balance of the Analysis tools are overlaid directly on the body of the chart. Select **Trend** from the **Analysis** menu. Your chart should now appear as follows...

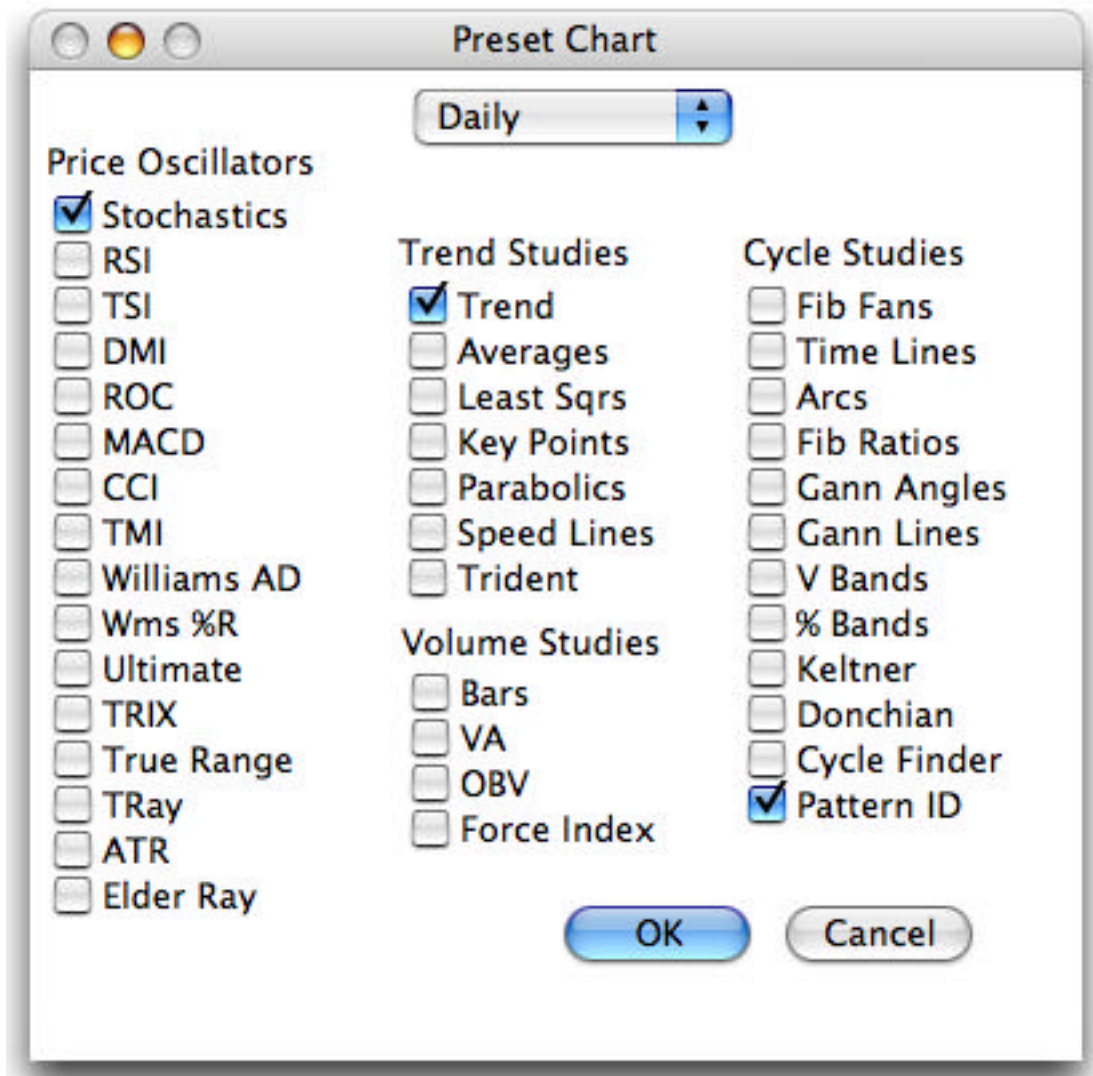


While we are on the subject of comparing the study to the price...hold the control key down and drag your mouse across the chart. The cursor will expand to a giant cross hair, and the price/indicator legends will update to reflect the placement of the cursor. Drop lines (horizontal and vertical) will be left on the chart if the mouse button is released while the cursor is to the left of the scale (i.e., y axis). These lines are automatically stored when you close the chart and may be removed all at once or one set at a time. To remove all drop lines with one command, hold the **Control** key down and select **Clear** from the Edit menu.

To remove an indicator, re-select its menu item from the **Analysis** menu. Try this with Stochastics... re-select **Stochastics** from the **Analysis** menu. The chart should redraw without Stochastics. You can also preset your charts to initially draw with your choice of analysis tools. Lets see how this works.

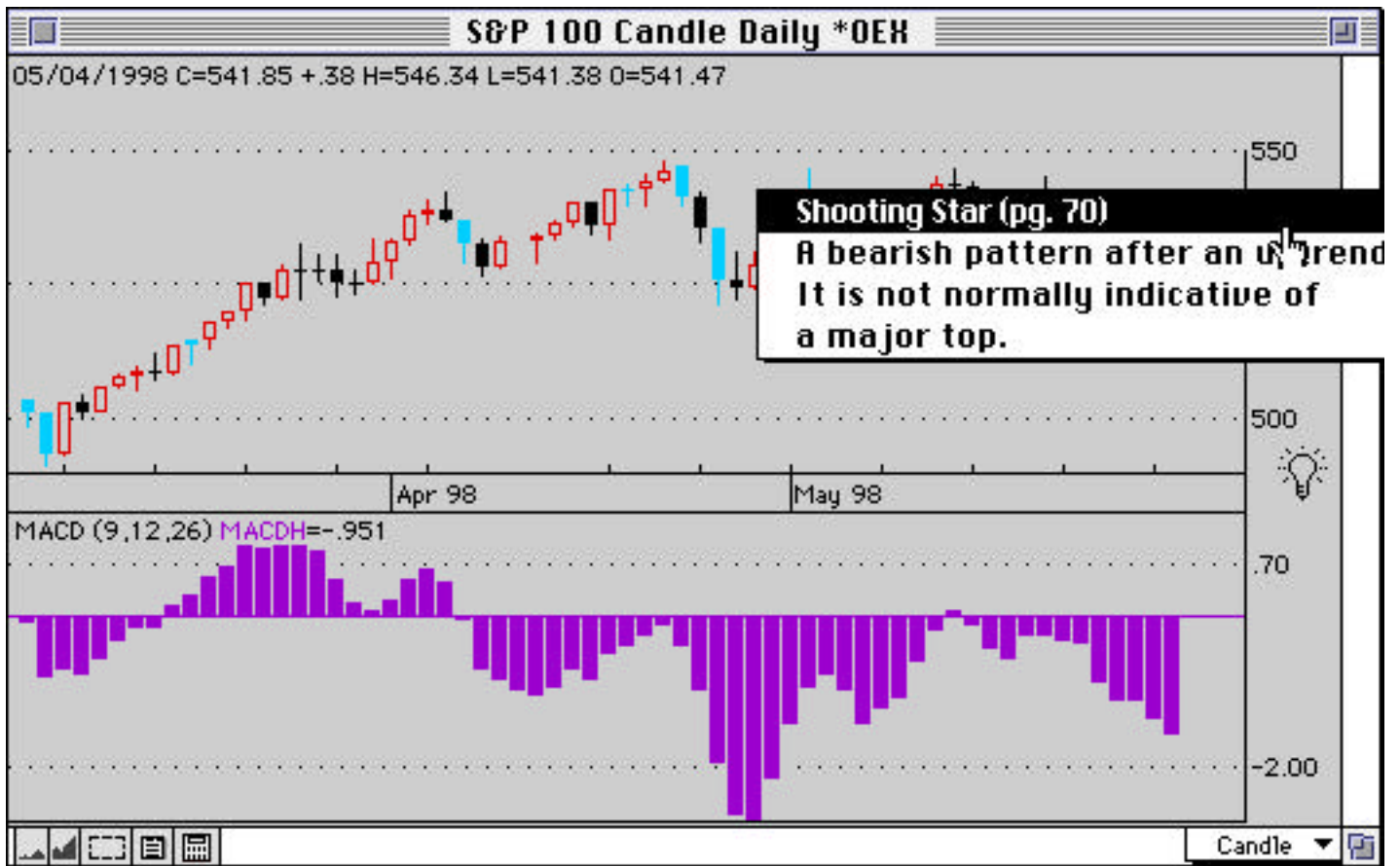
Preset

Default Studies (**Edit** menu) allows you to preset which, if any, technical tools will be displayed when you request a specific chart time frame. You can always add and subtract tools from a chart as we have demonstrated. This preference panel allows you to determine how the initial chart will draw. As you develop favorite indicators, this feature will become a tremendous time saver. Virtually every facet of your charts



Select **Stochastics**, **Trend**, and **Pattern ID** then press **OK**. The chart of the DJ will redraw with our new setup. Pattern ID is used for Japanese Candle charts only.

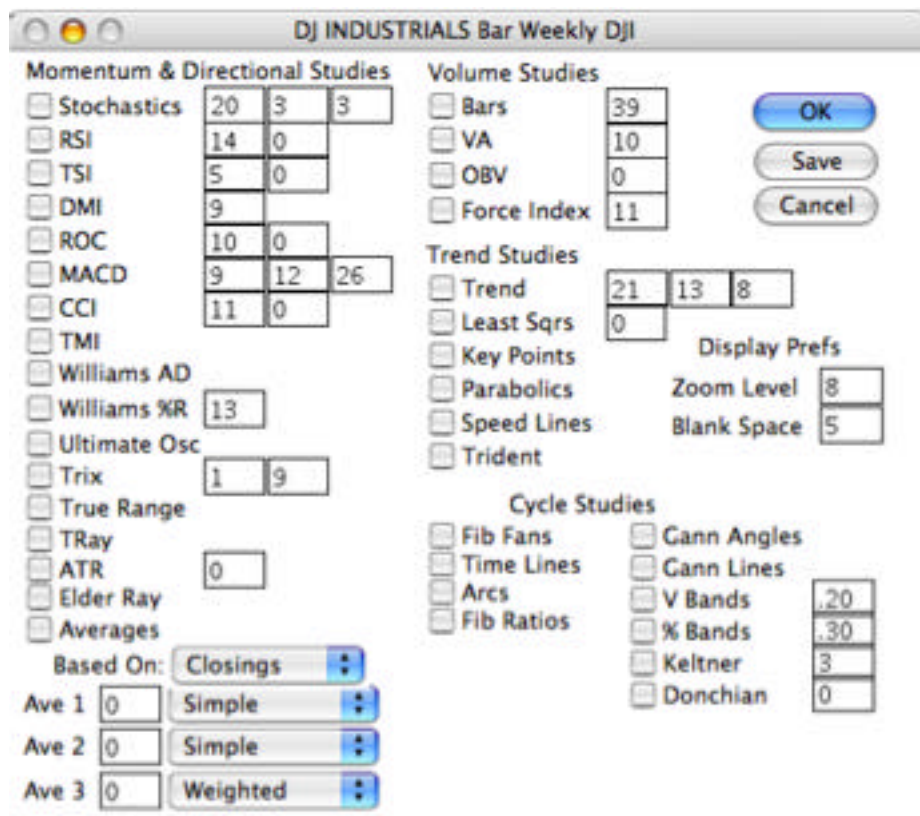
In the lower right corner of the chart is a popup menu control that changes the chart view. Select **Candle** from the control to switch views. The chart will redraw with the same indicators. Pattern ID works on Candle charts only. Candles that identify patterns are "painted" in a offsetting color. Hold the mouse down on any of these candles to read a description of the pattern and its meaning. Page numbers are a reference to Steve Nison's book on Candlestick interpretation. **Analyst** can identify 26 key candle patterns.



We can also add and/or remove multiple indicators once the initial chart has drawn. Select **Weekly** from the **Bar** sub menu of the **Charts** menu. Since the top window is a daily chart, **Analyst** assumes you want the new chart to be the same symbol. The new chart appears in a new window. Move your cursor horizontally along the date line located at the bottom of the chart.



Note how the cursor changes. Clicking on different points within the date line will allow you to change the appearance and/or content of the chart. The cursors change to help you navigate and remember where to click. We call this our point and click interface. More about this in a minute. When the cursor is in the form of a triangle or delta (Δ), click your mouse. A dialog will appear that allows you to change the indicators displayed on the chart. The main difference between this dialog and the **Preset Chart** dialog discussed previously is that these changes may apply to the active chart only. You should also note that you can change chart parameters for indicators that are not displayed.



Select **MACD** and then press **OK**. MACD is another study used for measuring momentum. It is an acronym for Moving Average Convergence Divergence (no wonder we use an acronym). Moving averages are a simple mathematical way of measuring the direction of prices. By comparing multiple averages of different time periods we can determine if momentum is growing or declining. This is the theory behind MACD.

As you move the cursor around the graph you will notice that the cursor changes to indicate the function of our point & click interface.

Clicking with this cursor active displays the information of that bar or candle at the top of the graph. This cursor should appear in the main body of the chart as well as the main body of sub studies (i.e., Stochastics).

Clicking with this cursor active scrolls the chart backwards in accordance with the what you have selected in the Program Defaults dialog. This cursor should appear in far left corner of the date line.

Clicking with this cursor active scrolls the chart forwards in accordance with the what you have selected in the Program Defaults dialog. This cursor should appear in far right corner of the date line.

Clicking with this cursor active allows you to change the start or end date of the active chart. This cursor should appear towards the right or left side of the date line.

Clicking with this cursor active allows you to change zoom levels. This cursor should appear left of center on the date line.

Clicking with this cursor active allows you to change indicators, zoom levels, etc., through the Preset Chart Dialog. This cursor should appear right of center on the date line.

Clicking with this cursor active allows you to change upper and lower Y-axis scaling. This cursor should appear in the scale area of the main chart.

- ✓ Clicking with this cursor active allows you to change indicator smoothing. This cursor should appear in the scale area of the indicator.
- EDIT Clicking with this cursor active allows you to edit the data used to create the chart. This cursor should appear above the main body of the chart on the information line.

Analyst's graphic windows may be sized, placed and zoomed through normal Macintosh controls. In addition, we have defined two controls that operate on multiple-windows as menu items. Lets see how this works. Select **Tile** from the **Windows** menu. The two graphs will redraw as a split screen. Tile splits the screen according to the number of active windows. In this case we have two, so each Window occupies half of the screen. Either chart may be made active by clicking on the window or by selection from the **Windows** menu. Now select **Stack** from the **Windows** menu. Window placement and size are changed to allow maximum viewing area while allowing enough space to click on non-active windows. Again, the number of graphic windows will affect size and placement.

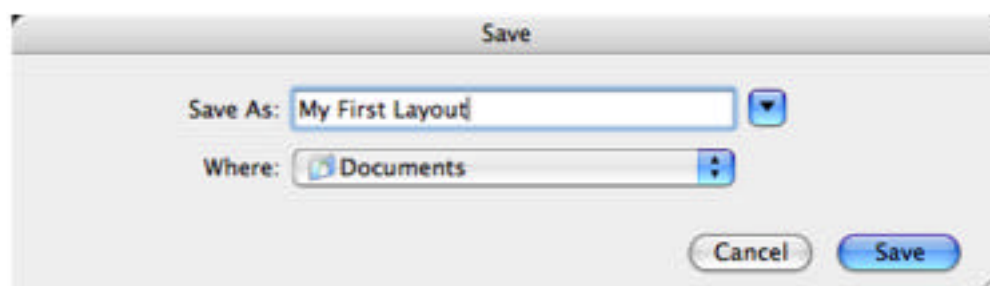
Select **A Tour List** from the Windows menu. This brings the List display back to the front. Select Apple from within the List then select **Bar - Daily** from the **Charts** menu. After the chart draws, select **Bar - Weekly** again.

We have now created four distinct charts. A peek under the **Windows** menu will remind you which charts are in which window. While you're here, select **Tile**. This time your screen is split four ways. Click in the Green Zoom control of any of the four windows. The selected window will redraw occupying the full screen. Click the Zoom control again and the Window redraws in its original size and placement.

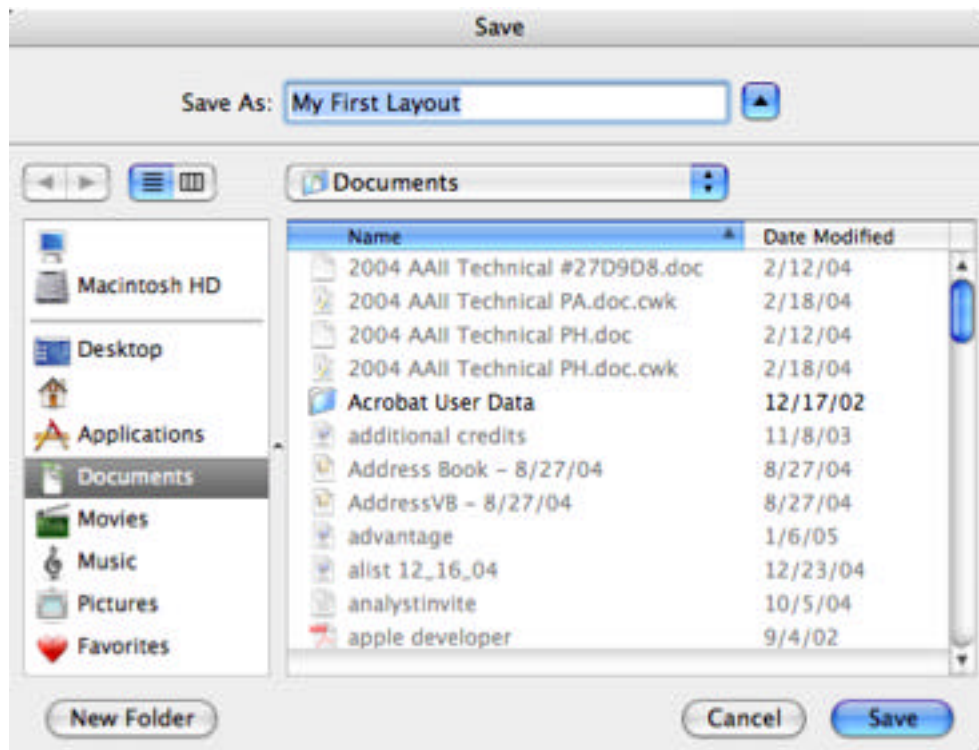
As you close each window, **Analyst** will store the size and placement of the window based on the security and the content of the window.

LAYOUTS

As you use the software you are likely to discover that you prefer to view similar securities in a similar way from day to day. Our custom layout and chart suite features were designed to allow you to accomplish this faster and more conveniently. Lets take a look at how these work. Select **Save Layout** from the **Windows** menu. The default Save dialog will look like this...



Click on the  to expand the default view to...



Just like any other file you create on your Macintosh, layouts must have a unique name. Name the layout **My First** and press **Save**. You have just created your first layout. Just like our Lists, layouts do not contain the charts or even the data necessary to create them. The layout files store aliases of the data file or files used to create the charts. This way, as you update those files with newer data, the layouts will update as well. The layouts also store other window content information like the type and time frame of the charts and what, if any analysis studies were applied to the chart. Finally, the layouts store the windows size and placement on the screen at the time they were created.

Using your layouts is even easier than creating them. Lets clear our screen and imagine that this is a new day. We can close all the open windows at once by using the shift and the option keys to modify the Close Window command. Hold the **Shift** and **Option** keys down. The fourth menu item under the File menu reads **Close All**. Select this menu item. All open windows, except the List, will close. The Tour List window should now be the front window.

Menu Modifiers (such as the Shift and Option keys) are not recognized unless the key or keys are down before pulling down the menu.

Select **Default Studies...** from the **Edit** menu. Turn off all of the indicators and press **OK**. Our daily charts are now set to open without any analysis tools. Now, lets see what happens when we open our Layout.

Select **Use Layout** from the **Windows** menu. Double click on **My First**. The four charts will open, with the same analysis, in the same position and size. These instructions were stored as part of the layout.

The number of layouts is limited only by your disk space and your ability to remember why you created the layout to begin with. With that in mind, descriptive names may become very important (e.g., Metals Daily). No data is stored in the layout files. If you have created too many, simply drag them to the trash (from the Finder).

As you open Layouts, they are added to the **Recent Layouts** menu that appears directly below **Use Layout** in the Windows menu. This makes switching from layout to layout faster and simpler.

Chart Suite

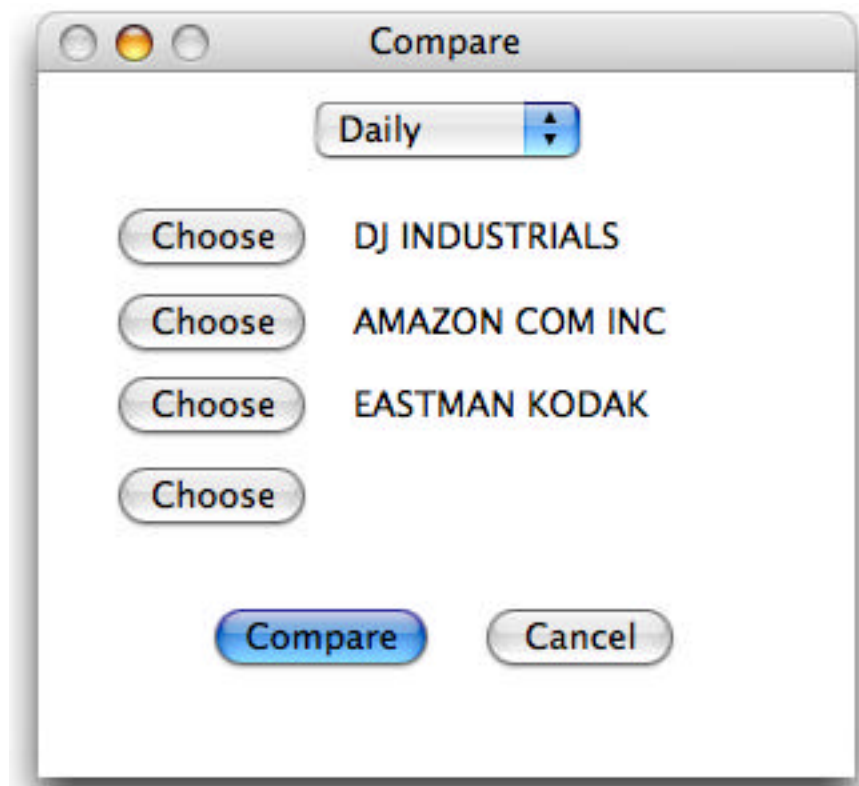
The **Chart Suite** is a layout without security names so that it can be used on any symbol in your List with a single keystroke or menu selection.

To use the Chart Suite, select a symbol in your List, then select Chart Suite from the Charts menu or press =

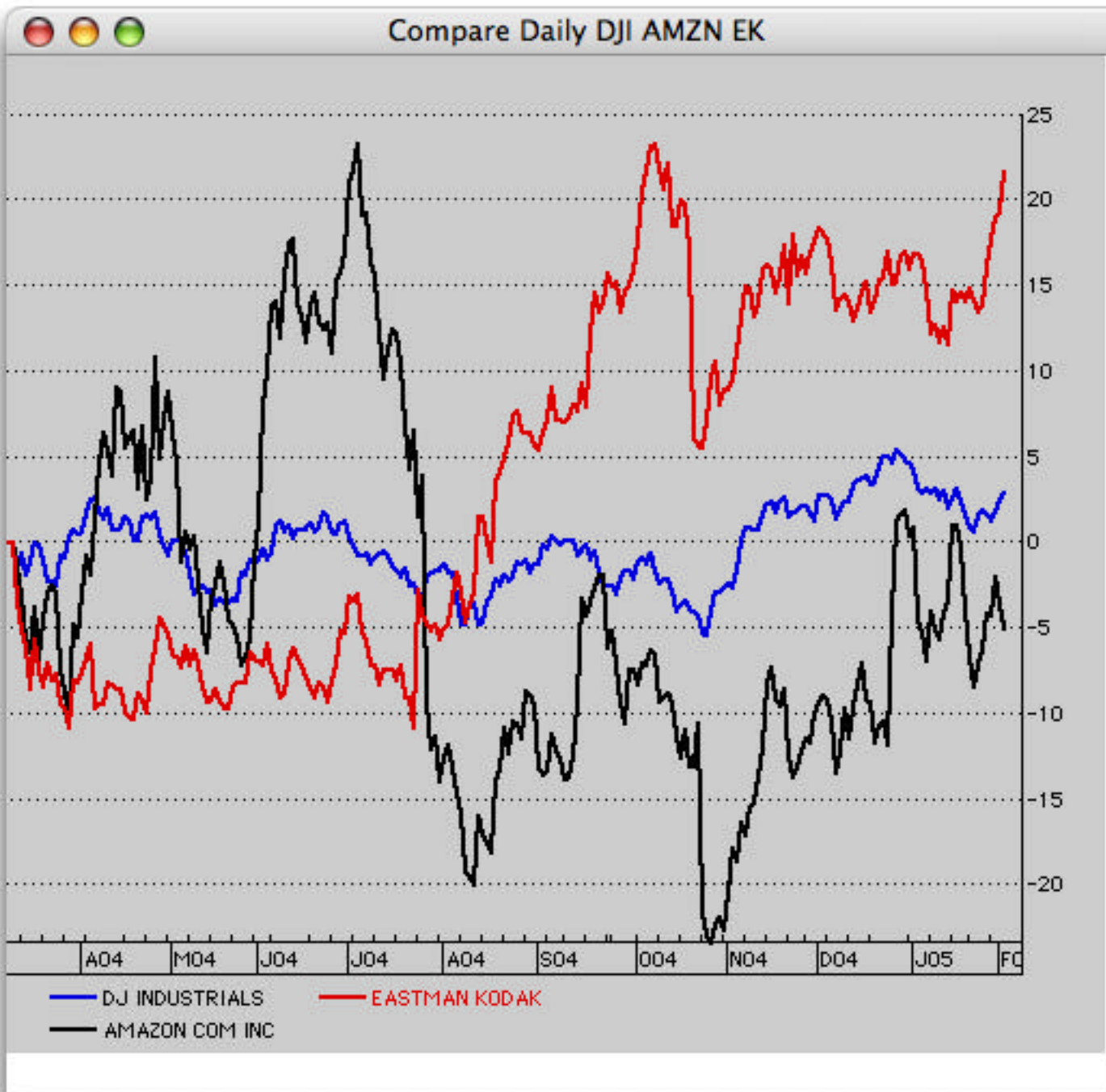
The default Chart Suite brings up a daily, weekly and monthly chart. To change the suite, open the charts you want included in the suite (all charts must be based on one symbol), then select Chart Suite from the charts menu while the charts are the front windows. **Analyst** will confirm that you want to re-define the suite based on the current charts. You can redefine the suite as many times as you want.

Compare Charts

Our **Compare** chart allows you to view 1 to 4 separate data sets on a percentage change basis over a selected period of time. When you select **Compare** from the charts menu, the following dialog will appear...



If there are any other charts open, the dialog will contain the names of the first four unique securities. To remove a security from the dialog, press the **Choose** button to the left of the name, then press **Cancel** on the File Selection dialog. To add a file, press the **Choose** button to the left of the position, select and open the file you want to add. Choose **Daily**, **Weekly** or **Monthly** from the popup, then press **Compare**. Here is the chart created from this sample dialog...



Once the chart is created, most of our point & click interface is active. You can change the start date, zoom levels, etc., and, if you double click on the body of the chart, you can change the securities that makeup of the chart.

Using the down or up arrows with this chart in the foreground will replace the last security in the comparison with the next or previous one in your List. This will allow you to compare, for example, the DJ Industrials with each security in your List.

The chart uses the price bar and the three candle colors to differentiate the securities.

Bring the Apple Bar Daily chart to the front by selecting it from the Windows menu. Move your cursor horizontally along the date line area of the chart until the cursor changes to a magnifying glass. Click the mouse. A small window will appear in the lower left portion of the chart showing the current zoom level. Zoom Levels are one way to control the amount of data displayed in a chart. Level 1 is the most compressed. Higher levels display less data with more detail. The maximum zoom will vary with the size of the window. Candle charts look best on a zoom level of 5 or 6. Enter a higher or lower number and press return.

In addition to changing zoom levels, **Analyst** can zoom-in on a particular area of the chart. Hold the **Shift** and **Option** keys down and drag the mouse over the area of the chart you would like to zoom in on. When you release the mouse, a new chart will open with just that area enlarged.

More About Lists

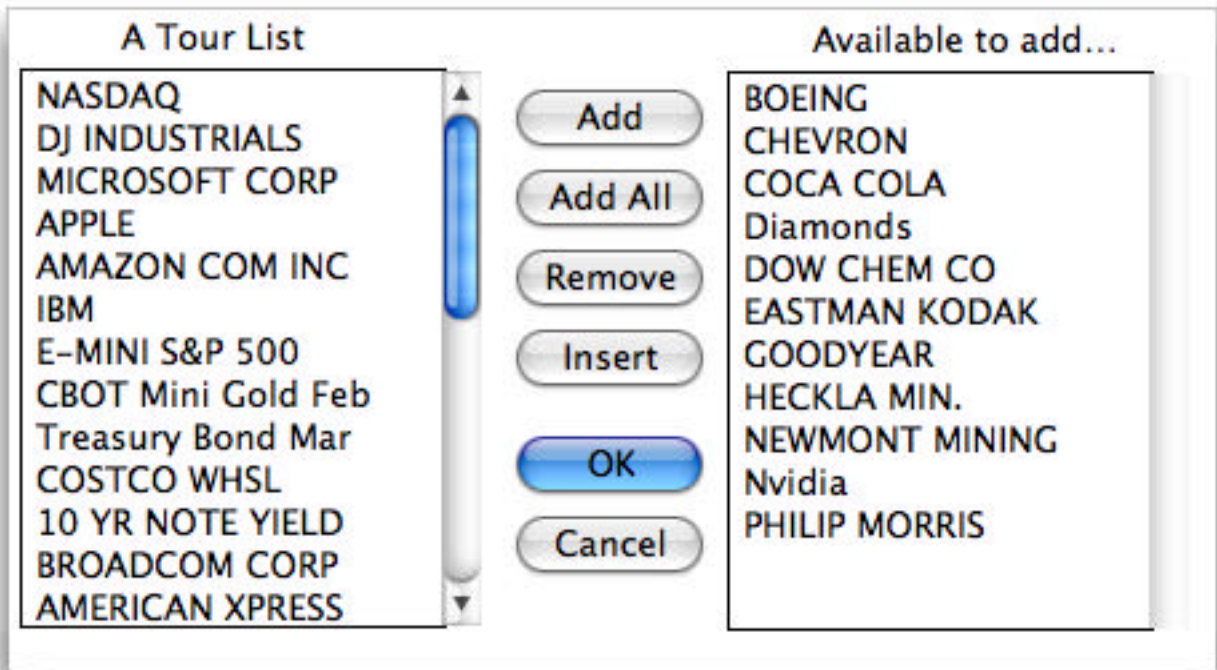
Each of us, in our everyday lives, compiles and maintains a variety of lists. Lists of phone numbers and addresses, assets and liabilities, bank accounts and credit card numbers, the list of lists we maintain is endless. Some lists are nothing more than sub-sets of other lists. For example, your list of securities purchased through a particular brokerage, is a sub-set of your current asset list. Other lists contain some items that are mutually exclusive and some that duplicated. Your personal address book and your list of emergency phone numbers would be good examples. Your doctor's name and phone number are most likely in both lists. Your next door neighbor might be on your personal list and not on the emergency list while the fire department is exactly the opposite.

In **Analyst**, you will compile and maintain lists in much the same way. A typical user will most likely have a single list referencing all securities for purposes of data entry and other functions that will be performed daily on all files. You may also have smaller lists (sub-sets of the large list) that will be used for functions that do not need to be performed on all files (e.g., printing). You may have as many lists as you want and individual file names may be repeated in several lists.

Wouldn't it be great if you could build an address book simply by dialing numbers on the phone? This is one of the many ways to build a list in **Analyst**. On startup, **Analyst** creates an Untitled List. All menu selections, that open a data file, such as charting, check to see if that file is in your current list. If it isn't, it's added. When you attempt to open another list or quit the program, **Analyst** will request permission to save any changes made to the current list. Answering "No" does not discard any data or changes you have made to your data files. You don't have to create graphs for hundreds of symbols to create a large list. Select **New List** from the **File** menu. The file selection dialog will come to the front requesting a name for the new List. Type in **Stocks** and press **Save**.

Two columns (with scroll bars) will appear in a new window. The left column is labeled with the name of the selected list and the right column is labeled **Not in List**. The latter is a list of data files in the current folder but not contained in the selected list. **Not in List** would be empty if all files contained in the folder are already in the list or if there are no data files in the

folder. In our example, there are securities in the List and others that are not. The **Not in List** side is initially sorted alphabetically. To add a security, point and click on the name in **Not in List** and press **Add** or double click on the name. You can select multiple names by holding the shift key down as you make selections. Add American Express, Apple, Disney, IBM and Motorola. The list modification window should now look like our example.



The **Insert** button allows you to add files into the List in places other than the end. Select the first file in **Stocks**, then select **DJ Industrials** from **Not in List**. Press **Insert**. **DJ Industrials** should now be at the top of your **Stocks** List.

The **Add All** button will move all files from **Not in List** to the end of the List. If you add a file by mistake, you can move it back to the **Not in List** side by double clicking on its name. This does not delete the data, it simply removes it from the List. Press **Save**.

While the list is opening, the names of the files in the list are displayed in the lower portion of the window. If you have followed instructions, there should be six files in your **Stocks** List, one Index and the five stocks.

Master Analysis

Master Analysis is another unique feature of **Personal Analyst**. After updating your data every day, you will select **Master Analysis** from the **Special** menu. This step is essential for many of **Analyst's** features to function properly. During this procedure, a countdown screen will appear as each file in the List is reviewed. During the review, **Analyst** checks statistical information used for ranking and to produce our various rating systems. A report and summary are compiled during Master Analysis. The report will be presented upon completion of this procedure. It can also be stored to disk and opened using Text Edit or any word processor. Select **Master Analysis** from the Special menu now.

Statistical Information

Statistical Ratings were designed to be an early warning system. The numeric rating is based on a combination of the studies reported in the Master Analysis worksheet. Each indicator is checked for direction and momentum and assigned a numeric rating. If an indicator is positive, points are added. If an indicator is negative, points are subtracted. Securities with a high positive or a large negative rating may be ready for action and deserve close scrutiny. The Master Analysis report contains a summary section listing all securities with very high or very low Statistical Ratings. These ratings increase in significance when they are very high or very low two days in a row. Therefore, the report contains the current rating and the previous rating.

Regression Ratings are based on the Least Square tool. When this tool is applied to a chart, three parallel lines are displayed. The Regression Rating was designed to allow you to "visualize" where prices are in relationship to these lines. The rating is a measurement of where the current day closed in relationship to the center line (median). As we move towards the lower line (oversold) the rating will approach 100. As we move towards the upper line (overbought) the rating will approach -100. As prices can exceed the outer line boundaries, the ratings can exceed ± 100 . Again, securities with very high or very low Regression Ratings are summarized towards the end of the Master Analysis worksheet.

Example section of Master Analysis report

CATEPILLAR(CAT) Last 55 1/4 UP `05

06/01/1998 C/55 1/4 H/56 1/8 L/54`13 O/55`03 V/10786

Statistical Rating = 65 Previous Rating = 0

39 day Average Range 1^17 Average Volume 10571

13 day Stochastics Falling %K 18 %D 35

9 day Wilder RSI Rising RSI 36.39

5 day Trendsetter TSI Falling TSI 38.40

11 day Wilder ADX Turning Dn ADX 18 ADXR 16

10 day Rate of Change Falling ROC 94.64

9 day MACD Falling MACDH -.01 MACD .78 MACDS .79

11 day Channel Index Rising CCI -88.3

TMI Rising TMI 77.27

5 day Percent R Rising %R -89

12 day TRIX Falling TRIX 100.09 MA 100.15

10 day True Range Falling TR .70

5 day Moving Average Falling MA 56.01

21 day Moving Average Falling MA 57.13

Parabolics - Direction Short SAR 60.08

Regression indicates the trend is up and prices are low

Candle Pattern Identified Harami

This concludes our tour. Feel free to experiment with other features of the program using the Tour data. Don't worry about making mistakes. You can always re-download the demo. And don't forget... we're here 9 a.m. to 6 p.m. every day the markets are open. Please drop us an e-mail, support@trendsoft.com or give us a call if you need help.

The balance of this guide contains selected segments from the **Personal Analyst** manual.

Data Management

Lists, Files and Data Entry

Adding & Deleting From Your List

You can not add or delete files with the demo version which is why we thought we should include those sections from the documentaiton. The following dialogs are accessible in the demo however, they are not functional.

The Dialog

Security Name

Symbol

Security Type Display Format Data Type

Tick Sector #

EPS Dividend

Security Name

A file is created to store historical data for each security you add to the List, therefore, all security names must be unique. If your List will contain Dec Corn and Mar Corn, you can not call them both Corn.

Symbol

Common Stock and Mutual Fund symbols will be same as those used by the exchange or listed in Investor's Daily or your local newspaper. Futures' symbols are listed in Appendix C. The most popular Index symbols may be found in Appendix E.

Security Type

Stock, Future, Index, Mutual Fund or Option.

Tick

This is the minimum price fluctuation. **Analyst** will set the tick for you if it recognizes the symbol, security type combination. Either way, you should confirm that the tick is correct. Stocks, indexes and mutual funds are usually .01. Futures vary, see Appendix C of this manual for a list..

Display Format

The **Decimal** and **Fractions** selections affect output display only. Most areas of the program can accept fractions or decimal as input. Only certain tick values can be represented as fractions (i.e., .03125 or 32nds, .25 or quarters)

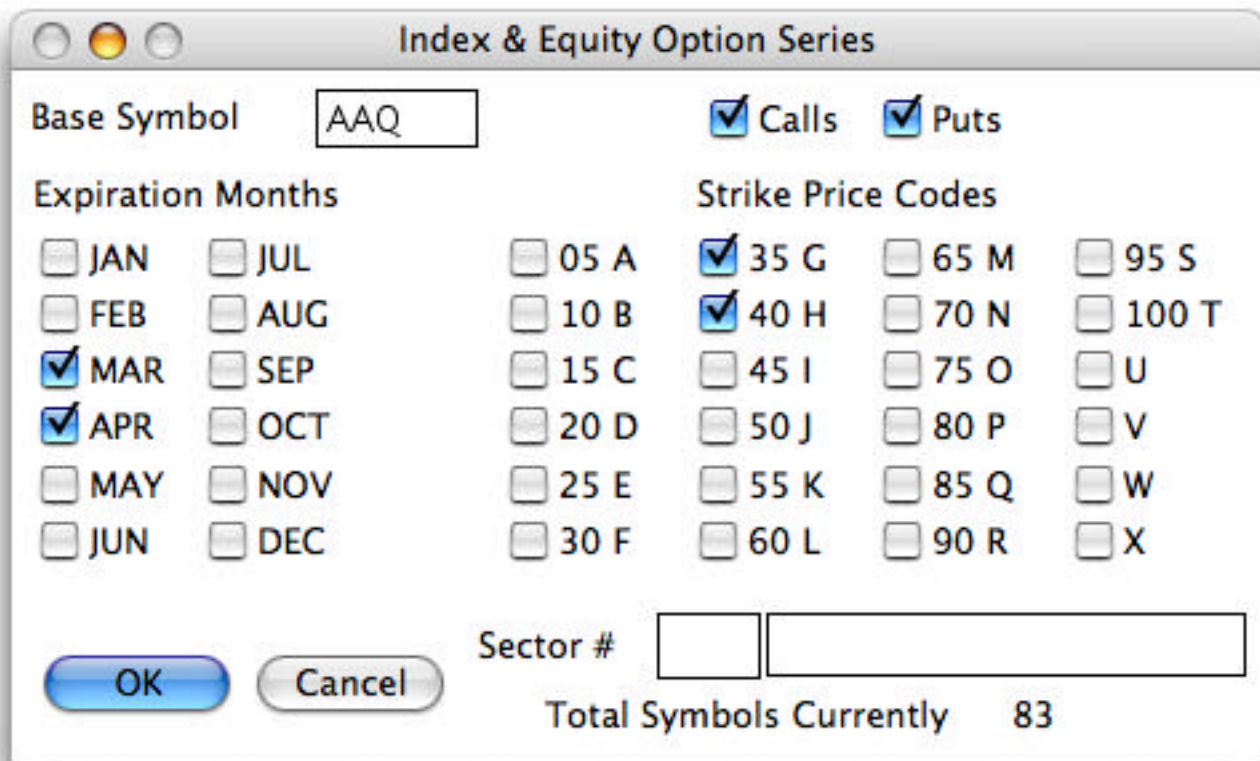
Sector #

Sectors are used for sorting purposes only. Assign a number in the **Sector #** field between 1 and 500. If this number has a definition, the sector name will be displayed. You may use traditional sectors such as Chemical, BioTech, etc., or use this field for definitions like Hot Picks, Inactive, etc. Changing the sector definition affects all securities with that sector number.

EPS and Dividend are used by for sorting. Some data sources provide this information. Use these fields to manually input or edit that data. These fields will change when entering a futures' contract.

Adding an Option Series...

You can add Equity and Index options, one at a time, through the **Add Security** feature or use this special dialog to add related groups of options in one operation. Hold the Option key down and select **Add Security** from the **List Mgmt** menu. The following dialog will appear...



The dialog box is titled "Index & Equity Option Series". It contains the following fields and controls:

- Base Symbol:** A text field containing "AAQ".
- Options Type:** Two checkboxes, "Calls" and "Puts", both of which are checked.
- Expiration Months:** A grid of 12 checkboxes for the months of the year. "MAR" and "APR" are checked.
- Strike Price Codes:** A grid of 24 checkboxes for strike price codes. "35 G" and "40 H" are checked.
- Sector #:** A text field with a placeholder box.
- Buttons:** "OK" and "Cancel" buttons.
- Total Symbols Currently:** A label showing "83".

Enter the base symbol. Base symbols are never more than three characters. NASDAQ symbols are normally converted by dropping the last two characters and adding a Q (e.g., AAPL becomes AAQ). Obviously this can not be true for all NASDAQ symbols as Apple is not the only stock whose symbol begins with AA. It would be wise to confirm the base symbol with your broker.

Select the **Call** and/or **Put** buttons, and check the appropriate **Expiration Months** and **Strike Price Codes**. The last two digits of the strike price are the only significant digits. In other words, a 105 and a 205 strike price have the same symbol. This does not normally create a problem since options have a limited trading life. However, in rare circumstances, the exchange may use the letters U, V, W, or X to identify duplicate strike prices or odd strike prices such as 22 1/2 after a stock split. It is also common for the exchange to use multiple base symbols for indexes. For example, the base symbol for S&P 500 index options may be SPX, SPU, SPZ or ??? based on need.

Sectors are used for sorting purposes only. You may assign a number in the **Sector #** field between 1 and 500. If this number has a definition, the sector name will be displayed. You may use traditional sectors such as Chemical, BioTech, etc., or use this field for definitions like Apple Options. Changing the sector definition affects all securities with that sector number.

After pressing **OK**, **Analyst** will create a file for each option and assign the appropriate symbol. The new securities will be added to the end of your List. Hold the Option key down and select **Remove Security** from the **List Mgmt** menu to use this same dialog to remove expired options from your List.

Adding a Series of Futures Contracts...

You can add Futures' contracts, one at a time, through the **Add Security** dialog described previously or, when you want to add multiple contract months of the same commodity, hold the shift and option keys down and select **Add Security** from the **List Mgmt** menu. The following dialog will appear...

Futures Contract Series													
Base Symbol	LC												
Tick	.025												
Sector #													
<div>Expiration Months</div> <table><tr><td><input type="checkbox"/> JAN</td><td><input checked="" type="checkbox"/> APR</td><td><input type="checkbox"/> JUL</td><td><input checked="" type="checkbox"/> OCT</td></tr><tr><td><input type="checkbox"/> FEB</td><td><input type="checkbox"/> MAY</td><td><input checked="" type="checkbox"/> AUG</td><td><input type="checkbox"/> NOV</td></tr><tr><td><input type="checkbox"/> MAR</td><td><input checked="" type="checkbox"/> JUN</td><td><input type="checkbox"/> SEP</td><td><input type="checkbox"/> DEC</td></tr></table>		<input type="checkbox"/> JAN	<input checked="" type="checkbox"/> APR	<input type="checkbox"/> JUL	<input checked="" type="checkbox"/> OCT	<input type="checkbox"/> FEB	<input type="checkbox"/> MAY	<input checked="" type="checkbox"/> AUG	<input type="checkbox"/> NOV	<input type="checkbox"/> MAR	<input checked="" type="checkbox"/> JUN	<input type="checkbox"/> SEP	<input type="checkbox"/> DEC
<input type="checkbox"/> JAN	<input checked="" type="checkbox"/> APR	<input type="checkbox"/> JUL	<input checked="" type="checkbox"/> OCT										
<input type="checkbox"/> FEB	<input type="checkbox"/> MAY	<input checked="" type="checkbox"/> AUG	<input type="checkbox"/> NOV										
<input type="checkbox"/> MAR	<input checked="" type="checkbox"/> JUN	<input type="checkbox"/> SEP	<input type="checkbox"/> DEC										
<div>OK Cancel</div>													

Base symbols for futures are always 1 or 2 characters. You'll find a complete list of futures symbols on our CD. As you enter the base symbol, the program will automatically set the **Tick** if it recognizes the symbol. Sectors are used for sorting purposes only. You may assign a number in the **Sector #** field between 1 and 500. If this number has a definition, the sector name will be displayed. You may use traditional sectors such as Grains, Meats, etc., or use this field for definitions like Hot Picks, Inactive, etc. Changing the sector definition affects all securities with that sector number.

Option Calculator

The problem for most option traders is determining a fair price for a given option contingent upon the value of the underlying stock or index. It would be great if you could call the broker and say "buy 10 Nov 30 Calls when Apple hits 28 1/2." Most brokers cannot or will not accept "contingent orders." Your broker expects you to tell him the price you are willing to pay for the option. Our option model was designed to calculate the probable price of the option contingent on the stock or index achieving a specific price.

There are two kinds of volatility. Historical Volatility is a statistical measurement of past price movements. Implied volatility measures whether option premiums are relatively expensive or inexpensive. Implied volatility is calculated based on the currently traded option premiums. Ideally, what traders would like to know is what the future volatility is going to be. If we knew what the future volatility would be, we could make a fortune. Since we don't have a crystal ball, we guesstimate what it will be. The beginning point for this guesstimate is historical volatility. What has the volatility been for this stock or other security, over a given period of time. The Black-Scholes formula is then used to calculate theoretical prices based on historical volatility.

In any formula there are known variables that are used to calculate a result. For example, $a + b = c$ yields a result of 7 for c if $a = 3$ and $b = 4$. We can use the same formula to solve for a if we know c and b ($a = c - b$). In the Black-Scholes formula, we solve for price using the volatility of the underlying stock or index which yields "theoretical" prices. Entering the known price of the option and solving for volatility yields implied volatility. We can then plug the implied volatility back into the formula and solve for target pricing based on the implied volatility. This is necessary because options trade independently from their underlying securities. Solving the formula both ways yields two sets of prices. Like the sticker price of a car and the actual selling price, they may or may not be different based on the supply and demand for the model.

As prices are calculated for both volatility based on the underlying security and implied volatility, the model can be invaluable in determining which strike price and/or expiration month is the best value. To start the model, select **Option Calc...** from the **Special** menu. The following dialog will appear...

Options Calc...

90 Day Tbill Rate Volatility based on:

Prices of underlying security

Current Target Target Date Prob. 28.58

Expire Days Remaining 25

Strike	Theoretical	Actual	Target	Delta	Gamma	Theta	To Double	Prob.
60	11.03		15.15	.959	.0105	.0063	81.93	7.71
65	6.66		10.39	.832	.0317	.0156	78.09	16.90
70	3.36		6.22	.596	.0513	.0489	75.63	25.89
75	1.37		3.15	.335	.0506	.1260	74.22	32.13
80	.45		1.32	.146	.0332	.0530	73.39	36.14

Initial calculations

The dialog opens with the following default values (from the top):

Tbill Rate is stored in your preference file. Default is 6.00 if it has never been set.

Current price of the security is the closing price for the last day in the chart or file.

Target Date is today's date.

Expiration is the closest expiration to today's date.

strike prices (there are five) are centered around the current price of the security. In other words, we should have 2 in the money calls, 2 out of the money calls and one at the money.

From this information we calculate initial values for:

Days to Exp which is the number of calendar days to expiration.

Theoretical values for each of the strike prices based on the one year volatility of the underlying security.

Delta how much the option price moves in relation to a one point move in the underlying security. A option that moves .75 points has a delta of .75 or 75% At the money options normally have a delta close to 50%.

Gamma is the delta of the delta.

Theta is the time decay per day to expiration.

To Double is the price the stock will have to achieve for the option to double in value.

Prob. is the probability, based on lognormal distribution, that the To Double price will be achieved. Maximum probability is 50.

Delta, gamma and theta are commonly referred to as "the greeks".

Your Inputs

Inputs whose control is a popup menu automatically force calculation of new output. You must press Return or the Calculate button when making adjustments to text based fields such as target price or date.

Current price of the security can be changed for "what if" calculations or if you are using the calculator while the markets are open and you know the current price of the security.

Target Price and Target Date are used to calculate expected values for the options if the target price is achieved on the target date. This also changes the value of Theta and adds a new calculation, the Prob. of the target price being achieved by the target date.

Actual is where you would type in the actual price of the option as they apply to the current price of the underlying security. This allows target prices, the greeks and the To Double values to be calculated based on implied volatility.

Volatility Based On Security or Implied. Nothing changes if Actual values for the option(s) are not entered. If a single price is entered, calculations for that option and each option following are based on the implied volatility (assuming it is selected).

Expiration Date and/or Month can be changed. The popup displaying the months automatically adjusts the expiration date to the third Friday of the expiration month. Since futures' options all expire on different days, you can adjust the expiration directly.

The screenshot shows a window titled "Options Calc..." with various input fields and a table of option data.

Inputs at the top:

- 90 Day Tbill Rate: 3.00
- Volatility based on: Security (dropdown menu)
- Calculate button

Prices of underlying security:

- Current: 70.76
- Target: 75
- Target Date: 1/26/05
- Prob. (empty)

Expiration and Days Remaining:

- Month: Feb (dropdown menu)
- Option Type: Calls (dropdown menu)
- Expire: 2/19/05
- Days Remaining: 25

Strike	Theoretical	Actual	Target	Delta	Gamma	Theta	To Double	Prob.
60	11.03			.959	.0105	.0108	81.93	7.71
65	6.66			.832	.0317	.0362	78.09	16.90
70	3.36			.596	.0513	.1039	75.63	25.89
75	1.37			.335	.0506	.0551	74.22	32.13
80	.45			.146	.0332	.0183	73.39	36.14

Calls versus Puts is a popup control. Since the Target price and the Actual prices would normally be different, the program resets these fields. If you switch back and forth, the program remembers the values previously set. Since we want the in-the-money options to be at the top of the sequence, the strike prices are automatically flipped when you change from calls to puts and back.

Options Calc...

90 Day Tbill Rate
Volatility based on:
Security

Calculate

Prices of underlying security

Current
Target
Target Date
Prob.

Feb
Puts
Expire
Days Remaining
25

Strike	Theoretical	Actual	Target	Delta	Gamma	Theta	To Double	Prob.
<input type="text" value="80"/>	9.69	<input type="text"/>		.882	.0251	.0183	60.62	6.64
<input type="text" value="75"/>	5.61	<input type="text"/>		.713	.0454	.0551	63.97	16.34
<input type="text" value="70"/>	2.60	<input type="text"/>		.455	.0582	.1039	66.11	25.44
<input type="text" value="65"/>	.90	<input type="text"/>		.204	.0416	.0362	67.27	31.15
<input type="text" value="60"/>	.27	<input type="text"/>		.054	.0171	.0108	67.30	31.30

Understanding how options work and the terminology used by option traders is essential to using and understanding our options model. Used properly, options can reduce your risk and increase your leverage. We highly recommend reading "Options as a Strategic Investment" by Lawrence G. McMillan, before attempting to trade this market. This book is considered the "bible" for option traders.

Spreads

Creating new spread files -- Select **Add Security-Single Symbol** from the **List Mgmt** menu. Give the spread a unique name, select **Spread** from the security type popup menu, set the tick, then press **Done**. A second dialog will appear in which you can select up to 3 securities that form the spread relationship and weight these files with conversion factors. Click on the arithmetic symbols to change the mathematical relationship between the files. This feature can be used to create ratios as well as spreads. Spreads and ratios are updated automatically during Master Analysis.

Security Name: Gold/Silver
Symbol: S-G
Security Type: Spread
Display Format: Decimal
Data Type: Daily
Tick: ☒ .01
Sector #: 300
Spreads and Ratios
Buttons: Cancel, Done, Next

Define Spread
Choose Silver mini * 1
Choose - Gold mini * 1
Choose - * 1
Buttons: Build, Cancel

The conversion factor is used in inter market spreads to adjust contracts to the same unit of measurement or in calendar spreads to magnify the spread to a more readable level. The mathematical relationship of a common spread is:

(File 1 * Conversion 1) - (File 2 * Conversion 2) - (File 3 * Conversion 3)

If File 3 is nonexistent then the spread is built on 2 files only.

Some examples:

British Pound to Deutsche Mark - File 1 is BP, File 2 is DM

Even though the BP contract is half the size of the DM, they are both traded in the same units, so the conversion factors are 1 to 1.

TED Spreads - File 1 is T-Bills, File 2 is Eurodollars

The relationship is 1 to 1 however the chart is cleaner if we use 10 and 10.

Crush - File 1 is Soy Beans, File 2 is Soy Oil, File 3 is Soy Meal

This is the most complex of spreads. As we want file 1 subtracted from the other files

(backwards) all conversions are entered as negative numbers. The conversions are: Beans = 1, Oil = 11 and Meal = 2.4

After entering the file names and conversion factors, press **OK**. The program will build the spread file, store it to disk and add it to your list. The spread files must be kept in the same folder as the files they are built upon.

Organizing your List

Our sorting and ranking capabilities allow you to quickly organize your List in a variety of ways. These tools have their own sub-menus under the List Mgmt menu and can also be accessed by clicking on the column headings of your List. See the reference section of this manual for an explanation of the various sort and rank categories.

Individual securities can be moved within your List as well. Simply drag the symbol where you want it in the List and drop. If you drag above the top of the List or below the bottom, the List will automatically scroll making it incredibly easy to put things in order. Changed your mind? Drop the symbol above or below the window and it will remain where it was.

Using Sectors to Organize your List

Analyst can sort your List by Sector. The only requirement on defining sectors is that they must range between 1 and 500. This flexibility can be used to organize your Quote Monitor.

Here's one example of how these features could be used.

Suppose we want to separate stocks that we trade from stocks that we hold in our long term account, like an IRA. We'd also like to group stocks that are on our "hot trading list" and stocks that are on our "hot investment list". When you sort by sector, **Analyst** places the highest sectors at the top of the list. With 500 sectors to define and four basic groupings, we can allow 40 sectors per group and still have 300 left over. We want our trading List to be at the top. We reserve sectors 500-461 for this group.

First, select a stock that falls into this group. Select **Modify Security** from the **List Mgmt** menu. Change the sector to fall within the grouping. Multiple stocks can have the same sector number. Remember, when we sort, the higher the sector number, the closer to the top of the group the symbol will appear. We could rank the top 15 stocks, according to their importance, and give them sector numbers from 499 down to 483. The remaining stocks in this group could all be sector number 461.

When we are finished with the first group we would repeat the process for the second group and so on.

The beauty of this method is it is easy to change sector #'s when we sell a stock or enter a new position. Simply modify the security settings, then re-sort your List.

Deleting Securities

There are several ways to remove securities from a List. The method you choose depends on whether you want to delete the data or simply remove the security from the List.

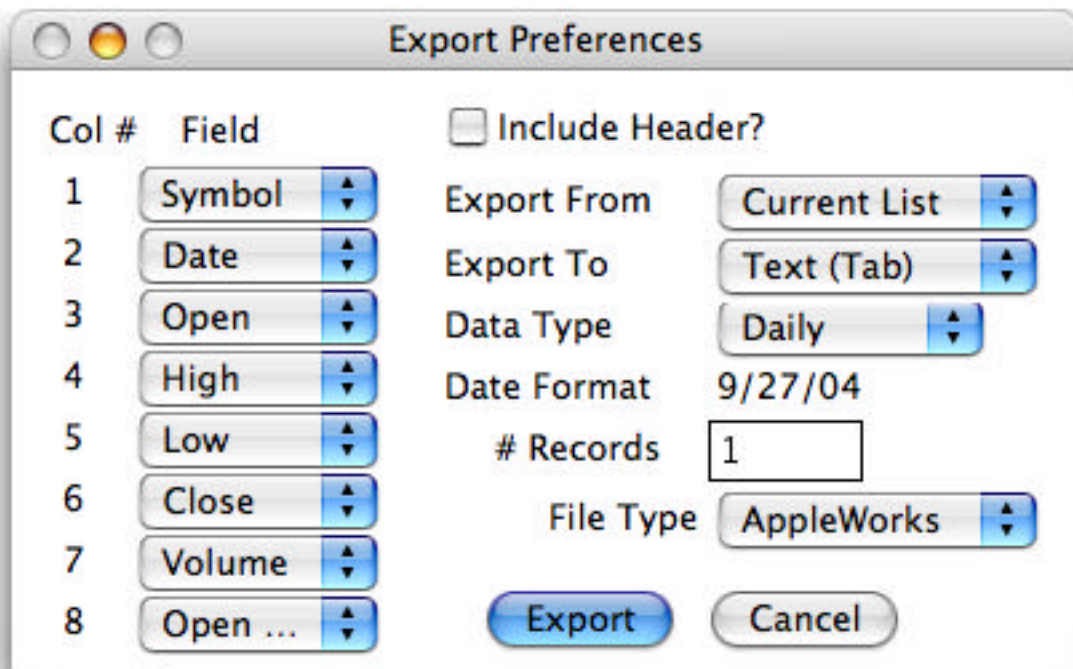
There are two ways to permanently delete the data...

1. Highlight the security in the List. Select **Delete** from the **File** menu. **Analyst** will request permission to permanently delete the data. This works fine if you only have one or two securities to delete.
2. Select **Quit** from the **File** menu. **Analyst** will return you to the Finder. Open your data folder and drag the file or files to the trash. When you return to **Analyst** and open the List, the program checks to see if the associated securities exist. If they do not, they are discarded from the List. This method works best if you have many securities to delete.

1. Highlight the security in the List. Select **Remove Security** from the **List Mgmt** menu. **Remove Security** allows you to remove a single symbol, multiple securities beginning with the highlighted security, or an option series. Changes made to the List are not saved automatically.
2. Select **Modify List...** from the **File** menu. Select and Open the List needing modification. The List Modification window will open displaying securities that are in the selected List on one side and those that are not on the other. Double click on the securities you want removed from the List. They will move to the other side. When you are finished making modifications, press **Save** or **Use**. The List will re-open as modified.
3. Select **Quit** from the **File** menu. **Analyst** will return you to the Finder. Open your data folder and drag the file or files to another folder. When you return to **Analyst** and open the List, the program checks to see if the associated securities exist. If they do not, they are discarded from the List.

Exporting Data

Export... (File menu) creates text files for use with AppleWorks, Excel and other Macintosh products.



Set the Col # fields to **Skip** on information you do not want exported. In our example we have indicated we want the Symbol in the first column, the Date in the second column, Volume in the seventh, and Open, High, Low and Last in the third through sixth columns respectively and we have indicated that we want to skip Open Interest.

Select your personal choices from the **Export From**, **Export To**, **Date Format** and **Data Type** popup menus. We have indicated that we want the dates in standard MM/DD/YY format, that we want the last 100 records of daily data exported, from a single security, in Tab delimited text (for use with Excel). When **Export** is pressed, **Analyst** will request which single file to export. The program will then request a name and location to store the exported data.

With the expectation that you will want to export to the same format on a normal basis, **Analyst** will store your setup after completing the export.

Export One (File menu) will export the current day's data from each item in the active List using the format parameters stored on your last export. The data will be stored in a file named "export" which will be created in the same folder as the active List. If the file exists it will automatically be replaced.

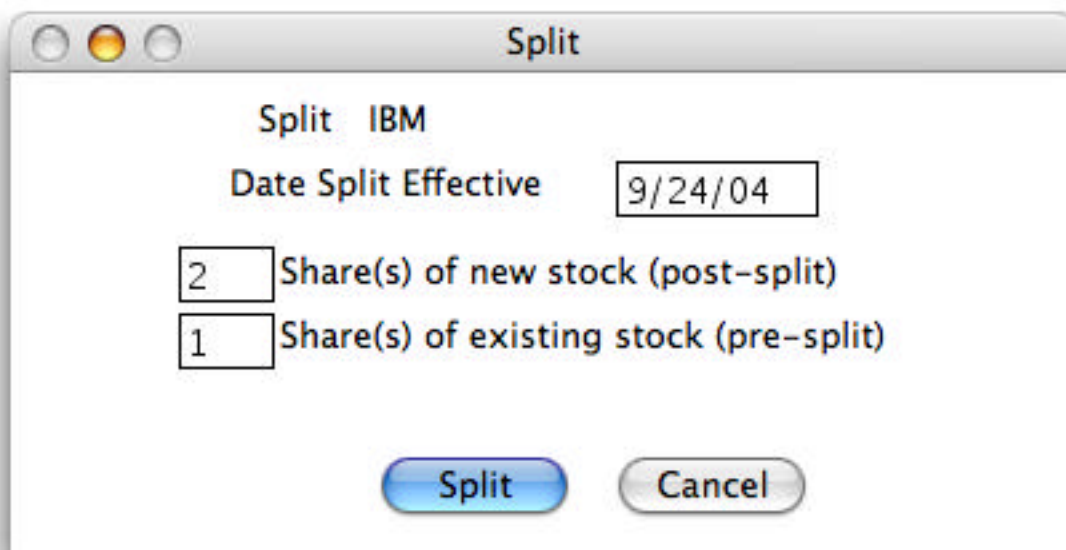
Exporting Calculated Studies

Selecting **Export** when a chart is the active window will export calculated study data along with the open, high, low, close, net change, volume and open interest. Set the chart up with

the indicators and studies you want exported, then select Export from the File menu. **Analyst** will request a name and location to store the exported data.

Stock Splits

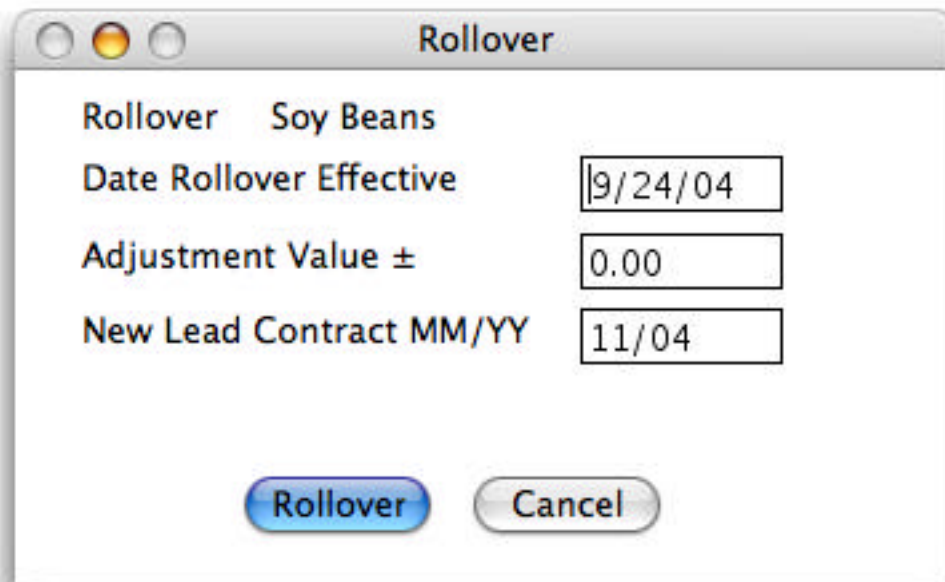
A stock split alters the number of shares outstanding and the price of those shares. In a 2 for 1 split, each share of existing stock will become 2 shares and the price will be halved. A reverse split has the opposite effect. Sometimes, if you are not following a stock closely, you will not become aware of the split until after it has taken effect. As such, our Split function contains an effective date field. All data before the effective date will be split in the ratio you select. Highlight the stock in your List. Select **Split** from the Special menu. A dialog window will appear requesting the ratio of the split and the effective date. After setting all fields, press **Split**. Before adjusting the prices, a copy will be made and left on the disk. After confirming that the new file is correct, you may discard the copy.



Analyst splits the data on the on the disk. Charts that are open will not display the split data until you close and re-open them.

Handling Rollovers

Rollover has two main functions: it can be used to adjust Mutual Fund prices after a dividend distribution and it can be used to create and maintain perpetual futures data.



The screenshot shows a dialog box titled "Rollover" with a light gray border and standard Mac OS window controls (red, yellow, and green buttons). Inside the dialog, the text "Rollover Soy Beans" is displayed. Below this, there are three labeled text input fields: "Date Rollover Effective" with the value "9/24/04", "Adjustment Value ±" with the value "0.00", and "New Lead Contract MM/YY" with the value "11/04". At the bottom of the dialog, there are two buttons: a blue "Rollover" button and a gray "Cancel" button.

For mutual funds... Highlight the Fund in your List. Select **Rollover** from the **Special** menu. A dialog window will appear requesting the adjustment amount and the effective date. The adjustment should be negative. The New Lead Contract field is for Futures only. If there is anything in this field, delete it. All data up to and including the effective date will be adjusted. After setting all fields, press **Rollover**. Before adjusting the prices, a copy will be made and left in your Data folder. After confirming that the new file is correct, you may discard the copy.

For Futures... Highlight the Future in your List. Select **Rollover** from the **Special** menu. The adjustment value is calculated by subtracting the current settlement price of the perpetual contract from the settlement price of the contract you are rolling to. If the new contract is lower in value, this will create a negative adjustment value. Enter the expiration of the contract you are rolling into. This date must be in the form MM/YY. The effective date defaults to today and should normally be left unchanged.

A discussion of Perpetual Futures data may be found toward the end of Section 5.

The Rollover function adjusts the data on the on the disk. Charts that are open will not display the adjusted data until you close and re-open them.

Special Features

Stepping Out


Customizing

Charts & Charting Tools

Chart appearance is very flexible in **Analyst**. You can set scaling, grid division, zoom level (i.e., chart spacing), study smoothing, colors, line-widths, patterns, even default studies. Beauty is in the eye of the beholder. When you know how you want to display your charts, **Analyst** will let you lock in your preferences for each type and time-frame of chart. Until then, the program will use default settings. In other words, you don't need to be an expert to create useful charts.

Customizing of charts and analysis tools is available through several distinct features: our preference dialogs, our point & click interface, chart controls and our double-click interface.

Chart Controls


Under each of the charts you see this control 

From left to right;

Zoom out, zoom in, controlled zoom, list/edit and the calculator.

Zoom out and zoom in alter the amount of data displayed in the chart.

Controlled zoom is a variation of our drag and zoom feature. Clicking on that portion of the control will place a selection rectangle on the chart which can then be resized or moved through normal dragging with the mouse. Drag the rectangle right or left to increase or decrease the size of the rectangle. Drag from inside the rectangle to move it to the right or left without changing its size. When the rectangle covers the horizontal area of the chart you want to zoom in on, press return or double click inside the rectangle and **Analyst** will create a new window with the selected data. The original window is left intact. Click outside the rectangle to remove it without creating a new chart.

List/Edit converts the chart to numbers for review and/or editing. The control changes to . Clicking on the new control will convert the window back to a chart.










In the lower right of the chart you'll find a popup menu that allows you to quickly switch the chart view (e.g., change from bar to candle).

Point & Click Interface

Clicking the mouse on any point in the chart will display the data (date, volume, open, high, low, and close) reflected by that point. These numbers are displayed directly above the chart. Moving average and analysis tool values are also displayed if they appear on the chart.

Clicking in other areas of the chart (see Figure 5) will allow temporary changes in chart appearance. We call this our Point & Click interface.

As you move the cursor around the graph you will notice that the cursor changes to indicate the function of our point & click interface.

-  Clicking with this cursor active displays the information of that bar or candle at the top of the graph. This cursor should appear in the main body of the chart as well as the main body of sub studies (i.e., Stochastics).
-  Clicking with this cursor active scrolls the chart backwards in accordance with the what you have selected in the Definitions dialog. This cursor should appear in far left corner of the date line.
-  Clicking with this cursor active scrolls the chart forwards in accordance with the what you have selected in the Definitions dialog. This cursor should appear in far right corner of the date line.
-  Clicking with this cursor active allows you to change the start or end date of the active chart. This cursor should appear towards the right or left side of the date line.
-  Clicking with this cursor active allows you to change zoom levels. This cursor should appear left of center on the date line.
-  Clicking with this cursor active allows you to change indicators, zoom levels, etc., through the Preset Chart Dialog. This cursor should appear right of center on the date line.
-  Clicking with this cursor active allows you to change upper and lower Y-axis scaling. This cursor should appear in the scale area of the main chart.
-  Clicking with this cursor active allows you to change indicator smoothing. This cursor should appear in the scale area of the indicator.
-  Clicking with this cursor active allows you to edit the data used to create the chart. This cursor should appear above the main body of the chart on the information line.

The mouse is also used for four other important features...

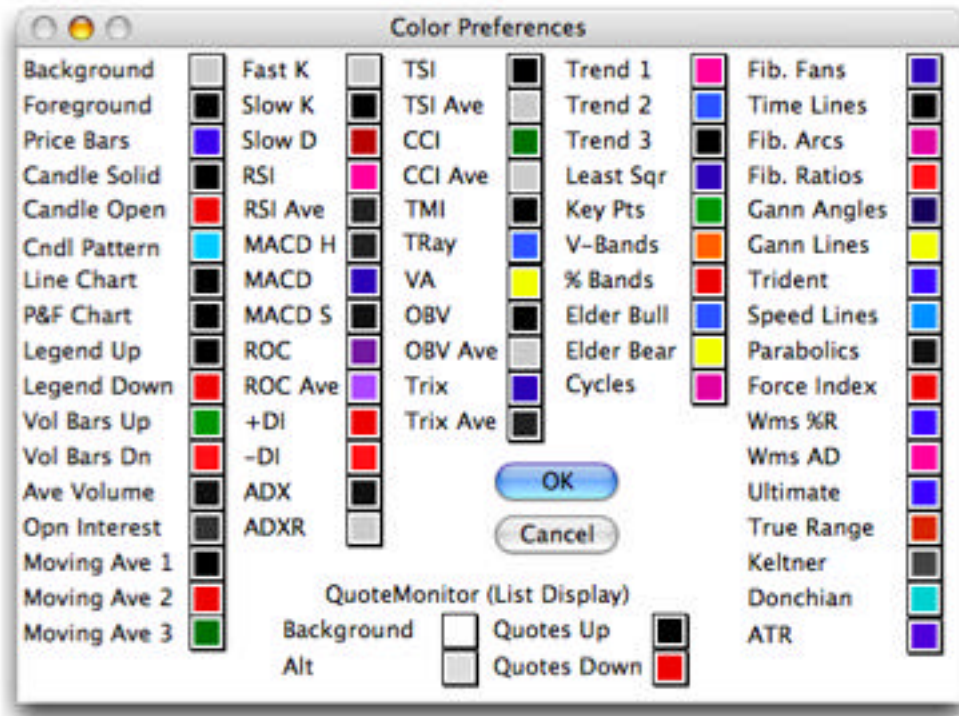
1. Hold the **Shift** key down while dragging your mouse to draw trend lines. Trend lines are automatically stored when you close the chart window. To remove trend lines, one at a time, hold the **Shift** and the **Control** key down and click on the line to be removed. To remove all trend lines with one command, hold the **Shift** key down and select **Clear** from the Edit menu.
2. Hold the **Control** key down and drag the mouse. The cursor will change to a giant cross hair, stretching from top to bottom and left to right. As you move the cursor across the chart, the data reflected by that point in the chart will update. Horizontal and vertical drop lines will be drawn on release if the cursor is still in the body of the chart. The resulting drop lines are automatically stored when you close the chart window. To remove drop lines, one at a time, hold the **Option** and the **Control** key down and click on the lines to be removed. To remove all drop lines with one command, hold the **Control** key down and select **Clear** from the Edit menu.
3. Hold the **Shift** and **Option** keys down and drag your mouse around an area of the chart body to zoom in on that section of the chart.
4. Hold the **Shift** and **Option** keys down and click in the scale area of the chart to activate our **What If** feature.

Preference Dialogs

There are several preference dialogs that affect charting and analysis...

Colors

Analyst allows you to control the color of virtually all elements of your charts and analysis. You can turn off many of these lines by setting their respective colors to match the color of the background. This dialog should be self-explanatory.



Other display characteristics are available by double clicking on the chart.

The **Study Smoothings** menu selection (**Edit** menu) will store your personal preferences for each study in our technical toolbox. Smoothings are stored independently for each type and time-frame of chart.

Set Up Analysis For APPLE

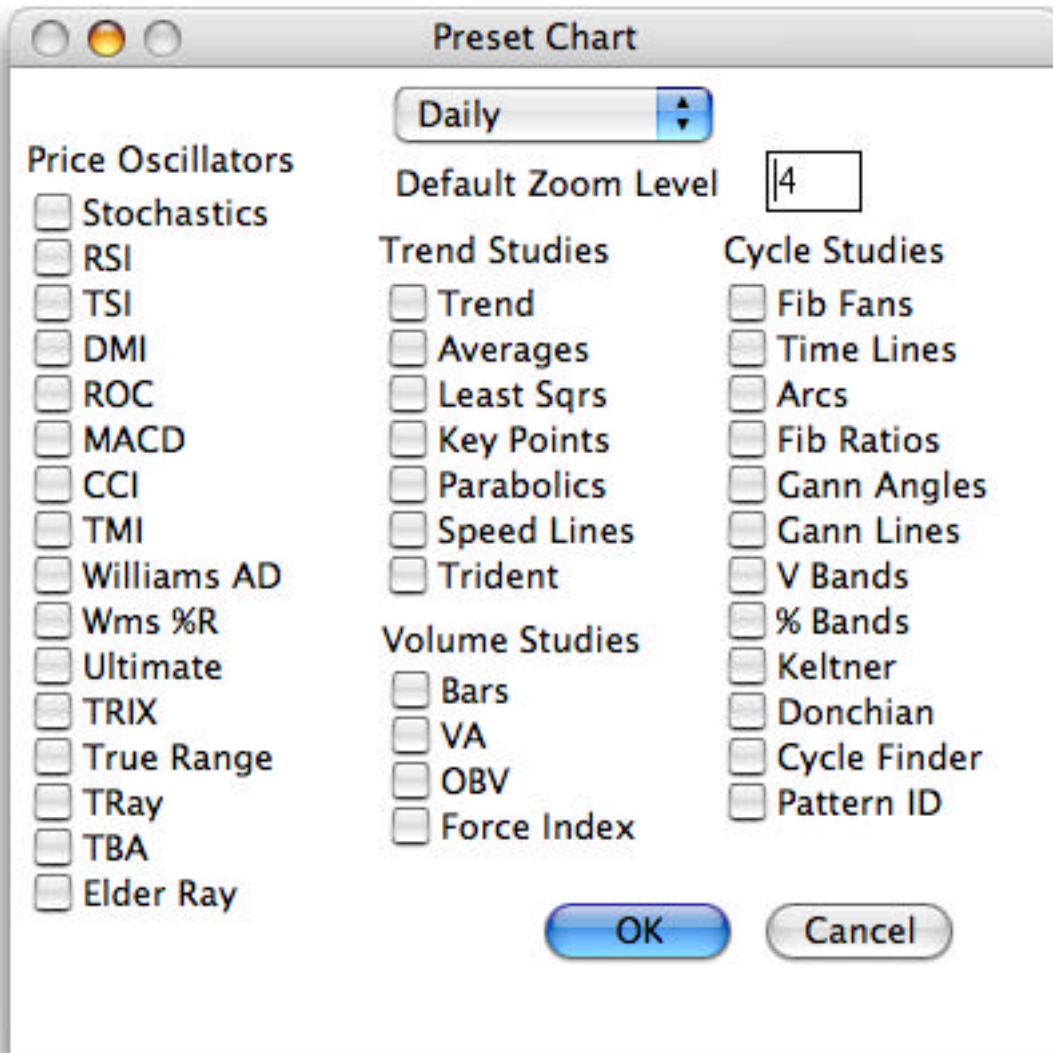
Stochastics	<input type="text" value="20"/>	<input type="text" value="3"/>	<input type="text" value="3"/>	Vol MA	<input type="text" value="39"/>	
RSI & MA	<input type="text" value="11"/>	<input type="text" value="0"/>		VA	<input type="text" value="10"/>	<input type="button" value="Next"/>
TSI & MA	<input type="text" value="7"/>	<input type="text" value="0"/>		OBV MA	<input type="text" value="0"/>	<input type="button" value="Done"/>
DMI	<input type="text" value="10"/>			Force	<input type="text" value="13"/>	<input type="button" value="Set list"/>
MACD	<input type="text" value="9"/>	<input type="text" value="12"/>	<input type="text" value="26"/>	Least Sqr	<input type="text" value="1.50"/>	<input type="button" value="Cancel"/>
ROC & MA	<input type="text" value="10"/>	<input type="text" value="0"/>		VBands	<input type="text" value="2.00"/>	
CCI & MA	<input type="text" value="13"/>	<input type="text" value="0"/>		%Bands	<input type="text" value="3.00"/>	
%R	<input type="text" value="13"/>			Trend	<input type="text" value="10"/>	<input type="text" value="20"/>
TRIX & MA	<input type="text" value="12"/>	<input type="text" value="9"/>			<input type="text" value="30"/>	
Keltner	<input type="text" value="10"/>			Moving Averages		
Donchian	<input type="text" value="20"/>			Based On:	<input type="button" value="Closings"/>	
ATR	<input type="text" value="14"/>			Ave 1	<input type="text" value="20"/>	<input type="button" value="Simple"/>
				Ave 2	<input type="text" value="5"/>	<input type="button" value="Exponential"/>
				Ave 3	<input type="text" value="0"/>	<input type="button" value="Weighted"/>

You may define three moving averages. To turn a moving average off, set the smoothing to zero. Choose **Simple**, **Exponential** or **Weighted** calculation methods independently for each moving average.

Press the Set List button to set the same smoothings for each security in the active List.

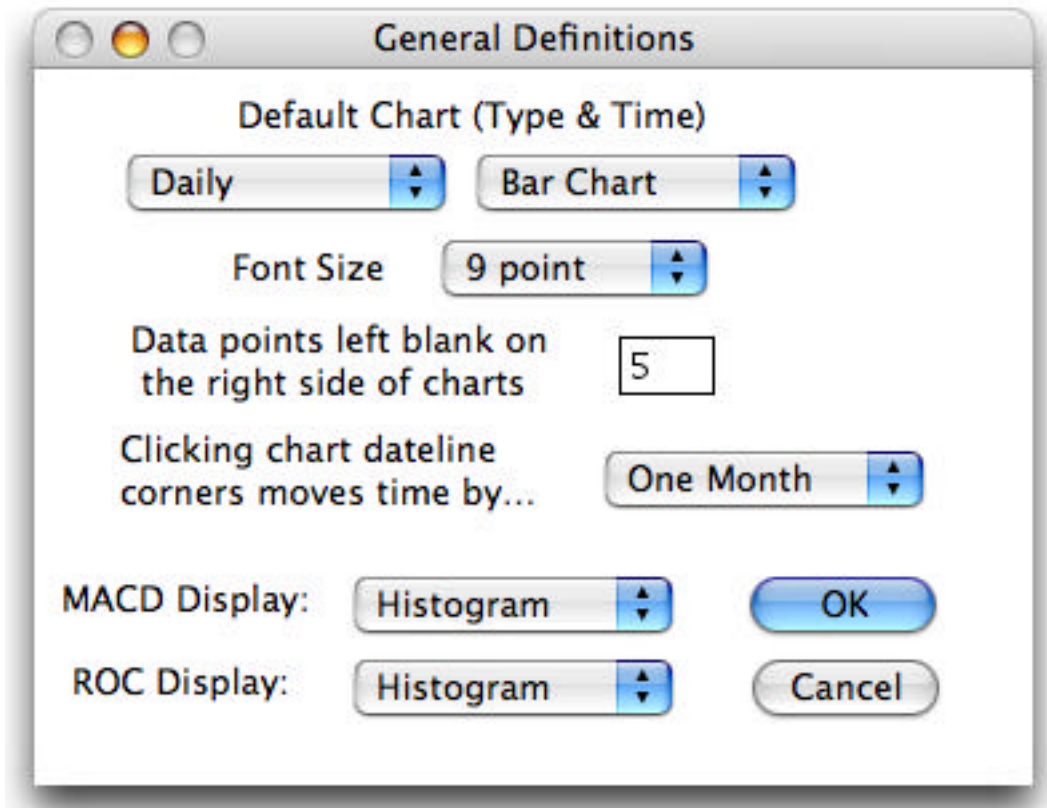
Preset

Default Studies (**Edit** menu) allows you to preset which, if any, technical tools will be displayed when you request a specific chart time frame. You can always add and subtract tools from a chart. This dialog affects how the initial chart will draw. The zoom level changes the amount of space between each bar or candle on the chart. Higher numbers put more space between bars.



Program Defaults

This dialog allows you to define global settings that affect all charts. Starting at the top... When you double click on a symbol in the Quote Monitor, the default chart type and time frame will be opened. The default type of chart (i.e., Bar, candle, line) is also used to determine the type of chart we will open when you make menu selections from the charts menu. The Font Size affects the legends of the chart.



When we initially draw a chart, we leave some blank space on the right side of the chart. This next field allows you to define how many periods (e.g., days) will be left blank.

The next popup allows you to define how much we will scroll a chart backwards or forwards when you click in the corners of the chart. This setting affects daily, weekly and monthly charts only. Intraday charts automatically remove a single day from the chart when you click on the right corner and restore the chart to its original view when you click on the left corner.

Two of the studies, MACD and Rate of Change can be set to default to histogram or line charts when they are initially drawn. Both indicators can be toggled to the alternate view after they are drawn.

MarketView Charts

Use this preference panel to define smoothings and display characteristics for the various MarketView charts. The McClellan seed is used to normalize the McClellan summation index to popular sources.

Set Up Market View

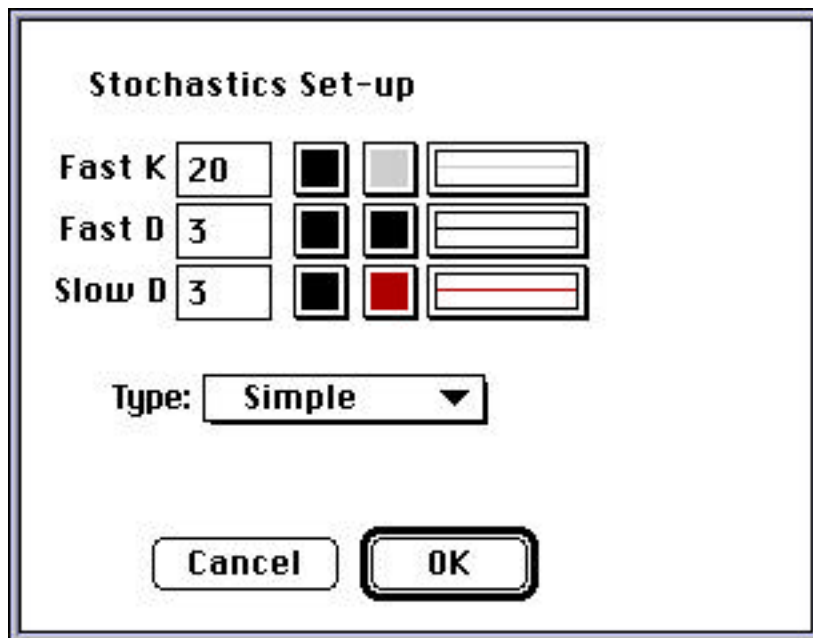
Advance\Decline	<input type="text" value="10"/>
Volume Analysis	<input type="text" value="10"/>
TRIN	<input type="text" value="10"/>
McClellan Seed	<input type="text" value="0"/>
Default Zoom	<input type="text" value="2"/>

OK
Cancel

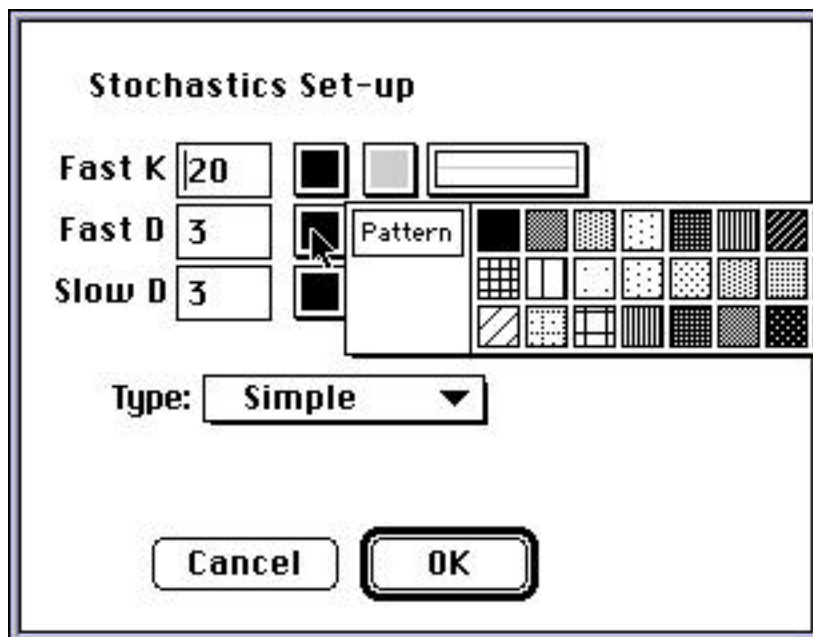
Double Click Interface

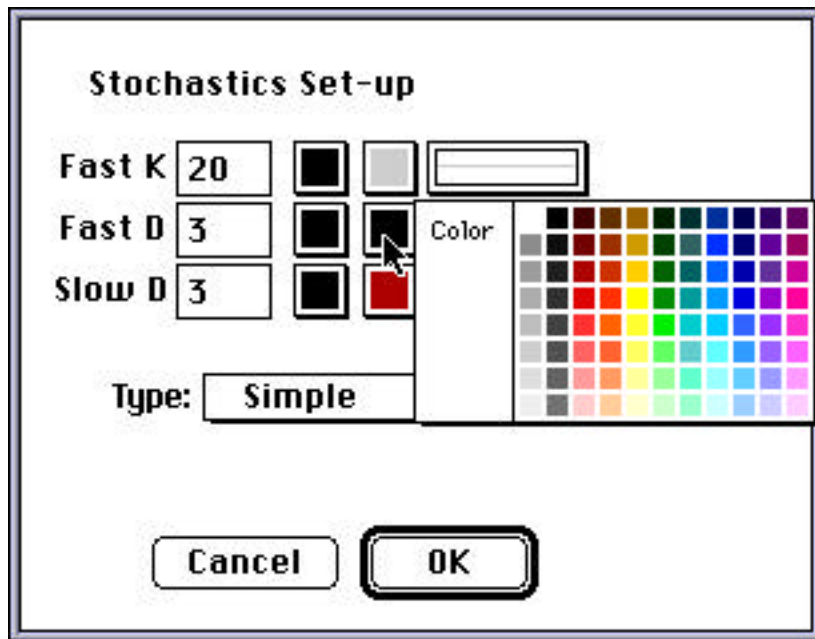
Our Double Click interface allows deep control over portions of the chart. **Double click on any study that displays under a chart (e.g., stochastics).**

The following dialog will appear...



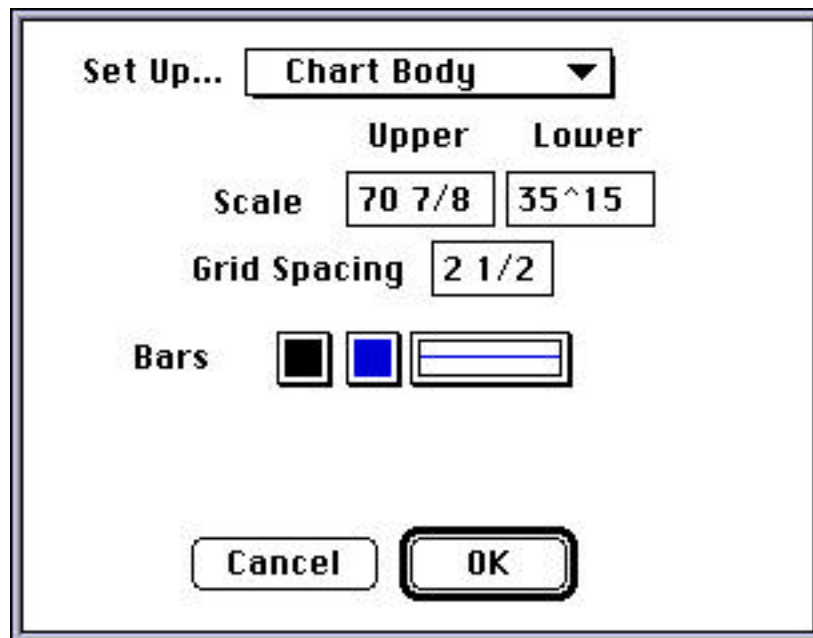
This dialog allows you to control the smoothing, patterns, color choices and line thickness of whatever oscillator you double clicked on. In the case of Stochastics, we can also alter the formulation of the indicator to be Simple or Exponential.



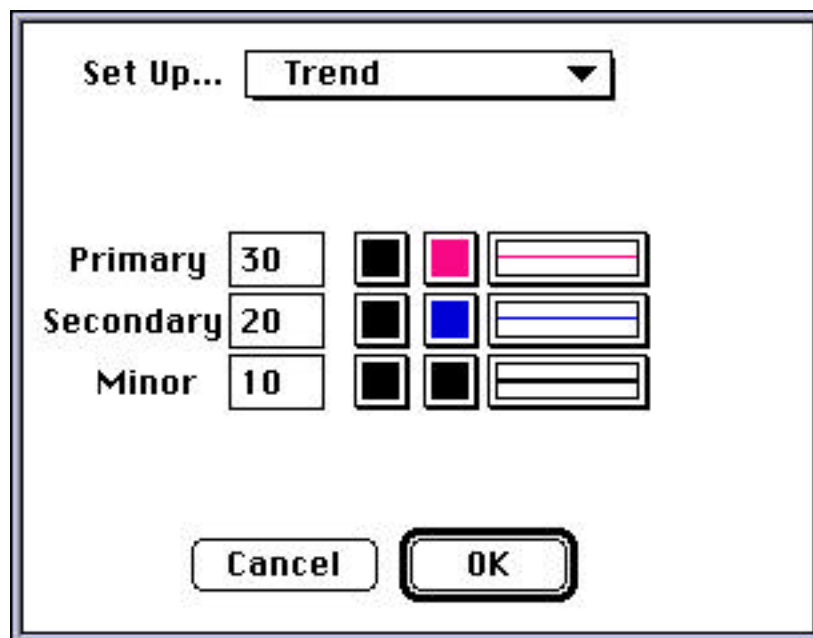
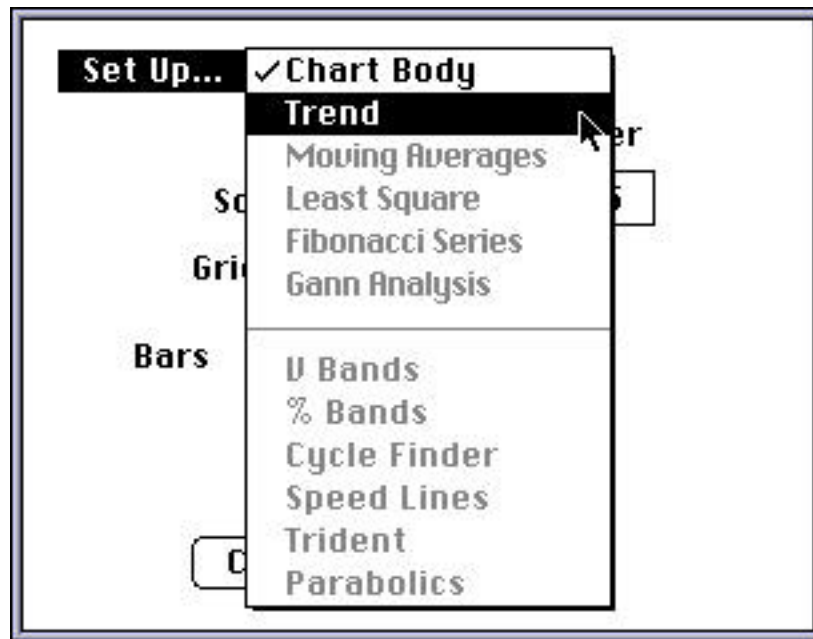


Double click on the main body of the chart.

The following dialog will appear...



This dialog allows you to control the upper and lower scale, grid spacing, patterns, color choices and line thickness of the main chart. The popup menu at the top of the dialog will allow similar changes to indicators overlaid on top of the chart. Menu items for indicators that are not currently on the chart are grayed.



Analysis tools that depend on the identification of a significant high and low (i.e., fibonacci, Gann, speedlines, and trident) offer the additional ability to change the date on which these two significant numbers were achieved.

Set Up... Fibonacci Series ▲▼

High Set 11/4/02 = 17.38

Low Set 1/24/03 = 13.56

Fans ☐ ☒ ☐

Time Lines ☐ ☐ ☐

Arcs ☐ ☒ ☐

Ratios ☐ ☒ ☐

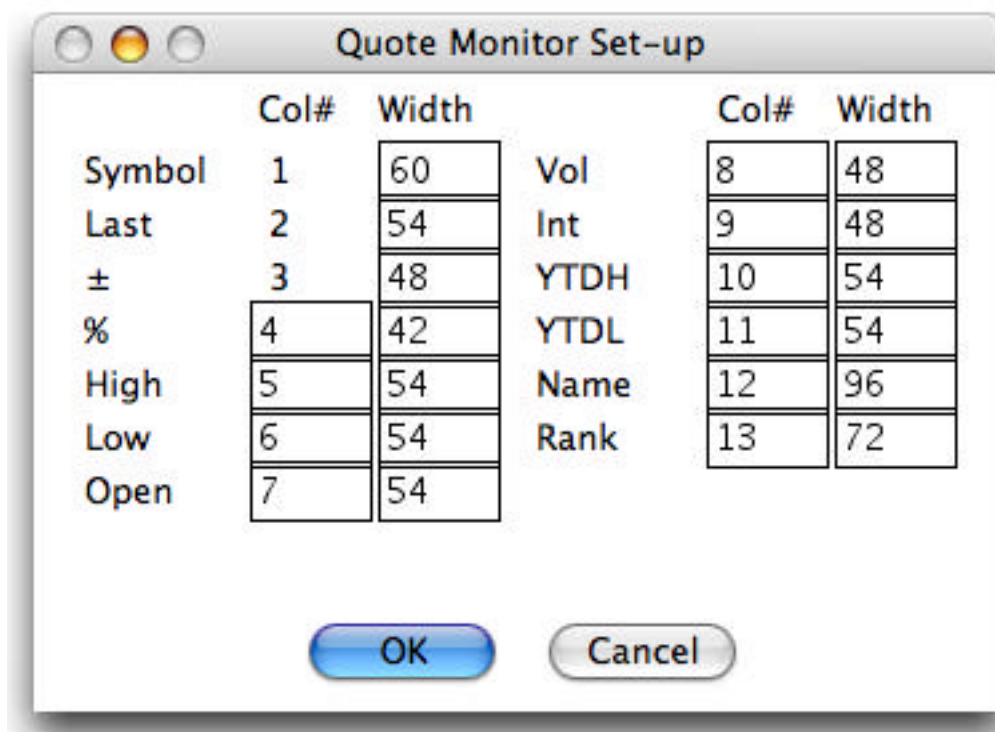
Cancel OK

Use the up and down arrow controls to change the dates. When you release the mouse, the significant high or low will be updated in the dialog. You can also type in any valid date

The List Display

Column Widths

Column Widths size and placement can be adjust by dragging the column headings and the lines that separate them. You can also open the following dialog by clicking on any of the headings while holding the shift and option keys down. This dialog allows you to define column width in pixels as well as column placement. Column width setups are stored independently for each List. To return to the default column widths... reopen the list while holding the option key down.



Sorting & Ranking

You can alter the sorted order of your List by selecting any of the 30 plus choices in the sort and rank sub menus (located under List Mgmt). For convenience, clicking on the column headings (e.g., Symbol or Last) of the List will sort the List by that criteria. The column labeled rank contains a popup menu of other ranking choices that do not have their own column heading. Most of these selections are self-explanatory. A detailed explanation of each sort and rank selection is provided in the reference section of this manual.

Individual Placement

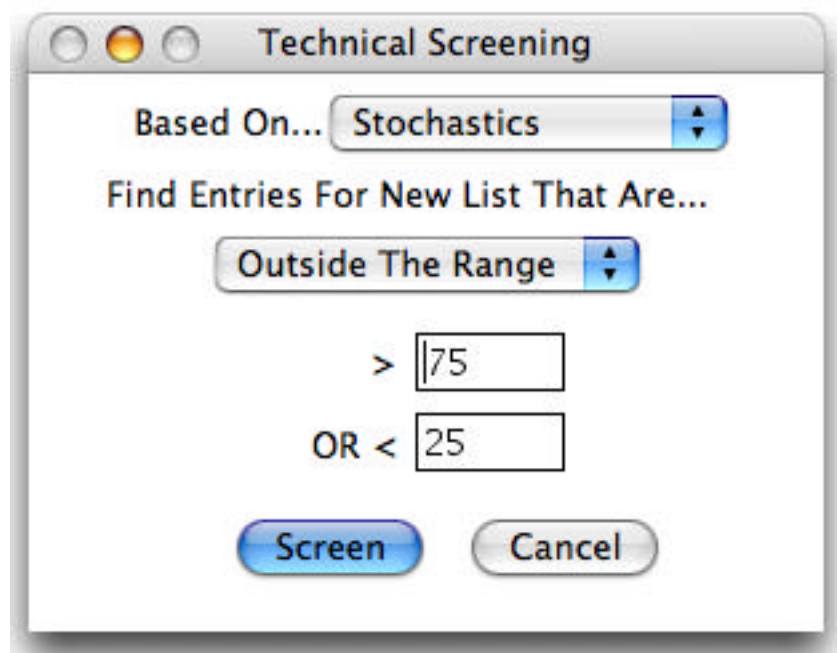
You can drag and drop individual securities to determine their exact placement within the List. Simply hold your mouse down on the symbol you want to move, then drag the gray rectangular outline on top of any other symbol in the List and release.

Technical Screening

Analyst can be instructed to create a new List, based on virtually all of the criteria in either the sort or rank menu. This feature depends very heavily on Master Analysis.

With your largest List open, select Screen from the List Mgmt menu. **Analyst** will request parameters by which to screen the existing List for candidates to be inserted in a new List. As you can see from the Pop Up menu selections, **Analyst** can screen for %K values outside a given range, within a given range, less than, greater than, equal to or not equal to a single parameter.

After the screening is complete, assuming that hits were found, a new, ranked, Untitled List will appear. Multiple iterations can be used to narrow a large List of securities down to a few ideal candidates for review.



Master Analysis

Another unique feature of **Personal Analyst** is Master Analysis reporting. MA calculates current statistical information that is available in our information screen and used for our ranking routines. In addition, a daily report can be viewed, stored to disk and printed. This report summarizes statistical information on each symbol in your List. The following is an example of the information contained in this report for each security analyzed.

Master Analysis updates the statistical numbers used for ranking.

Master Analysis updates the statistical ratings and statistical information such as 12 month highs and lows and average daily range. During the analysis, a countdown screen keeps you apprised of progress. Upon completion, a report is presented summarizing the results. The concept of this worksheet is to provide a snapshot of your portfolio and help you identify which securities you might want to view more closely.

Master Analysis Report

This section shows the values of the various studies used to compute our Statistical Ratings.

39	day	Average Range	13.75	Average	Volume	36129		
13	day	Stochastics		Rising	%K	5	%D	6
9	day	Wilder RSI		Falling	RSI	25.09		
5	day	Trendsetter TSI		Rising	TSI	44.02		
10	day	Rate of Change		Rising	ROC	89.51		
9	day	MACD			MACD	-7.12		
11	day	Channel Index		Rising	CCI	-81.07		
11	day	Wilder ADX		Rising	ADX	25	ADXR	18
5	day	Percent R		Falling	%R	78		
12	day	TRIX		Falling	TRIX	99.49	MA	99.65
10	day	True Range		Falling	TRFalling			
		TMI		Falling	TMI	38.25		
5	day	Moving Average		Falling	MA	587.00		
21	day	Moving Average		Falling	MA	642.75		
		Parabolics - Direction		Short	SAR	645.25		

Regression indicates the trend is up and we are oversold R = 107.47

Regression Ratings are based on the Least Square tool. When this tool is applied to a chart, three parallel lines are displayed. The Regression Rating was designed to allow you to "visualize" where prices are in relationship to these lines. The rating is a measurement of where the current day closed in relationship to the center line (median). As we move towards the lower line (oversold) the rating will approach 100. As we move towards the upper line (overbought) the rating will approach -100. As prices can exceed the outer line boundaries, the ratings can exceed ± 100 .

This is followed by our **Statistical Ratings**.

Statistical Rating = 33 Previous Rating = 33

Statistical Ratings are based on a combination of the studies reported below. Each indicator is checked for direction and momentum and assigned a numeric rating. The sum of the totals is reported along with the previous rating. The rating has a range of ± 100 . Extreme ratings, above 85 or below a negative 85 equate to potential trading opportunities. The final entry will contain what, if any, new candle patterns formed.

Candle Pattern Identified Bearish Counter

At the end of the report you will find a summary Top Ten Gainers, Losers and Volume Leaders (you must have at least 20 symbols in a List to see these).

Gai ners

Symbol	Cl ose	Change	%	Vol ume	% of Ave
AAPL	77`07	1 7/8	2. 4	40961	87. 2
F	50 3/4	`13	1. 6	21125	72. 8
DD	65 3/4	`15	1. 4	17640	26. 1
PG	103 1/8	1 1/4	1. 2	19035	85. 3
AXP	140	1 3/8	. 10	16328	78. 3
MRK	69`13	5/8	. 9	31390	67. 5
GM	64`13	1/2	. 7	21603	111. 7
IP	51`05	1/4	. 4	18126	107. 3
*OEX	712. 79	2. 98	. 4	0	0
AA	65`13	`03	. 2	9824	66. 2

Losers

Symbol	Cl ose	Change	%	Vol ume	% of Ave
HL	2`05	- 1/8	- 5. 1	1343	56. 8
CAT	56 3/4	- 2	- 3. 4	13861	111. 4
DIS	27 7/8	- 7/8	- 3. 0	44754	71. 0
NEM	20 5/8	- 3/8	- 1. 7	7662	55. 3
MO	38	- `11	- 1. 7	47537	104. 4
CHV	95 7/8	- 1`11	- 1. 7	9365	80. 8
T	45 7/8	- 5/8	- 1. 3	92635	85. 8
EK	73`01	- 3/4	- 1. 0	15019	160. 3
XON	80`07	- `13	- 1. 0	29451	80. 4
MMM	97`11	- `13	- . 8	6178	63. 1
BS	7`11	- `01	- . 8	7374	69. 9

Vol ume Leaders

Symbol	Cl ose	Change	%	Vol ume	% of Ave
T	45 7/8	- 5/8	- 1. 3	92635	85. 8
IBM	135	1/4	. 1	50818	80. 4
MO	38	- `11	- 1. 7	47537	104. 4
DIS	27 7/8	- 7/8	- 3. 0	44754	71. 0
AAPL	77`07	1 7/8	2. 4	40961	87. 2
GE	119`03	- `09	- . 4	40161	96. 3
MOT	98 3/4	`01	. 0	38041	136. 5
KO	55 1/8	1/8	. 2	32575	90. 1
MRK	69`13	5/8	. 9	31390	67. 5
XON	80`07	- `13	- 1. 0	29451	80. 4

The report also includes summaries of...

Securities with high or low statistical ratings.

Securities achieving new 12 month highs or lows.

Securities with candle patterns.

After reviewing, close this window, **Analyst** will ask permission to save a copy of this report. This is only necessary if you will want to review this document in the future. Documents are

saved as Text and can be viewed using a text editor, word processor or through our **Text Viewer** (File menu).

Statistics

This table contains statistical information about the selected security.

Statistical Analysis

From 07/07/97

Volatility	55.38
Average Range	13.75
Average Volume	36129
Regression Rating	107
Stat Rating	33
Previous	33
Stochastics FastK(13)	= 7
SlowK(3)	= 5
DMI(11)	ADX = 25
ADXR	= 18
RSI(9)	= 25.09
TSI(5)	= 44.02
ROC(10)	= 89.51
CCI(11)	= -81.07
TRIX(12)	= 99.49
TRIX MA(9)	= 99.65
WR(5)	= 78
MA(5)	= 642.75
MA(21)	= 587.00
MACD(9, 12, 26)	Hist = -7.12
MACD	= -25
Parabolics SAR	= 645.25
Direction	= Sh

12 Month Statistics
Calculator... APPLE

02/19/1999
01/26/2000
+45

Dates Retrace
Stats Count
Clear Cancel

From 02/19/1999 to 01/26/2000
Calendar Days = 341
Trading Days = 244
Projected Date 03/11/2000 in calendar days
Projected Date 03/29/2000 in trading days

Calculator

Enter two dates and press the Dates button.

Our special calculator will determine the number of trading and calendar days

between the two dates. Add a third input (the +45 in our example) and **Analyst** will project future dates as well.

Enter two prices and press Retrace and our calculator will compute Fibonacci retracement levels. Enter a single price in the first field and a percentage in the second field and we compute percentage moves up and down from your price.

Enter a price in the first field and a \pm number in the second field and press Count. We'll check how many times your price was within the high and low range.

The Stats button will calculate standard deviation, volatility and price range between any two valid dates. With no input, we use the date range of the chart.

Trader's Journal

Every successful trader must learn from experience, good and bad. Our Trader's Journal feature allows you to keep dated notes, stored separately for each security. The perfect spot to write your thoughts, emotions, etc. Font, size and style menus (see Edit menu) are active for this window.

Journal Entries for APPLE(AAPL)	
04-12-1993 rsi signals buy	<div>↑</div>
	<div>↓</div>
	<div>↻</div>

Technical Analysis and Charting

A Primer

Limited in the Demo

The manual that ships with the software includes a 50 page primer on technical analysis. The following pages contain a sampling of material from that guide...

Introduction to Technical Analysis

What is technical analysis and why is it important? All investors should do some form of due diligence before making any investment. There are two basic forms of investment analysis; fundamental and technical. Fundamental analysis involves evaluating an investment on the merits of its balance sheet, products, supply and demand, and the economic climate. Technical analysis assumes that the market has discounted the fundamental information (the market knows the information before it becomes public) and seeks to interpret the market reaction to this information by analyzing price movements for a given investment.

Prices move in trends, and these trends tend to continue in the same direction for extended periods of time. The technician, through the use of charts and other indicators, attempts to identify these trends. The charts do not cause the market to go up or down. They simply reflect the market's perception of the fundamentals. In essence, it is a matter of cause and effect. Fundamental analysis seeks to interpret cause, while technical analysis interprets effect. The fact that XYZ's earnings continue to grow is the fundamental cause for higher stock prices while the actual price range in which XYZ finds support and resistance is the effect.

Support and resistance? Every investor has a price at which he becomes concerned about continued ownership of his stock and decides to sell. When enough investors have a similar price in mind, there are more sellers than buyers in the market and the price of the stock will fall. This price is referred to as resistance. Similarly, at some price, investors will view a stock as being undervalued and decide to buy. The price at which more investors want to buy than sell is considered support. As investor psychology changes over time, so do the areas of support and resistance. The key to market timing is identifying support and resistance areas and attempting to buy at support and sell at resistance. This is the heart and soul of technical analysis.

Charts are the basis for technical analysis. They offer a visual aid to interpreting trend and market action. The old axiom "a picture is worth a thousand words" was never more appropriate. Even the novice can do basic chart interpretation. We can all look at a chart and say "I wish I had bought this stock then" or "Wouldn't it have been great to take profits then." Hindsight is easy and you can't always be right, but with the right tools and a little work, you can decrease your risk and increase your profits.

The three most popular forms of charts are the bar chart, candlestick chart, and the line chart. **Analyst** can create all of these in daily, weekly and monthly time frames. For the experienced trader or investor, **Analyst** saves you hours with access to some of the most powerful analysis tools. It can also help prevent you from making the emotional mistakes we are all susceptible to.

Learning technical analysis, with our software, is easy if you have invested or traded before. After reading through this section of the manual, download data on securities you have traded in the past. Examine the chart around the time you entered the trade. Did you enter the trade at the most opportune time? Would the chart, by itself, have altered your strategy?

Next, let's apply one of the analysis studies. Pick an indicator (e.g., Stochastics). Can you spot anything here that would have helped you enter the trade at a better point? Check your other charts to see if your observations hold. The next step is to discover how studies work in conjunction with one another. This is called "looking for confirmation". No single tool will be 100% accurate in predicting direction or timing. However, two tools, each 50% accurate, might produce 75% accuracy when they both point in the same direction at the same time. Take your time, Rome wasn't built in a day. Each tool that you master will enhance your bottom line.

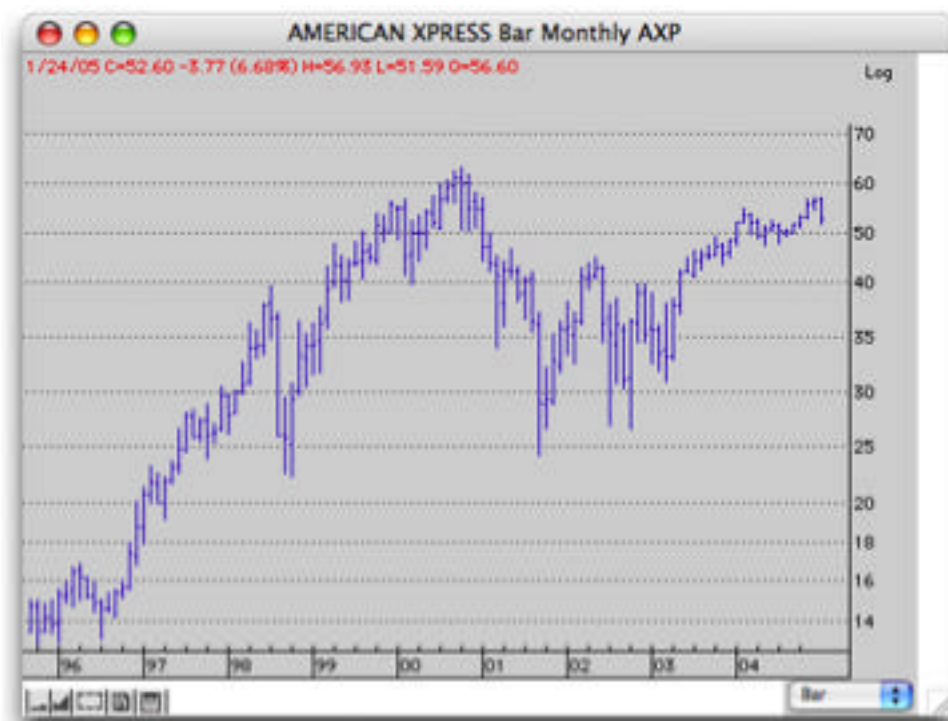
We strongly recommend paper trading if you are new to trading. Trading is the only business that can truly be tracked on paper. If you were to open a video store on paper, you would not get a true picture of potential profitability because factors such as the quality of your employees, location, traffic, theft, bad debts, etc., can only be estimated. Investments can be tracked on paper and all variables are known. Take advantage of this and make your mistakes on paper, not with real money. Many of the techniques involved in technical analysis can only be learned through experience and **Analyst** offers you an excellent way to gain this experience. In time you will make fewer and fewer mistakes and you'll be ready to put that experience to work. Our Trader's Journal feature (Special menu) was designed to help the trader keep track of his thoughts and emotions. We think you will find it to be an excellent aid in paper trading.

Semi-Log Scaling

Many analysts believe long term trends lose validity on arithmetic (standard) charts and, therefore prefer semi-log scaling for weekly and/or monthly charts. These charts do offer a unique perspective relating to long term trends but are not useful on all securities in all time frames. It helps to understand how semi-log charts are constructed...

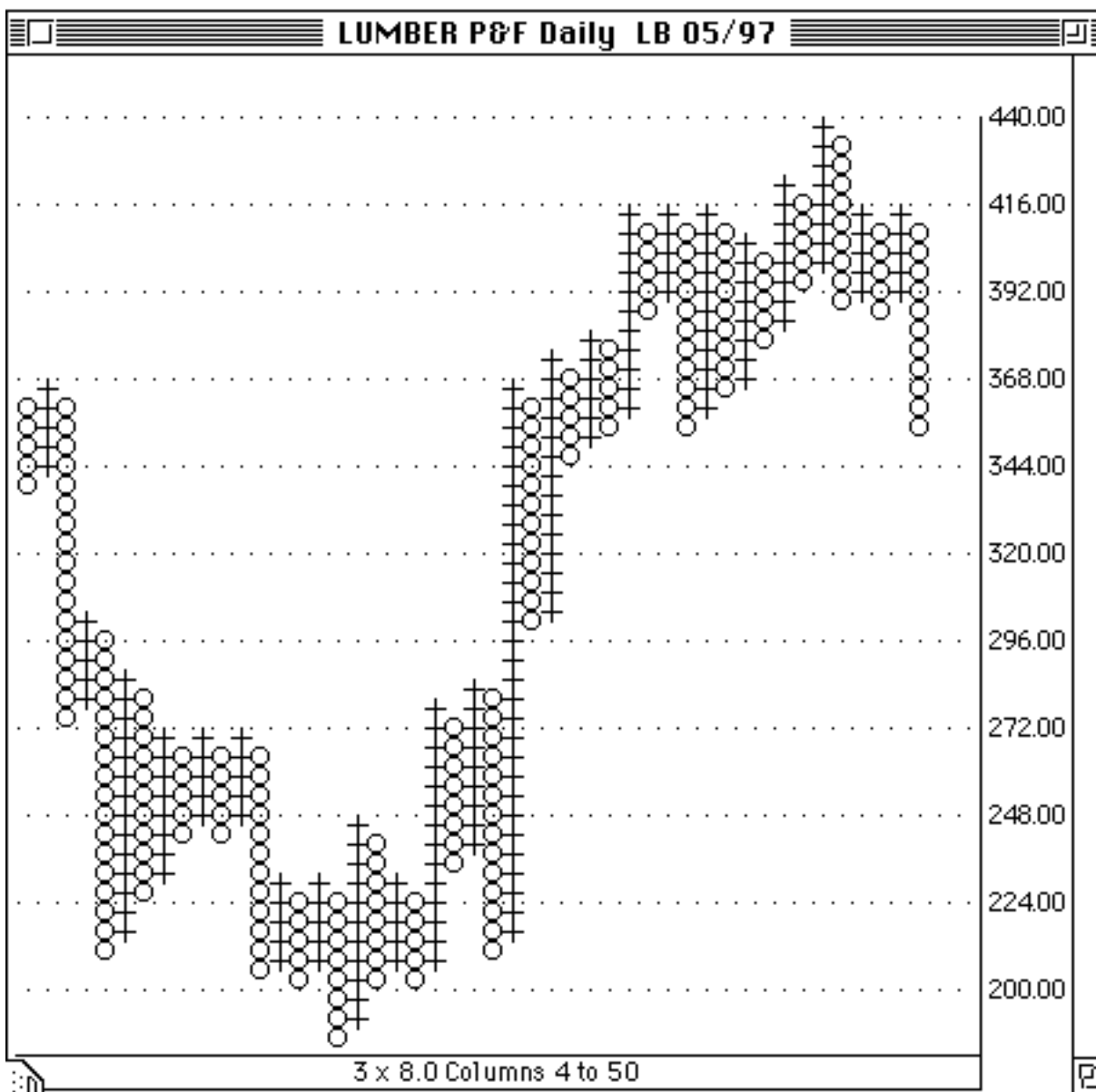
On an arithmetic chart, each inch equates to the same number of points. Conversely, on a semi-log chart, the scaling halves as price doubles. In the example below, the region occupied by prices ranging between 10 and 20 is the same height as the price range between 20 and 40. Prices between 40 and 80 would then occupy the same amount of space. If all prices fall within one region (e.g., between 40 and 80), then the scaling of the chart is essentially arithmetic.

To toggle between semi-log and arithmetic, hold the control key down and click in the Y axis scale.



Point & Figure

Point & Figure charting dates back to the turn of the century. It acts like a filter, showing only "significant" price movements, allowing the analyst to see patterns more readily. The basis for plotting revolves around selecting a box size (the value of a + or o). This is one of the most critical decisions for the analyst. A box that is too small will make the chart too sensitive while one that is too large has the opposite effect. **Personal Analyst** decides the box size for you based on current price, recent volatility and accepted standards providing the optimum sensitivity for the chart. To create a Point & Figure chart... select **Point & Figure** with the desired time-frame, from the **Charts** Menu.



Plotting is based on well defined rules. Horizontal movement reflects trend changes rather than time. In other words, each column can encompass a different amount of days, weeks or even months.

Preference is given to price movements that continue in the direction of the current column. If the last column of the chart is a down column (o's) then the low of the day is tested first. Price movements are considered "significant" if they exceed previous movements in the trend direction by one box.

The price must reverse direction by an amount equal to three boxes for it to be considered "significant". Traditional charts use "x" to mark up trends and "o" to mark down trends. **Personal Analyst** uses a "+" instead of an "x" but otherwise follows the traditional format.

Let's look at our example (the Lumber chart on the previous page)... the lowest point achieved in the last column (o's) is 352. The chart is a 3 x 8. This means each o or + represents 8.0 with a 24 point (3 x 8) move necessary to reverse column direction. When a new day of data is added to this chart, **Analyst** will test the low of the day first (because the last column is a down column). If the low of the day exceeds 352 by at least one box (i.e. 344) then **Analyst** would add one or more o's. If this test fails (e.g., the low is 345) then **Analyst** will test the high of the day to see if it matches the criteria necessary for a new column. In this case, the high must exceed 376.

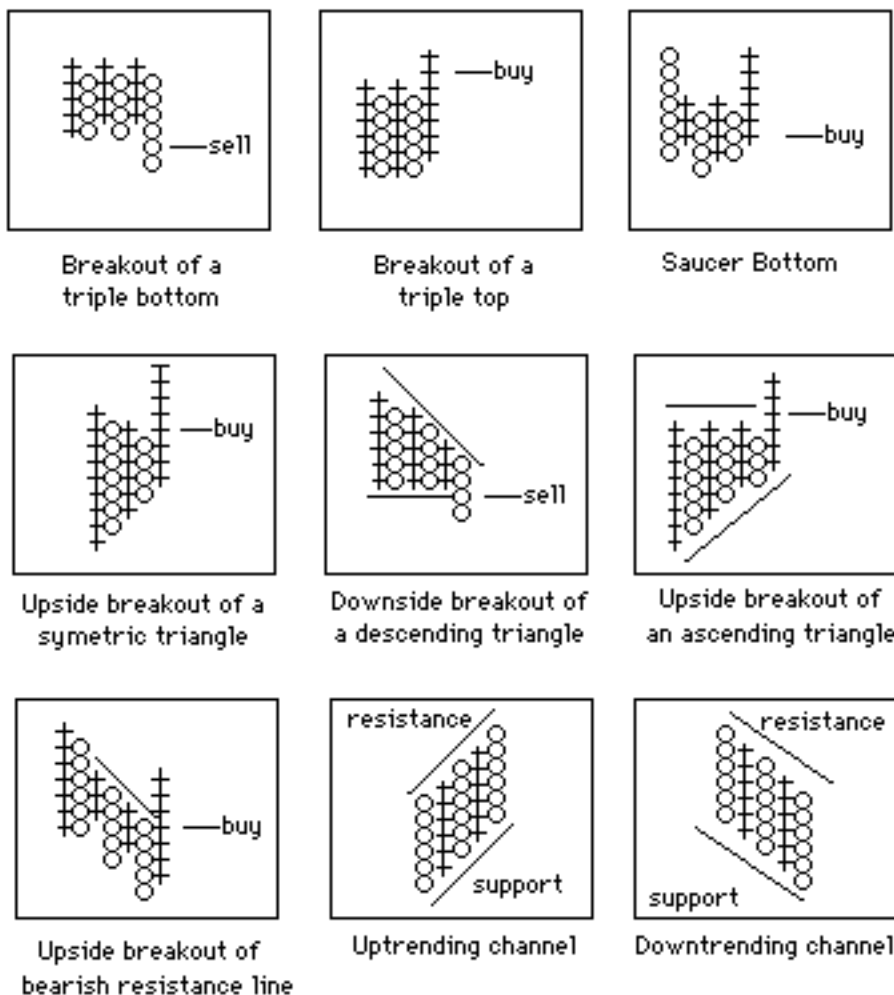
P&F are the easiest charts to draw on paper. This is one reason why they have remained a popular choice for analysis for over 60 years. On paper, you keep the grid size constant and associate a different value for each box. On a computer, windows are adjustable in size and a circle can not be made infinitely small. This can present a problem.

The solution is to keep the box size constant and only display that part of the chart that will fit in the window. **Analyst** decides which part of the chart is key based on recent price movement. Click in the scale area to toggle the display to the other part of the chart.

Clicking in the left corner of the chart will "scroll" the chart to the left if more columns exist than can be displayed in the current window. Clicking in the right corner will "scroll" the chart back.

Point & Figure Analysis

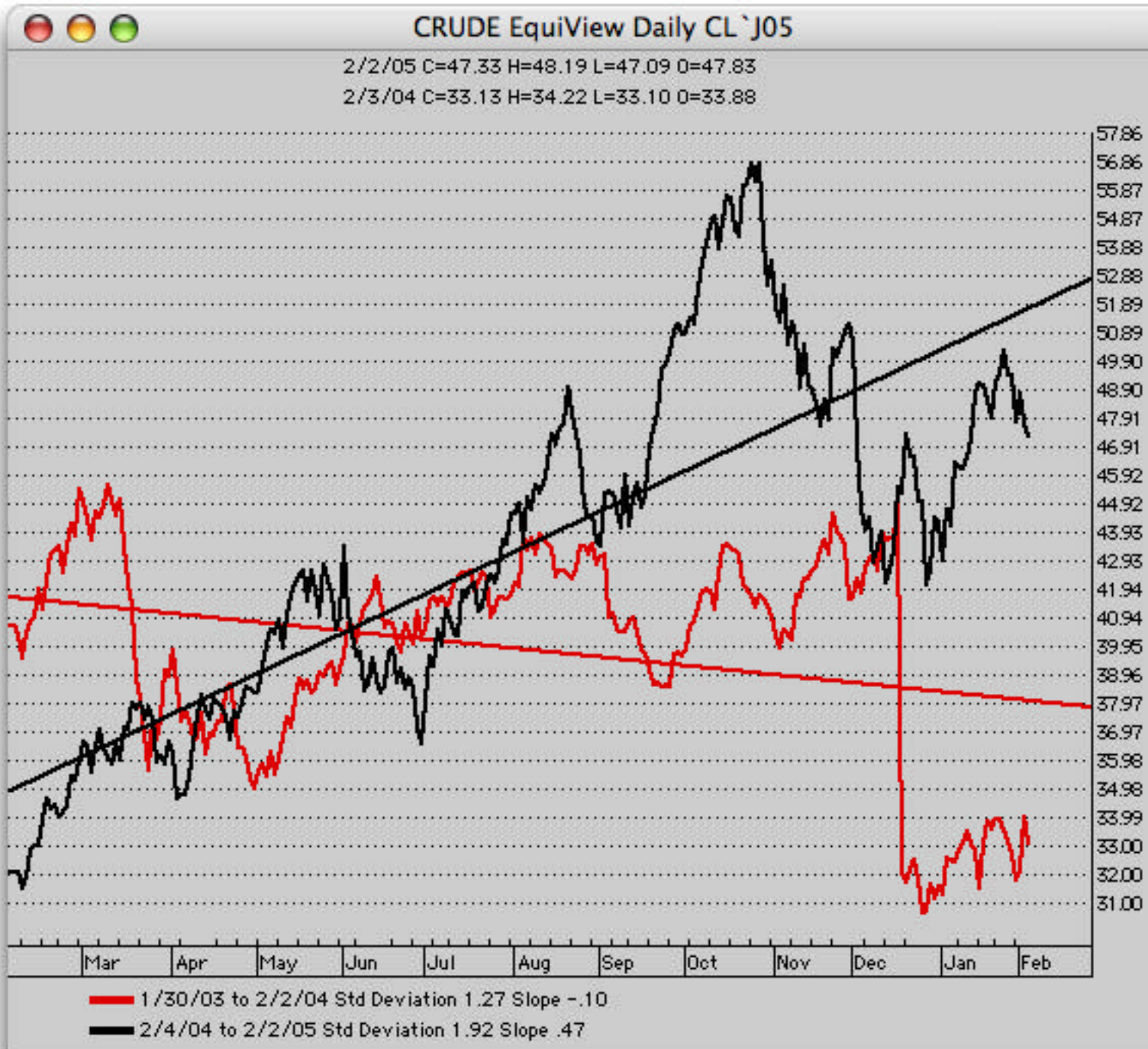
Many of the same techniques for interpreting bar charts apply to point & figure. Trend lines are more easily identified as are many of the chart patterns. The most common point and figure formations are shown in following example with corresponding buy and sell signals identified.



Recognizing patterns, entries and exits, and potential price objectives, are a function of experience. Don't give up, in time you will realize the power and accuracy of this time-tested tool.

EquiView Charts

Trendsetter has created two unique chart types for comparison work, our **Compare** charts and **EquiView**. **EquiView** displays 2 years of closing data on a single symbol. **EquiView** is perfect for checking seasonal tendencies. Each year is accompanied by a linear regression line (trend). The legend at the base of the chart indicates the date range, standard deviation (volatility) and the slope (how strong was the trend) for each year.



General Market Indicators

The General Market Security Type is for Advance/Decline information storage. Automatic down loading is supported by Dial Data. The symbol for NYSE information is **NY...** for the AMEX it is **AM** and for the NASDAQ it is **OT**. The program will convert these symbols to the actual symbols used by Dial Data.

If you are entering or editing data through the keyboard... the declining volume is stored in the Volume field, the number of advancing issues is stored in the Open field, the number of declining issues is stored in the High field and the advancing volume is stored in the Close field. The low field is unused in the file structure. From these 4 numbers **Analyst** will calculate and display the following breadth of market indicators.

Advance Decline - an adjustable (default is 10 days) simple moving average of advances minus declines.

Up versus Down volume accumulation (adjustable smoothing).

Traders' Index (TRIN) which is calculated as $(Adv/Decl) / (Adv\ Vol/Decl\ Vol)$ and is de-trended using an adjustable (default is 10 days) simple moving average prior to presentation.

The McClellan Oscillator and Summation Index are also based on the daily difference between advances and declines. This Oscillator is the difference of a weighted 20 day moving average (10% value) and a weighted 40 day moving average (5% value). McClellan It is then presented as a histogram and is effective in interpreting short term market moves. The Summation Index is a cumulative total of the Oscillator readings and is more effective in predicting long term market movement. It is presented as a line, overlaid on the Oscillator.

The McClellan Oscillator offers many types of structures for interpretation, but there are two main ones. First, when the Oscillator is positive, it generally portrays money coming into the market; conversely, when it is negative, it reflects money leaving the market. Second, when the Oscillator reaches extreme readings, it can reflect an overbought or oversold condition.

Paraphrasing Tom McClellan on interpretation...

The Oscillator reaches an extreme value (above or below zero) in advance of market turns, then passes through zero at or very soon after important market turning points. The height of the oscillator correlates with market volatility. During the early phases of a bull or bear market, readings in excess of ± 150 have occurred while in more mature bulls and bears, a high reading is in the 60-80 range.

While these two characteristics are very important, they merely scratch the surface of what interpreting the Oscillator can reveal about the stock market. Many more important structures are outlined in the book *Patterns For Profit* by Sherman and Marian McClellan, available from McClellan Financial Publications.

If you add up all the daily values of the McClellan Oscillator, you will have an indicator known as the McClellan Summation Index. It is the basis for intermediate and long term interpretation of the stock market's direction and power. When properly calculated and calibrated, it is neutral at the +1000 level. It generally moves between 0 and +2000. When outside these levels, the Summation Index indicates that an unusual condition is taking place in

the market. As with the Oscillator, the Summation Index offers many different pieces of information to interpret the market's action.

Among the most significant indications given by the Summation Index are the identification of the end of a bear market and the confirmation of a new bull market. Bear markets typically end with the Summation Index below -1200. A strong rise from such a level can signal initiation of a new bull market. This is confirmed when the Summation Index rises above +2000.

Limited in the Demo

The full manual, included with the software, contains a primer on the markets and how the tools of **Personal Analyst** would be applied to those specific markets. The Option Calculator and the ability to build spreads are two of those tools.

Reference Section

File Menu

New List...

Analyst works with groups of data files we call Lists. Lists can range in size from one to 1500 symbols. All securities added to a List must be in the same folder as the List. Care should be taken to create the List in the desired data folder. Selecting **New List** clears the current List and requests the name of the new List to be created. After naming the List and selecting the folder where it is to be created, press **Save**. The program will present the List Modification window to facilitate the addition of existing security files to the new List. After adding existing securities, press **Save**.

Open List...

Loads an existing list.

Recent

As you open or create Lists, they are added to the Recent menu allowing you to switch Lists without reselecting the location. The menu will remember the last 20 Lists opened.

Modify List...

Select the List to be Modified and press **Open**. Double Click on items to be added or deleted from the List. Press **Use** to open the modified List without saving the changes or **Save** to store the modified List to disk before opening.

Close Window

Closes the active window.

Close All... (*shift-option* Close Window)

Hold the shift and option keys down, then pull down the file menu and select **Close All** to close all open chart windows.

Close Related... (*option* Close Window)

Selecting Close Window while holding the option key closes all open windows whose symbol matches the active window.

Save

Will force **Analyst** to save changes to your List immediately instead of waiting until you Quit or open another List. This is recommended after adding, deleting or renaming data files.

Save As...

Save the current List with the name you specify. You can also use **Save as...** to change the name of a List. If you save the list into a different folder, all associated data files will be copied into this folder. In essence this will create a back-up of your data. If the chosen drive does not contain enough room, an error will occur.

Save As... Graph in Front

When a Graph or Time & Sale Display is the front window, **Save As** will export the data as a tab delimited text file with the name and location you specify.

Delete

Use this function to permanently delete files, as if you had dragged them to the Trash and emptied it. To minimize the possibility of "trashing" the wrong file, **Analyst** will give you an extra opportunity to change your mind by displaying a special Alert. The selected file will simultaneously be removed from the List.

Recover

Reconstruct data files omitting data that is out of range. This can be used to remove extraneous data from the beginning, end or middle of a file. You supply a valid date range. Any data that is outside this range, or duplicates within this range, are removed during the rebuilding process. Recover also checks highs and lows for validity as it is rebuilding. Recover creates a copy of the selected file before reconstruction.

Recover All (*shift-option* Recover)

Hold the shift and option keys down, then pull down the file menu and select **Recover All**. When you are off line, the program will rebuild all file in the current List using the first and last dates in each file to determine the valid date range. Copies of the original files are not made.

Print...

Prints the active window. Charts are printed using the full page regardless of the size of window on the screen.

Update Histories

Requests end-of-day data from the server bringing all histories up-to-date. If you have a Dial Data account, This menu selection will launch a helper application to retrieve longer term histories

Export

Will export historical data from a single file or the entire list into a tab or comma delimited text file with the name and location you specify.

Export One

Will export today's data from the active list into a text file named export.

Text Viewer...

Will present any text file for display (max. size 32K).

Edit

Copy

Copy the window contents to the clipboard when the active window is a chart.

Clear

When the active window is a chart, this menu item will remove all studies from the chart. When modified with the **shift** key, this menu item will clear all manually drawn trend lines from the chart. When modified with the **control** key, this menu item will clear all manually drawn drop lines from the chart. When modified with the **shift** and **option** keys, this menu item will clear all manually drawn drop lines, trend lines and studies from the chart.

Cut, Paste, Select All

These menu items are for use with TextViewer, Trader's Journal and Help windows only.

Preferences

The following dialogs allow you to define personal preferences. Menu options that appear above the separator line store their preferences in the programs preference folder. These preferences apply globally to all securities. Menu options that appear after the separator store their preferences in the individual security files and apply to those securities only. For these preference panels you should select the security within your List before making the menu selection.

Colors

Analyst supports your choice of 132 colors used for graphic displays.

Default Studies

Preset which technical studies you want displayed when a chart initially draws. This dialog allows you to define different default charts for each time-frame.

Program Defaults

Define personal chart display preferences that affect all charts such as the type of chart (bar, candle or line), and the default time-frame when you double click on a symbol in your List.

MarketView

Define smoothings for market view charts.

Study Smoothings

Set personal preferences for moving averages, MACD and other technical studies. This dialog allows you to define different smoothings for each time-frame.

Chart Appearance

Set grid spacing, y-axis scaling, and default zoom level.

Charts

Charts analyze an instrument's performance over time and can display their information in either line, bar or candlestick form. The time frame of a chart refers to the amount of time each bar or candle represents. A daily chart in **Analyst** can cover 2 or 3 years of market activity where each point in the chart represents one day.

Daily, weekly and monthly charts are built from end-of-day data stored within each securities data file.

Suite

Our Chart Suite feature is the same as a layout except it does not pertain to any symbol. To use this feature, simply select a symbol then select **Suite**. If you select **Suite** when a graph is the front window, the program will ask if you want to re-define the Suite definition based on the current set of open graphs. You can re-define the chart suite definition as many times as you want.

Analysis

All studies are drawn to the active graph, therefore, items in this menu are gray unless the active window contains a graph. Re-selecting the same menu item acts as an Undo command.

See the Technical Tools chapter of the Technical Analysis and Charting section for a detailed discussion of the use and interpretation of each analysis study.

Windows

Tile

Re-sizes and moves graphic windows so they are equal in size and use as much screen space as possible. For example, 2 graphic displays will each take half the screen, 4 graphics displays will each use 1/4 of the screen. Odd numbers are treated the same as the next even number higher (e.g., 3, 4 are the same).

Stack

Re-sizes and moves graphic windows to use as much screen area as possible while allowing a small overlap both horizontally and vertically. This facilitates clicking to change active windows. Actual size will depend on the number of windows open at any given time.

Layouts

A layout is a combination of window size, placement and contents. To save a layout, simply set your graphic windows up the way you want them, then select **Save Layout** from the **Windows** menu. Name the layout in the dialog provided and press **Save**. To recall the layout, simply select **Use Layout** from the **Windows** menu and select the named layout.

Recent

remember the last 16 layouts used to make switching between layouts faster and simpler.

Size, Style and Font Menus

These menus are currently used for text based windows only. These include the QuoteMonitor, Headlines, News, Trader's Journal and TextViewer.

Quote Monitor (Window 0)

Bring the Quote Monitor window to the front.

Graph 1-9

Bring selected window to the front (making it active).

Sort & Rank- reorder the List by the criteria chosen.

Sort Menu	Description	Rank Column
Symbol	Alphabetical by Symbol	No Affect
Name	Alphabetical by security name	No Affect
Type	Sort by type of security (e.g., stock, index, future)	shows type
Sector	Sort based on user definable sectors.	shows sector name
Updated	Sort the List by the last date updated.	shows date
Candle Pattern	Patterns formed by the last complete daily candle.	
Last Saved	reverts to the order last saved	No Affect

Rank Menu	Description	Rank Column
Net Change	Rank by the net change from the previous day.	No Affect
% Change	Rank by the percentage net change from the prev. day	Shows Percentage
YTDH	Rank by current price in relationship to 52 week high	Shows Percentage
YTDL	Rank by current price in relationship to 52 week low	Shows Percentage
YTD Range	Rank based on 52 week range	Shows Range
Most Active	Rank based on current volume	No Affect
Open Int.	Rank based on current open interest	No Affect
% Change Vol	Rank based on percentage increase in volume.	Shows Percentage
Vol/Ave Vol	Rank based on current volume divided by ave. volume	
EPS	Rank based on earnings per share.	Shows EPS
P/E Ratio	Rank based on price divided by earnings per share.	Shows P/E
Dividend	Rank based on dividends.	Shows Dividend
Studies	Rank based on RSI, Stochastics, TSI, ROC, CCI, ADX	
Volatility	Rank based on standard deviation divided by ave. price	
Stat Rating	Rank based on six studies combined mathematically.	
Regression Rating	Rank based on our rating based on linear regression	

Find...

Search your List by file name or symbol. Selected file will be moved to the top of the Quote Monitor without altering the order. The Find dialog will search open charts if a chart is the front window when activated.

Add Security

Add any type of security to the active list.

Add Option Chain (*option* Add Security)

Add any type of security to the active list.

Add Futures' Series (shift - *option* Add Security)

Add any type of security to the active list.

Modify Security

Reset symbol, security type, tick and display format for securities in your active List.

Remove Security

Remove any security, without deleting the data, from the active List.

Remove Multiple (*control* Remove Security) will remove user specified number of securities beginning with the selected security.

Edit Data

Selecting **Edit Data** allows you to edit the last end-of-day record for any file in your List.

Delete Data

Delete the last end-of-day record from the selected file only.

Block Delete

Deletes n number of records from the end of each file in the List or from the selected security.

Next

This menu selection changes the current graph to the next symbol in your list.

Previous

This menu selection changes the current graph to the previous symbol in your list.

AutoRun...

Will display a new series of charts on a user selectable timer. The timer can be overridden with the **Next** and **Previous** menu selections or canceled by re-selecting AutoRun or pressing .. Analysis menu selections do not interrupt the AutoRun sequence. This means you can add or delete studies from charts in between their display.

Special

Split...

Will split all data records up to but not including the date entered.

Rollover...

Adjust all previous data records up to and including the date entered. Designed for creating perpetual futures' contracts, many Mutual fund traders find this tool useful for adjusting fund prices after a distribution.

Statistics

Displays results from the last Master Analysis report.

Master Analysis

Master Analysis updates the statistical ratings and statistical information such as 12 month highs and lows and average daily range. During the analysis, a countdown screen keeps you apprised of progress. Upon completion, a report is presented summarizing the results. The concept of this worksheet is to provide a snapshot of your portfolio and help you identify which securities you might want to view more closely.

Options Calc...

Black-Scholes option calculator used to evaluate option prices.

Trader's Journal

Allows for date stamped entries into each file. Use it to make notes about your trades, emotions or analysis.

Special Keys and Key Combinations

Some of the functions of the software may be modified through the use of the Shift, Option, and Control keys. Wherever possible, these keys modify functionality in a similar fashion. For example, the **Shift** and **Option** keys together will affect the full list versus a single security (e.g., closing all windows). Modifier keys are not recognized unless you use the mouse to make your menu selection and you must have the keys down before you pull down the menu.

Most menu titles are altered to indicate the modified functionality of these special keys.

The following menu options may be modified with these keys.

File Menu

Shift-Option Close Window (Close All) will close all windows.

Option Close Window (Close Related) will close all windows whose symbol matches the symbol in the active window.

Option Open List restores default column headings as the list opens.

Edit Menu

Shift Clear will remove all manually drawn trend lines.

Control Clear will remove all drop lines.

Shift-Option Clear removes all studies, manually drawn trend lines and drop lines.

Charts Menu

Shift Key forces new chart into active window instead of opening a new window.

List Mgmt Menu

Option Add Security (Add Options...) enables an option chain to be created and added to your List.

Shift-Option Add Security (Add Futures...) enables the addition of a series of futures' contracts to be created and added to your List.

Shift-Option Edit Data (Add Holiday) adds a Holiday to each of the securities in the list. Holidays leave an extra space in the chart where they occurred.

Option Remove Security removes an option chain from your List.

The following non-menu functions may also be key modified...

1. Hold the **shift** key down and drag your mouse to draw your own trend lines. Trend lines are automatically stored with the chart. To remove all previously drawn lines...hold the **shift** key down and select **Clear** from the **Edit** menu. To remove a specific line, hold the **shift** and **control** keys down and click on the line to be removed.

2. Hold the **option** key down to track the price and date of the mouse location.

3. Hold the **shift** and **option** keys down and drag your mouse around an area of the chart body to zoom in on that section of the chart. The new zoomed view will be displayed in its own window.

4. Hold the **control** key down and drag the mouse to turn the cursor into a giant crosshair. All legends will update as you move the cursor within the price area of the chart. Release the mouse button within the body of the chart to leave horizontal and vertical drop lines on the chart. Release the mouse to the right of the Y axis (scale area) to turn off the tool without leaving lines. To remove all previously drawn drop lines...hold the **control** key down and select **Clear** from the **Edit** menu. To remove a specific line, hold the **option** and **control** keys down and click on the meeting point of the drop line to be removed.
5. Hold the **Shift** and **Control** keys down to remove a specific manual trend lines.
6. Hold the **Option** and **Control** keys down to remove a specific drop line.
7. Hold the **Shift** and **Option** keys and click on a column heading to adjust column widths.

Break Response

- . may be used to exit certain routines early. The effect will vary on which routine is active.
- AutoRun** - current procedure will be finished, then AutoRun will be terminated.
- Opening a List** - stop loading list immediately. All items currently loaded will be displayed for your use and manipulation. As list was not completed, it will be opened as an Untitled list.
- Master Analysis** - terminates master analysis. Report will be displayed on progress to the break point.
- Split** - cancel the operation.
- Rollover** - cancel the operation.
- Recover** - cancel the operation.

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