

The EZ2 Trade Charting Collection

Raghee Horner, EZ2TradeSoftware.com

For more information email raghee@ez2tradesoftware.com or call 954.796.2393/2395

<http://www.ez2tradesoftware.com>

Thank you for your interest in the **EZ2 Trade Charting Collection!**

The Collection is a complete set of trading analysis tools that, when followed with the EZ2 Trade Software Trading Plan, presents a step-by-step methodology for trading stocks, futures, and forex.

These are the exact same tools that Raghee Horner, author of "Forex Trading for Maximum Profit" (Wiley, Nov. 2004) uses and helped develop. All subscribers will receive the EZ2 Trade Software Trading Plan that outlines her three-step methodology as well as her momentum and swing trading strategies. Also see eSignal's ["Trading with the Masters"](#) to read articles by Raghee Horner.

The **EZ2 Trade Charting Collection** offers a set of tools that allow traders to automate:

- **Support and Resistance**
- **Fibonacci Levels**
- **Minor Highs and Minor Lows**
- **Trend Detection**
- **Candlestick patterns**

These automated tools bring accuracy, confidence and convenience to classic charting. No longer worry about if you are using the "right" trendline or Fibonacci level. You don't have to spend valuable time finding and analyzing candlestick patterns or support and resistance levels. At-a-glance, know the strength and direction of the overall trend.

There are six indicators that comprise the **EZ2 Trade Charting Collection**.

EZ2-S/R Analyst Pro
EZ2-Fibonacci
EZ2-Candlestick
EZ2-Wave
EZ2-Minor HiLo
EZ2-CCI

The following sections explain the parameters of the individual tools. While it may be somewhat technical in nature, rest assured that the settings are simple to change. If you'd like more information, there are articles available at <http://www.ez2tradesoftware.com> and <http://www.ez2trade.com>.

EZ2-S/R Analyst Pro

S/R Analyst Pro is the ultimate tool for the short-term trader who wants to fully exploit the power of support/resistance and trend lines in his or her trading. It will assist you in identifying low-risk entry points (and help you to avoid high-risk situations) by calculating and then projecting pivot points, trend lines, support/resistance zones, and gap zones on charts of any bar interval. The software has been designed from the ground up to perform this task and a large number of unique features have been made available to the trader along with a high degree of flexibility in terms of both customization and presentation.

If you are currently using other charting tools to draw support/resistance and/or trend lines manually, you know how tedious, time-consuming and subjective this process can be. Let **S/R Analyst Pro** fully-automate and standardize this process for you so you can focus on the business of trading.

When loaded into a chart, the **S/R Analyst Pro** script will scan the price data and identify all price pivot points, both upper and lower. Using these pivot points, the script will then analyze all possible trendline formations. It uses proprietary ranking logic to determine the 'best' trendlines to display based upon the current price action. In addition to trendlines and pivot points, the **S/R Analyst Pro** script will also identify key support/resistance zones and gap levels on your chart. Put these together and you have a comprehensive picture of the support/resistance characteristics of the security you are charting.

Terminology

The following Glossary of Terms is provided to help you familiarize yourself with the terms and concepts used in the **S/R Analyst Pro** script. Use this section to gain a quick understanding of what the program does and how it presents itself on a chart.

Glossary of Terms

- **Stock** is the general term used within this documentation to refer to financial instruments such as stocks, currencies, futures, indexes and mutual funds. **S/R Analyst Pro** can be used with any financial instrument that is available for charting on the [eSignal](#) platform.
- A **Pivot Point** is a bar with a high or a low price that supercedes all of the bars in the general vicinity. In the **S/R Analyst Pro** script, you have the ability to specify exactly what constitutes a pivot point in terms of the number of bars on either side that must be superceded. This is called the *size* of the pivot. The default setting is to identify all pivots that have a size of 3 or greater. This means that, to qualify as a pivot point, a bar must either have a high price that is higher than the high price of the 3 bars on either side or a low that is lower than the low price of the 3 bars on either side. Once identified, pivot points are used to calculate support/resistance zones and trendlines. Pivot points are displayed as colored arrows on the chart.

- Support/Resistance Zones** (aka S/R Lines) are price areas that have acted as support and/or resistance in the past and, it is assumed, will again in the future. Support/resistance zones are calculated by **S/R Analyst Pro** using pivot points. All of the pivot points are collected and analyzed for clustering and any resulting clusters are identified as support/resistance zones. Each support/resistance zone is rated by the number of pivot points that touch that particular price level. The more pivot points that touch the price level, the stronger the support/resistance zone is likely to be. Support/resistance zones are displayed as colored horizontal lines on the chart and they are drawn from the oldest pivot that touched that particular price level. **Note** that we use the terms *support/resistance zone*, *support/resistance line*, *S/R zone* and *S/R line* interchangeably within this document.
- Gap Zones** (aka Gap Lines) are areas on the chart where price has gapped from one bar to the next. There are two types of Gap Zone situations that the script will highlight: a Gap Up situation is where the Low of the current price bar is greater than the High of the prior price bar and a Gap Down situation is where the High of the current price bar is less than the Low of the prior price bar. A Gap Up zone will tend to offer support to future price action and a Gap Down zone will tend to offer resistance to future price action. **Note:** the word "Gap" as it is used in the context of Gap Zones should not be confused with the term "Gap Weighting", which is a measure used by the script to determine trendline strength.
- Trendlines** are also calculated from pivot points. As each upper and lower pivot is being analyzed by the program, the slopes of lines drawn from each pivot to every other pivot are analyzed for total number of touch points, distribution of touch points, for breaks, and for proximity to current price. **Touchpoints** are areas where *regular* price bars and/or pivot points are within a minimum acceptable distance of the trendline and **breaks** are areas along the trend line where the price has pushed through by more than a maximum acceptable amount. Once all of the valid trendlines have been calculated, they are classified by slope of line, total number of touchpoints and proximity to current price. Trendlines are displayed as colored lines of various slopes on the chart.
- Ignore Zone** is a term used to describe an area on the price chart where trendlines will not be checked for breaks. The **Ignore Zone** is typically set to include the 3 or 4 most recent price bars. Its purpose is to allow you to see trendline breaks as they occur so you can make trading decisions before the invalidated trendline is removed from the chart. On the chart, the **Ignore Zone** is represented as a grey bracket in the vicinity of the most recent price action.
- Slope** is the term used to describe the angle or trajectory of a trendline. A slope of 0 would indicate a perfectly horizontal trendline. A slope greater than 0 would indicate a rising trendline and a slope less than 0 would indicate a declining trendline.
- Tolerance** is the percentage of price that constitutes a **Break** or a **Touch** of a trendline and is used to determine whether or not a trendline is valid. If a trendline is broken at any point between the oldest pivot and the **Ignore Zone**, the trendline is considered invalid and is

discarded. Conversely, all data points between the beginning of a trendline and the end of a trendline are analyzed and each time the price is within the **Tolerance** of the trendline at that point in time, the trendline's touch count is incremented. The high price is used when testing upper trendlines and the low price is used when testing lower trendlines. In the **S/R Analyst Pro** script, **Tolerance** is calculated by taking a fractional multiple of the security's current Average True Range (ATR) value.

- A **Touchpoint** is any point where price touches, but does not exceed, a calculated trendline. Remember that the allowable distance that constitutes a 'touch' is governed by the current **Tolerance** value. **Touchpoints** are important in determining the strength of trendline. Given two trendlines of equal length, the trendline that has the greater number of touchpoints would typically be considered the stronger of the two.
- A **Break** is any point along a calculated trendline where price pushes past the trendline by more than the current **Tolerance** value. Once a trendline is broken, it is considered to be invalidated and is discarded.
- **Channeling** is the word that describes the tendency (of many stocks) to bounce up off a lower support zone or trend line and then to move up and eventually bounce down off an upper resistance zone or trend line. When this behavior extends over many bars, it forms a price channel that the stock appears to be following. Channels can be horizontal, upward-sloping or downward-sloping. Price channels, if they exist, are very easy to identify when trend lines and support/resistance zones are displayed on a chart.

Operation

While **S/R Analyst Pro** offers a lot of flexibility in terms of configurable parameters, it was designed first and foremost to be intuitive and easy to use.

Using the Script

While all of the individual parameter settings are explained in detail in the S/R Analyst Parameters section, in this section we will go over some of the more important parameters and how they impact the operation of the **S/R Analyst Pro** script. To access the script parameter menu, click on the **S/R Analyst Pro** icon that you see at the bottom-left of your chart.

Tolerance: This is the most important calculation in the **S/R Analyst Pro** script because it governs the trendline and S/R line calculations. Tolerance is defined as the percentage of price that constitutes a Break or a Touch of a trendline and is used to determine whether or not a trendline is valid. It is also used in a similar fashion to determine support/resistance zones (e.g., S/R lines). By way of example, a Tolerance value of 0 would mean that there is no leeway in determining Breaks and/or Touchpoints. Assume that we have a trendline drawn from point A to point B. If price pushes past this trendline (by even the tiniest amount) at any point between A and B, the trendline would be considered broken and, therefore, invalidated. By the same token, if price actually touches this trendline at any point between A and B (but does not push past the trendline), we would consider that to be a Touchpoint.

In the **S/R Analyst Pro** script, Tolerance is calculated using the Average True Range (ATR) of the security you are charting. There are two parameters that determine the Tolerance value: Tolerance ATR Length and Tolerance Multiple. Basically, the Tolerance Multiple is applied to the current ATR value and the resulting value is converted to a percentage. This percentage is then used as the Tolerance value.

In practice you will find that a Tolerance value of 0 (which is achieved by setting the Tolerance Multiple parameter to 0) is probably too strict. The script will often generate more useful trendlines when you give it a little leeway in terms of the Tolerance value. The default Tolerance Multiple is 0.10 (e.g., 10% of the current ATR value) which should be adequate for most, if not all, of the securities that you are likely to chart. Adjust the Tolerance Multiple up to increase the Tolerance value and adjust the Tolerance Multiple down to decrease the Tolerance value.

Pivot Size: The **S/R Analyst Pro** script uses price pivots as the basis for calculating trendlines as well as determining support/resistance zones. The term 'pivot', as used in the context of this script, refers to a bar with a high or a low price that supercedes all of the bars in the general vicinity. We can measure the 'strength' of a pivot by counting the number of bars on either side that have lower highs (when looking at a high pivot) or higher lows (when looking at a low pivot). A high pivot with a strength of 5 (e.g., 5 lower highs to the left of it and 5 lower highs to the right of it) would be considered stronger than a high pivot with a strength of only 3.

A default setting of 3 is used for Pivot Size and this will probably be more than adequate in most situations. Just keep in mind that you can change this setting if you need to.

Lookback Bars: The Lookback is simply the number of bars on your chart that **S/R Analyst Pro** will use in performing its trendline, S/R line, and Gap line calculations. The default value is 150 bars but, depending upon the security and bar interval you are using, you may want to increase this number so that you can find older support/resistance zones as well as longer trendlines, if they exist.

Show S/R Lines: S/R lines are defined as a confluence of pivot points and they represent price levels where a number of price pivots were formed in the historical data. Since a pivot is essentially a price level where price was turned around, it would be safe to assume that a particular price level that is in close proximity to multiple pivot points would be a potentially strong area of support/resistance. S/R lines are ranked in **S/R Analyst Pro** by strength, and strength is simply a measure of how many pivot points 'met' at that particular price level. You can use this internal ranking to filter the display of S/R lines on your chart.

Show Gap Lines: Gap lines are defined as price levels (price ranges actually) where price either gapped up or gapped down. A Gap Up is where the Low of a price bar is higher than the High of the price bar that precedes it. A Gap Down is where the High of a price bar is lower than the Low of the bar that precedes it. Gaps can be very strong areas of support/resistance and this feature makes it very easy to spot them.

The parameters listed above are those that you will probably use the most on a day-to-day basis. Remember, however, that there are many other parameters available that can be used to tweak and fine-tune the operation of the script.

Parameters

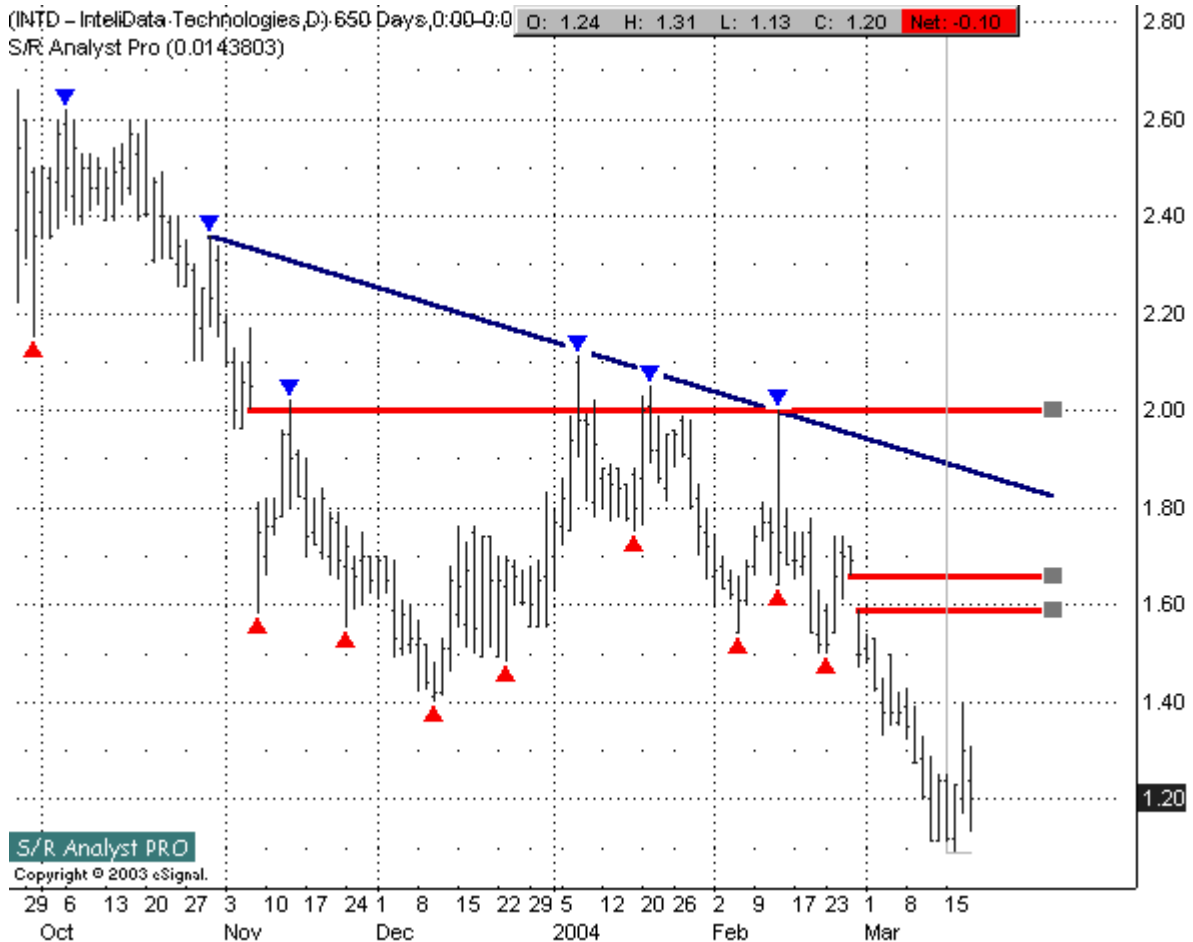
The **S/R Analyst Pro** script has a menu of parameters that can be accessed by clicking on the teal-colored "**S/R Analyst Pro**" icon that you will see at the bottom-left of your chart. Alternatively, you can right-click in your chart, select the "Edit Studies" option from the pop-up menu that will appear and then select the **S/R Analyst Pro** study from the listbox at the top of the *Study Properties* dialog.

Several parameters are available and they are outlined in the links provided below:

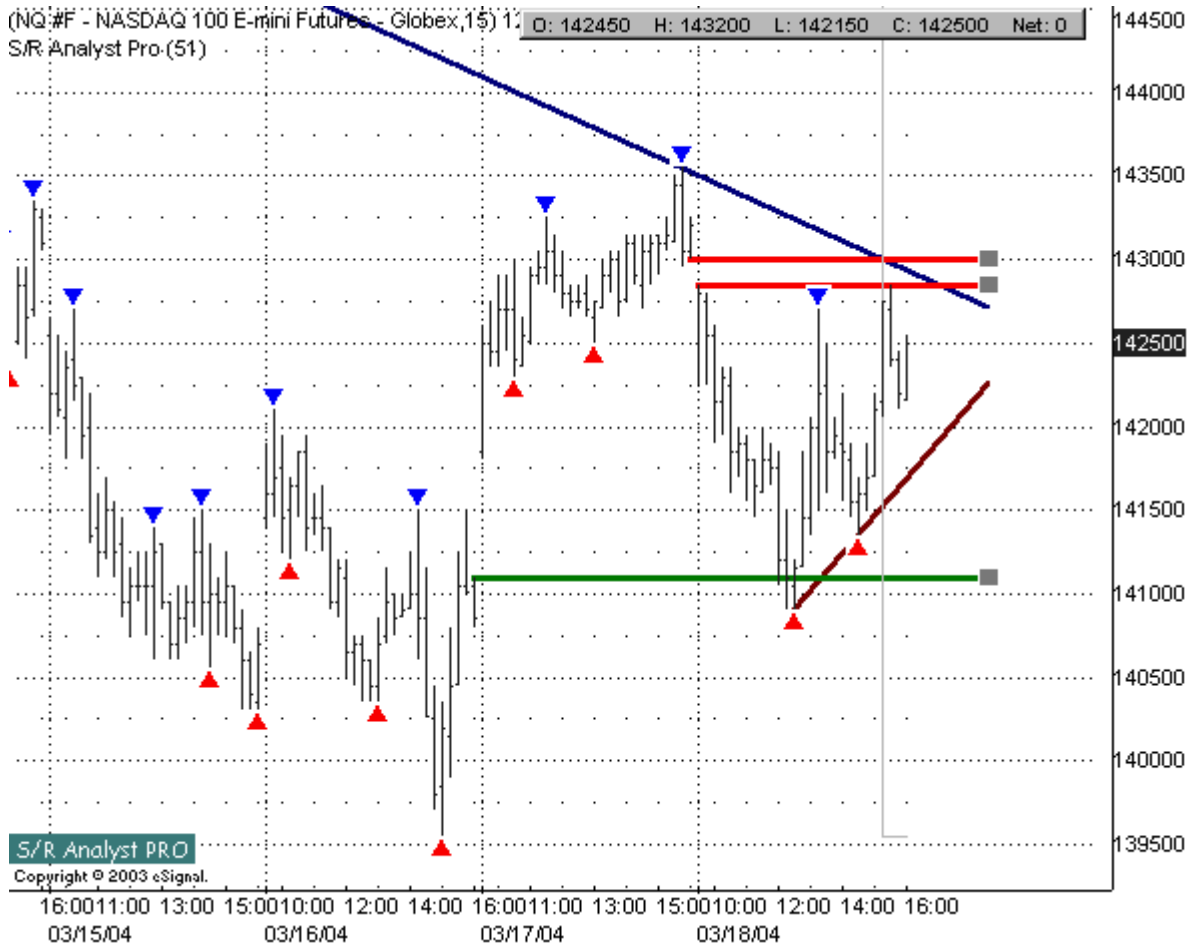
| Parameter | Value | Default |
|---------------------------|-------------|-------------|
| Lookback Bars | 150 | 150 |
| Pivot Size | 3 | 3 |
| Min Length | 10 | 10 |
| Tolerance ATR Length | 14 | 14 |
| Tolerance Multiple (ATRs) | 0.1 | 0.1 |
| Length Weighting | 1 | 1 |
| Touchpoint Weighting | 1 | 1 |
| Gap Weighting | 1 | 1 |
| Proximity Weighting | 1 | 1 |
| Max. Trendlines | 3 | 3 |
| Bars to Ignore | 3 | 3 |
| Show S/R Lines? | Active Only | Active Only |
| S/R Strength | 2 | 2 |

Some Examples

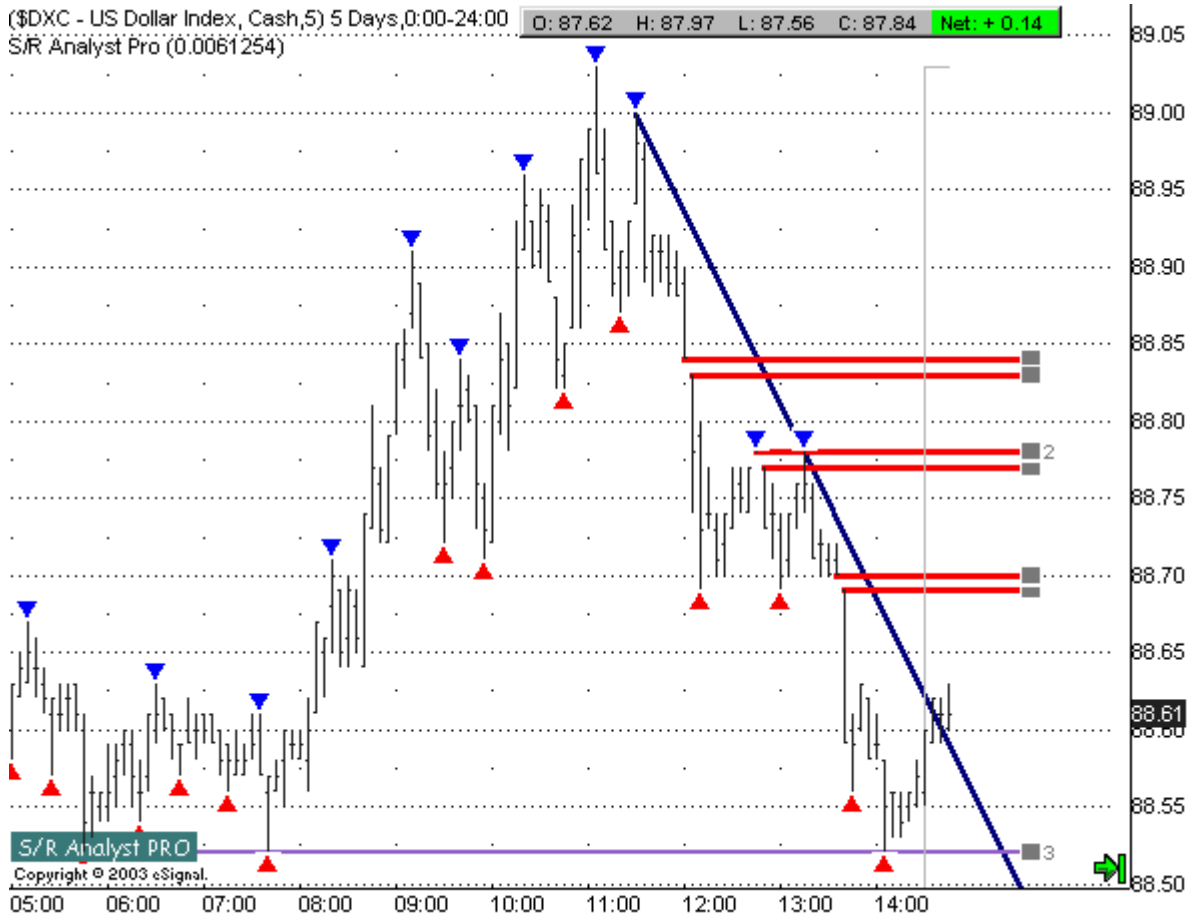
In this section we have provided some sample screenshots of the **S/R Analyst Pro** script in action. These screenshots will give you a better idea of how the software works and how it can help your trading.



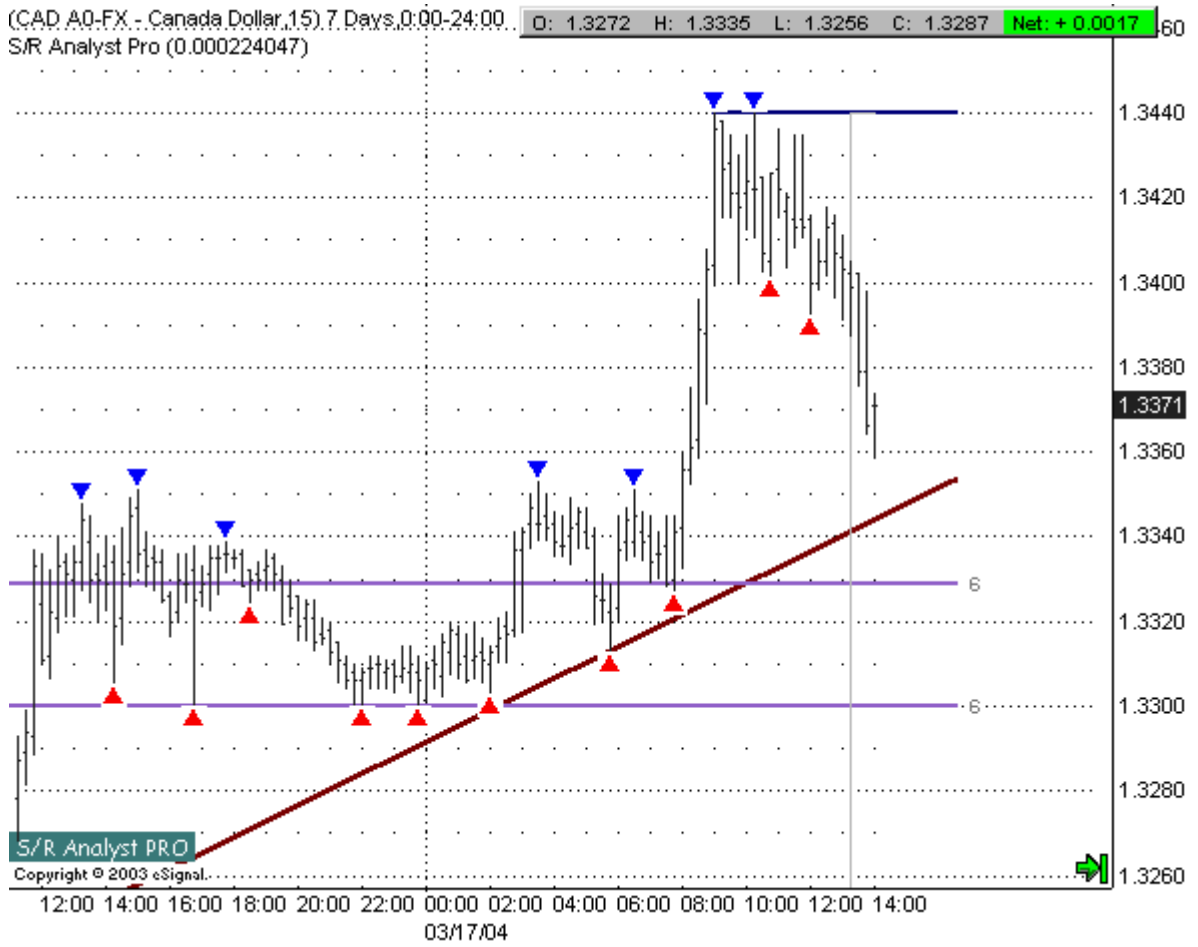
The Intellidata chart above provides a clear example of the Gap line tool. The two red lines at the 1.60 price level highlight a gap down that occurred at the end of February and this gap is still open. We can also see an upper trendline that extends down from a higher price level. This trendline will intersect with the price gap at the 1.60 level which would indicate that this price level could be a strong resistance zone in the future. You can also see that there was another large gap down in early November of 2003 and the upper Gap line in that Gap line pair remains unbroken. Remember that Gap and/or S/R lines are not considered to be broken until price closes on the other side of the line.



The Nasdaq e-mini chart above shows how the auto-trendline tool can highlight tradeable price patterns, in this case a triangle formation. We can also see that there are two active Gap zones in close proximity to current price: a gap-down that occurred on 3/18 and the lower line of a gap-up that occurred on 3/17.



The 5-min Dollar Index chart above is a good illustration of using the trendline, support/resistance zone and Gap line information together when reviewing a chart. Price has broken up through the trendline but is currently in an area peppered with several small Gap zones. In addition, there is an active S/R line at about the 88.53 level that may provide support in the event that the downtrend resumes.



In this currency pair chart, we see that price is retracing down to a trendline that is in the vicinity of several levels of historically strong support.

EZ2-Fibonacci

The EZ2-Fibonacci script is based on the popular ZigZag indicator and uses a user-defined percentage to control the display of swings in the price data. If you specify a relatively large percentage value, the script will highlight large swing moves and, conversely, if you specify a relatively small percentage value the script will highlight very small swing moves. In addition, the script uses the range of the last completed swing to automatically create and update a series of user-defined Fibonacci retracements/projections so that you can keep track of the progress of the current swing move.

(CAD A0-FX - Canada Dollar,30) Dynamic,0:00-24:00
EZ2-Fibonacci



The EZ2-Fibonacci script has the following parameters:

Percent Move: The value you set for this parameter represents the minimum amount (in percentage terms) that price must move away from a potential swing high or swing low for that swing high or swing low to be confirmed as a swing pivot. For example, price in a hypothetical security trades down over several bars from a price of \$15 down to a price of \$10 and it then starts to slowly trade back up again over the next few bars. Our potential swing low is the low at \$10. If you had, in this case, set your Percent Move parameter to 10 (e.g., 10%), then price would need to move back up to \$11 (\$10 plus 1% * \$10) for that \$10 low to be confirmed as a swing low.

You will need to adjust this parameter based upon the specific security and bar interval that you are charting. The default value is 2 (e.g., 2%) and the valid range is from 0.01 to 100

Color - Confirmed High: This is the color to use when marking a confirmed swing high pivot. The default color is Blue and you can select from a palette of colors.

Color - Confirmed Low: This is the color to use when marking a confirmed swing low pivot. The default color is Red and you can select from a palette of colors.

Color - Pending High: This is the color to use when marking a pending swing high pivot. The default color is Magenta and you can select from a palette of colors.

Color - Pending Low: This is the color to use when marking a pending swing low pivot. The default color is Maroon and you can select from a palette of colors.

Color – Text: This is the color to use when swing retracements on the chart. The default color is Black and you can select from a palette of colors.

Color - Trendline: When the EZ2-Fibonacci script is loaded into a chart, a trendline is drawn to highlight the last two swings. Use this parameter to select the color to be used when drawing that trendline. The default color is Navy and you can select from a palette of colors.

Color - Menu FG: This parameter sets the foreground color for the EZ2-Candlestick/EZ2-Fibonacci menu icon/button. The default color is White and you can select from a palette of colors.

Color - Menu BG: This parameter is used to set the background color of the EZ2-Candlestick/EZ2-Fibonacci menu icon/button. The default color is Teal and you can select from a palette of colors.

Menu Icon Vert Offset: This parameter allows you to vertically offset the display of the EZ2-Candlestick/EZ2-Fibonacci menu button/icon (along with the "Edit CFG" and "View Text" buttons in the case of the EZ2-Candlestick script). This gives you the ability to load the EZ2-Candlestick or EZ2-Fibonacci script along with other scripts that also place buttons/icons at the lower-left of the chart.

The default value for the EZ2-Candlestick script is an offset of 2 with a valid range from 0 to 3.

The default value for the EZ2-Fibonacci script is an offset of 0 with a valid range from 0 to 3.

Show Pivots? Use this parameter to toggle the display of the swing pivot markers in the EZ2-Fibonacci script. The default value is "F" (False) and you can select from "T" (True) and "F" (False). When set to "T" (True), a down-arrow character will be drawn above each swing high and an up-arrow character will be drawn below each swing low.

Show Swing Retrace? Use this parameter to toggle the display of the swing retracements in the EZ2-Fibonacci script. The default value is "F" (False) and you can select from "T" (True) and "F" (False). When set to "T" (True), the current swing is compared to the immediately preceding swing and the retracement/projection percentage is calculated. This value is then displayed (rounded to 2 digits) above each swing high and below each swing low.

Show Fib Retrace? Use this parameter to toggle the display of fibonacci retracements/projections in the EZ2-Fibonacci script. The default value is "T" (True) and you can select from "T" (True) and "F" (False). When set to "T" (True), the most recent prior swing is used as the basis for a series of fibonacci retracements/projections so you can measure the progress of the current swing move.

Show Menu Icon? Use this parameter to disable/enable the display of the menu icon and buttons in the EZ2-Candlestick/EZ2-Fibonacci scripts. The default value is "T" (True) and it can be set to either "T" (True) or "F" (False).

Fib Level X: There are 14 Fib Level parameters provided in the EZ2-Fibonacci script menu. You can use these to specify the Fibonacci retracements/projections that you want to display on the chart. The default values are 0.250, 0.382, 0.500, 0.618, 0.786, 1.000, 1.272, 1.618. To disable a particular Fib Level parameter (e.g., to set it to an unused state), set the parameter to -1.

Fib Color X: There are 14 Fib Color parameters provided in the EZ2-Fibonacci script menu. You can use these parameters to customize the color for each Fibonacci line drawn on the chart.

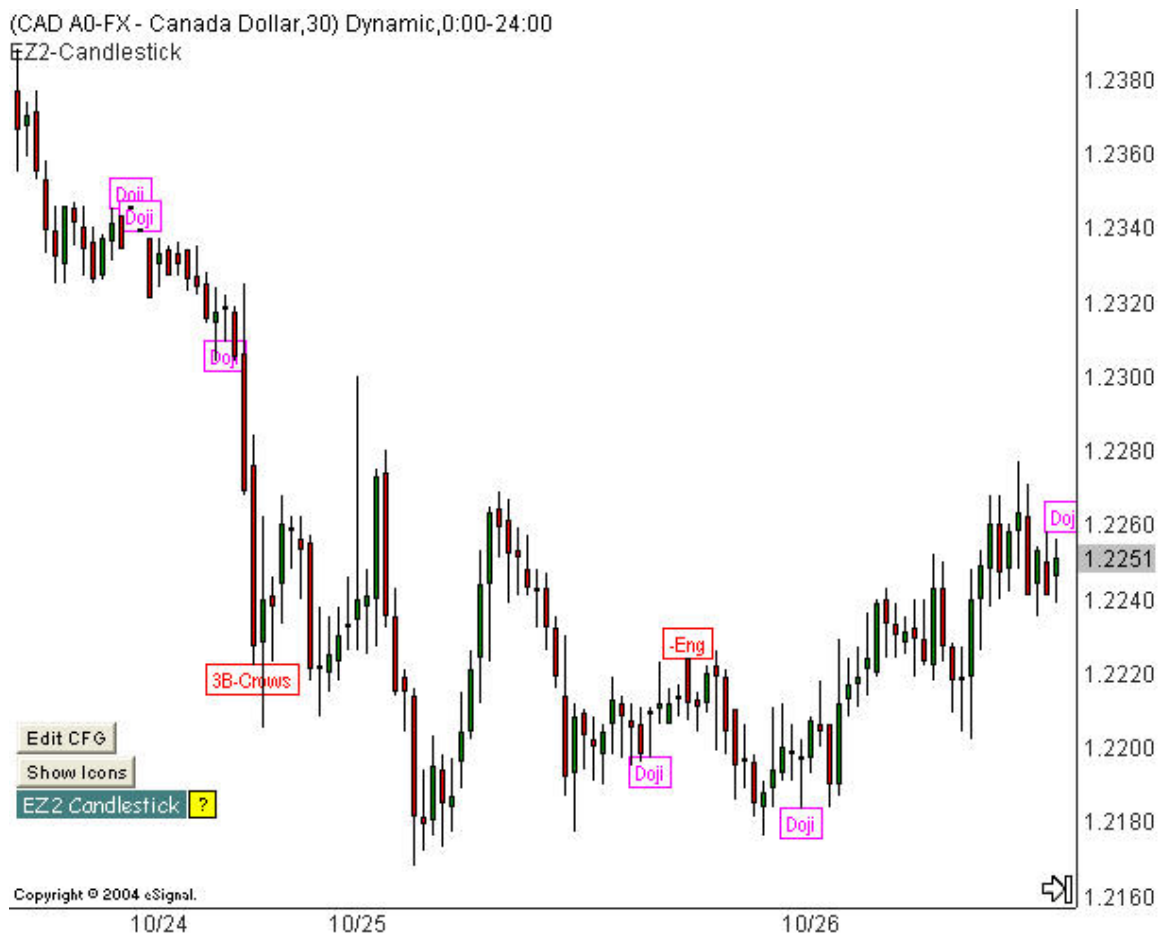
Fib Line Thickness: The line thickness to use when drawing the Fibonacci retracement/projection lines on the chart. The default value is 1 with a valid range from 1 to 10.

* * * *

EZ2-Candlestick

This script will identify and highlight candlestick patterns in your price data. When the script is first loaded, it will mark all candlestick patterns found in the historical price data (using various wingding font characters) and, as new bars come in, it will identify and highlight patterns as they are formed.

(CAD A0-FX - Canada Dollar,30) Dynamic,0:00-24:00
EZ2-Candlestick



The script can be configured to monitor up to 30 patterns. The power of this script lies in the fact that all of the patterns are user-definable. The specific patterns that the script will search for are controlled by a text file called "**EZ2Candles.txt**". In this text file you can use a simple-to-understand set of codes to specify up to 30 unique candlestick patterns that the script will then monitor. The "**EZ2Candles.txt**" file that comes with the script includes 16 common candlestick patterns that you can use as examples to create your own new definitions.

When the script is loaded, three buttons will be displayed at the lower-left of your chart:

The **Edit CFG** Button

Click on this button and the candlestick pattern configuration file "**EZ2Candles.txt**" will automatically be pulled up for you in the Windows Notepad program. You can then edit the existing candlestick pattern definitions or create new ones. Note that if you add new candlestick pattern definitions, you should then unload and reload the EZ2-Candlestick script in your chart so that the new definitions will appear in the menu.

The **Show Text** Button

This button allows you to toggle the candlestick pattern display. By default, all of the candlestick patterns identified in the price data are highlighted with Wingding font characters (which take up a minimal amount of screen space). If you click on the "Show Text" button, the Wingding font characters will be replaced by the actual short text description of each pattern. If you click on the button again, the display will revert to displaying the Wingding font characters.

* * * *

EZ2-Wave

This indicator plots Upper and Lower bands along with a Centerline in the price pane. EZ2-Wave is used in conjunction with the EZ2-CCI indicator to take a quick, visual reading of the current trend.



The EZ2-Wave script has the following parameters:

Color - Centerline
Color - Band

To access the script parameters, right-click in the price pane and select the "Edit Studies" option from the eSignal popup menu. Select "EZ2-Wave" from the study listbox in the "Study Properties" dialog and the parameters will be displayed.

* * * *

EZ2-Minor HiLo

This indicator identifies all minor-high and minor-low formations in the price data and highlights them by drawing a wingding Font character above or below the price bar where the minor-high or minor low was found.



The EZ2-MinorHiLo script has the following parameters:

Color - Minor High

Color - Minor Low

To access the script parameters, right-click in the price pane and select the "Edit Studies" option from the eSignal popup menu. Select "EZ2-Minor Hi/Lo" from the study listbox in the "Study Properties" dialog and the parameters will be displayed.

* * * *

EZ2-CCI

EZ2-CCI plots a standard CCI with a Center band, in addition to the standard Upper and Lower bands. This indicator is used in conjunction with the EZ2-Wave indicator to take a quick, visual reading of the current trend.



The EZ2-CCI indicator has the following parameters:

- CCI Period**
- Price Source**
- Upper Band**
- Lower Band**
- Line Color**
- Line Thickness**
- Band Color**
- Band Thickness**

To access the script parameters, right-click in the indicator and select the "Edit Studies" option from the eSignal popup menu.

* * * *