Elder-disk for TradeStation

version 4.1 (for TradeStation v9.5 and newer)

Thank you for purchasing this Elder-disk. It was originally developed in 2002 by Dr. Alexander Elder, the author of COME INTO MY TRADING ROOM, and by John Bruns, a programmer. This disk adds the indicators to TradeStation from this book, as well as the earlier book TRADING FOR A LIVING.

This software is designed for use with **TradeStation** online. You must be a registered user of TradeStation Software to use this disk. Some of our newer studies require **Radar Screen**. You must have Radar Screen enabled to use them. Check with your TradeStation representative how to qualify for a complimentary Radar Screen.

This manual is provided in PDF format, showing screen samples exactly as you will see them on your TradeStation. To view the PDF file, you need to have Acrobat Reader, a free program from Adobe. If you do not already have it installed, the viewer for PDF can be downloaded for free from www.adobe.com , look for Acrobat Reader.

You can work with this manual displayed on your screen or print it out. TradeStation charts normally have a black background which looks great on a monitor but translates poorly to print. If you decide to print this manual, try a sample page with black charts first to see how they turn out. Keep in mind that this type of printing will use a lot of ink.

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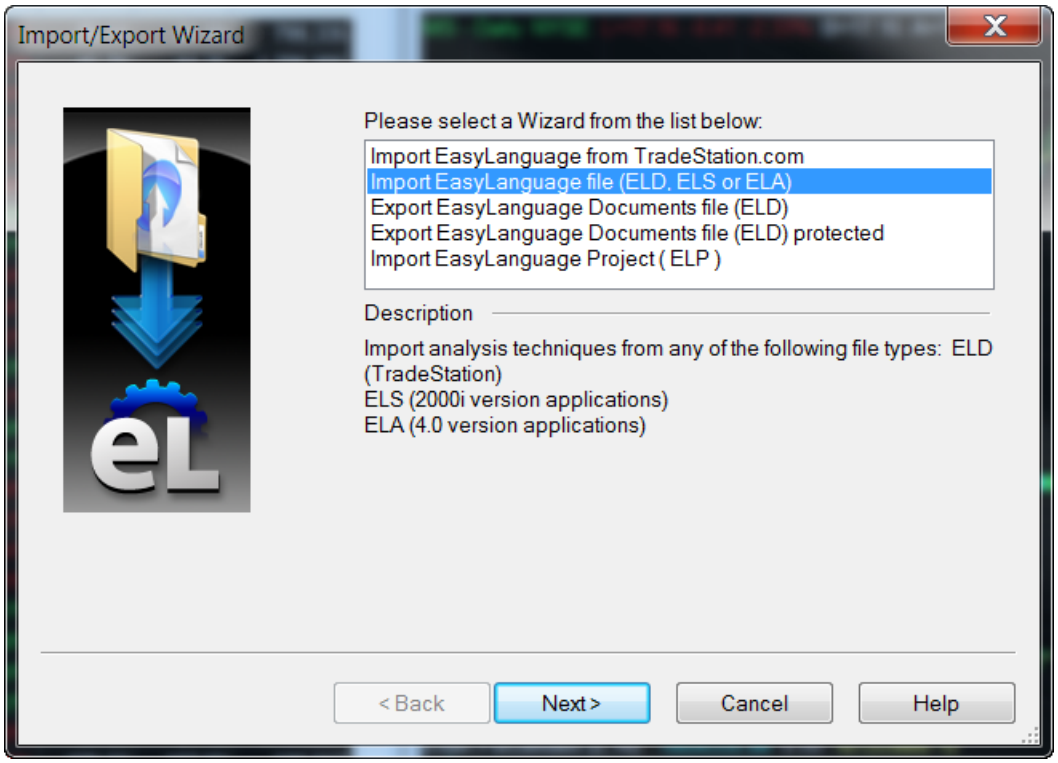
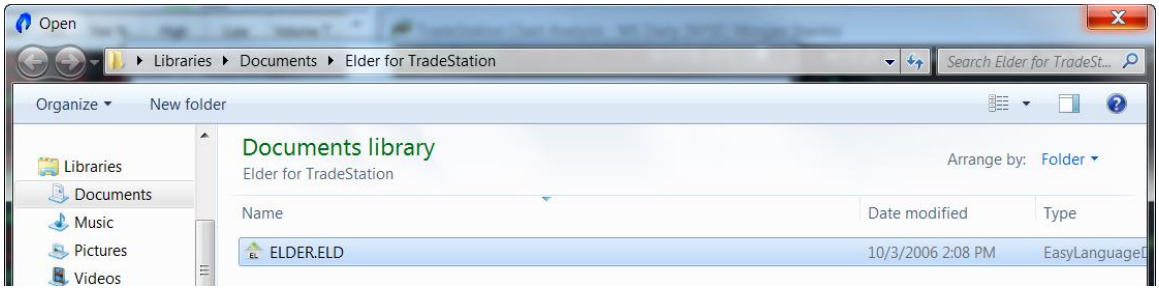
Loading the Software

The folder you have downloaded contains the Elder.eld file and the workspaces for Trade Station. Please copy the folder to your Documents library and save the original. We named the folder "Elder for TradeStation". If you want to use another name or location, please substitute those in the following directions.

Start TradeStation and access the File Menu. Choose **Import/Export Easy Language**. Select the second choice and press next.



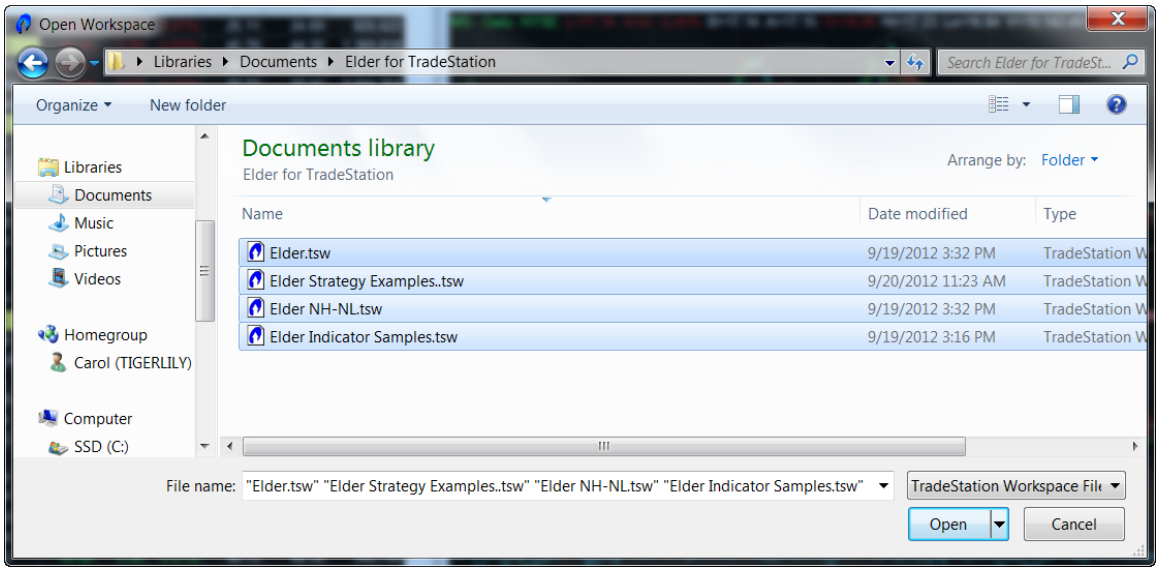
Use the browse button and navigate to the location you saved the folder and select the Elder Easy Language file



Unless you have previously purchased an Elder-disk or have created your own studies with identical names ("Elder…"), you will not have any conflicts. If you have conflicts, the program will ask you whether you want to install over the previous study. You must answer Yes, but if you want to keep your old studies, please first go back and rename them.

NOTE: **Enhanced Disk** users receive an additional file: "Elder_Enhanced.eld" Load it after the "Elder.eld" file, using the same procedure.

Next under the File menu select: **Open Workspace**…
Browse to the saved file location and select all the workspaces and press the Open button.



Congratulations – you have loaded the software!

The Workspaces

Elder Indicator Samples (Workspace)

This Workspace has a separate graph with each of the Elder indicators. Use this workspace if you want to see how any one of these indicators looks.

Elder Strategy Examples (Workspace)

This Workspace has the examples of the strategies and is described in the Strategies section of this manual.

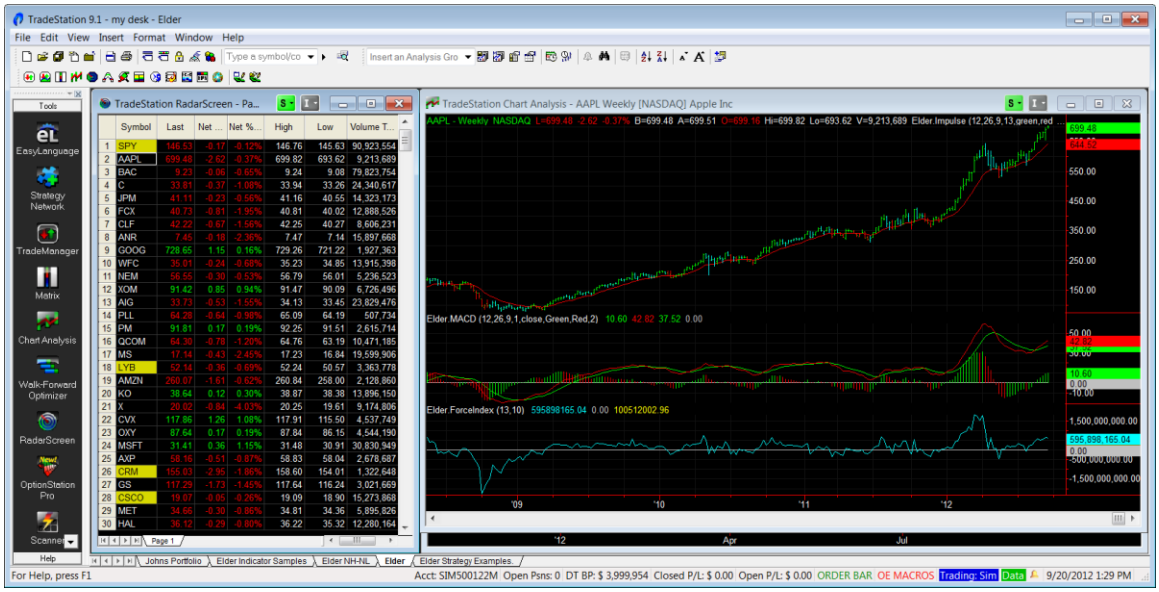
Elder NH-NL (Workspace)

This Workspace contains our New High - New Low chart, described in a separate section.

Elder (Workspace)

This is our standard workspace. We have populated its RadarScreen with all the components of the S&P 500. You may want to change it to the list of stocks you are interested in trading.

One of the two charts has a Weekly and the other a Daily Analysis Group templates, both described in a later section. Note that the Weekly chart overlaps and largely covers the Daily. This lets you examine the Weekly prior to seeing the Daily, which is what Dr. Elder recommends. Simply click on the lower portion of the Daily Chart to bring it forward or click on top of the Weekly to bring it forward as you move through your selection of stocks.



Elder Risk Control

This workspace has two Radar Screens, each with a version of the new Risk Control indicators. They are linked to the Elder Weekly and Daily Screens.

Elder Force Index Bands Extreme Scanner (Enhanced Only)

This workspace is set up for using the Radar Screen to search for stocks whose Force Index has exceeded the Force Index 3-ATR bands. This workspace requires the Elder Disk Enhanced version to operate.

Elder MACD Divergence Scanner (Enhanced Only)

This workspace is set up for using the Radar Screen to search for tickers that may be developing MACD-Histogram Divergences. This workspace requires the Elder Disk Enhanced version to operate.

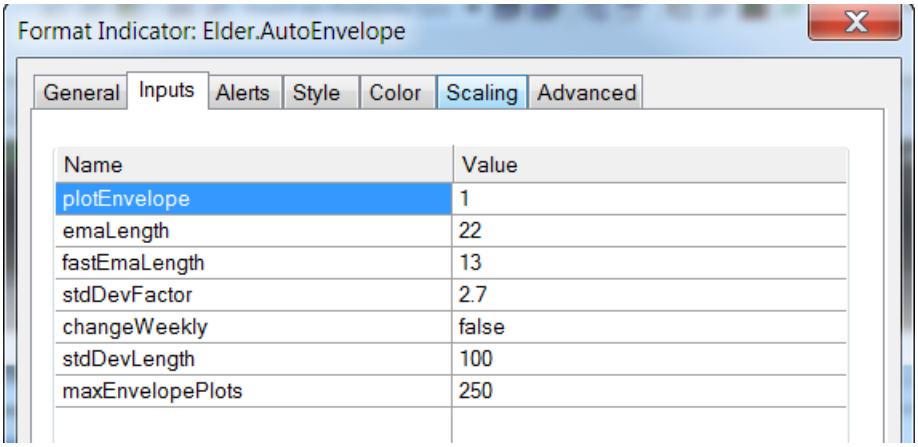
The Indicators

In this section, each indicator is shown in a stand-alone graph in the workspace. Many Dow stocks are used as examples. The name of the chart is the symbol of the stock, so each symbol is noted in the manual. The selection of symbols was random, for illustration purposes only.

Elder.AutoEnvelope

Envelope channels should be set parallel to the slow moving average and contain approximately 90-95% of all prices for the past two or three months, with only the extremes protruding outside of a channel. Envelope channels provide attractive profit targets – sell longs near the upper channel line and cover shorts near the lower channel line.

The AutoEnvelope custom indicator on this Elder-disk is an original tool for automatically creating channels that contain 90-95% of prices. This indicator is designed to change value at most once a week, making it stable even for intra-day data.



- Plot Envelope – Set to 1 to display the envelope plots. Set to 0 to turn them off. This is useful when you want to remove a plot without removing the indicator, for example when some other studies are based on it.
- EmaLength – This is the length of the EMA around which the channel is built (default is 22). Usually plotted in yellow.
- FastEmaLength – A second, faster EMA used for trading entries. Usually plotted in red. Set to 0 if you wish to eliminate this plot.
- StdDevFactor – This is the number of standard deviations for sizing the channel. The default is 2.7 standard deviations, which is good for most daily data. You may want to change this depending on the stocks you trade and your trading style and timeframe. Note that this method implies a bell shaped distribution,

which is seldom found in stocks. Intra-day data are much more erratic and usually need a higher number.

- ChangeWeekly – The default behavior of this indicator (i.e. False) is to plot a single envelope based on the weekend just before the right edge of the chart. It emulates the technique of setting channels by 'eye-balling'. Setting this input to True will plot a different band value each week, sort of a very slow Bollinger Band. This is more accurate if using the data for a strategy, since this reflects the values as they exist while evaluating the strategy.
- StdDevLength – This is the number of bars to use for the Standard Deviation calculation. The default of 100 has proven adequate for most purposes.
- MaxEnvelopePlots – TradeStation normally plots indicators from the oldest bar forward, one bar at a time. This indicator requires starting at the right edge and plotting backwards. TradeStation automatically limits this type of plotting, and so you have to tell it how far to plot back. We use 250, which means that you must have at least twice as many data points, 500 or more. Setting the ChangeWeekly input to True makes the software plot from left to right, overriding this parameter.

AutoEnvelope

If alerts are enabled, they signal when the high extends above the upper envelope or the low extends below the lower envelope.

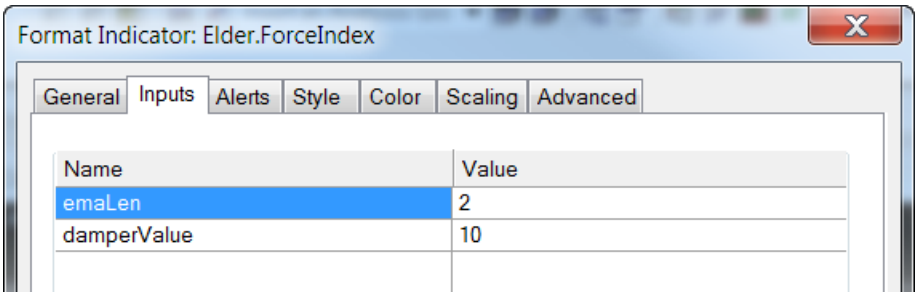
NOTE TO INTRADAY USERS: This indicator was designed for daily use, but you can use it intraday if you have enough data points. We suggest you format the symbol to contain 2 weeks of data when plotting intraday.

Elder.ForceIndex

Force Index was first described in the original *TRADING FOR A LIVING*. This indicator multiplies the change of closing price price for any bar by volume during that bar and plots an exponential moving average of the result.

Dr. Elder considers Force Index the best tool for analyzing volume, deeper than simply looking at volume bars. It can be used to analyze markets and trading vehicles in all timeframes.

Our plot of this indicator has been enhanced to eliminate large spikes that make the rest of the chart appear flat and unreadable. Spikes greater than 10 times the current threshold are truncated and marked with a yellow dot.



- EmaLen – sets the length of the EMA used to calculate Force Index.
- DamperValue – put a limit on how far a spike can extend to prevent the rest of the plot from flattening out completely.

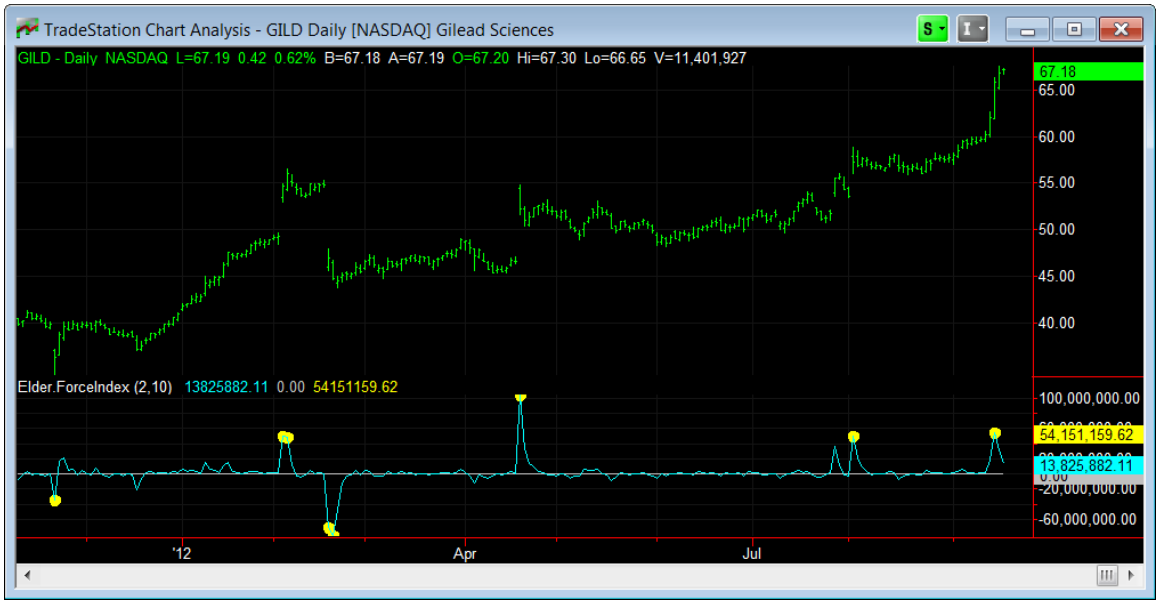


Chart: GLD daily, Force Index smoothed by 2-bar EMA.

If alerts are enabled, they signal when the plot crosses the zero line. Note the yellow dots where the Force index spiked and the spikes were truncated.

Changing the EMA length changes the focus of Force Index. Longer-term 13-bar EMA of Force Index helps identify intermediate trend reversals. Shorter-term 2-bar EMA helps identify market extremes.

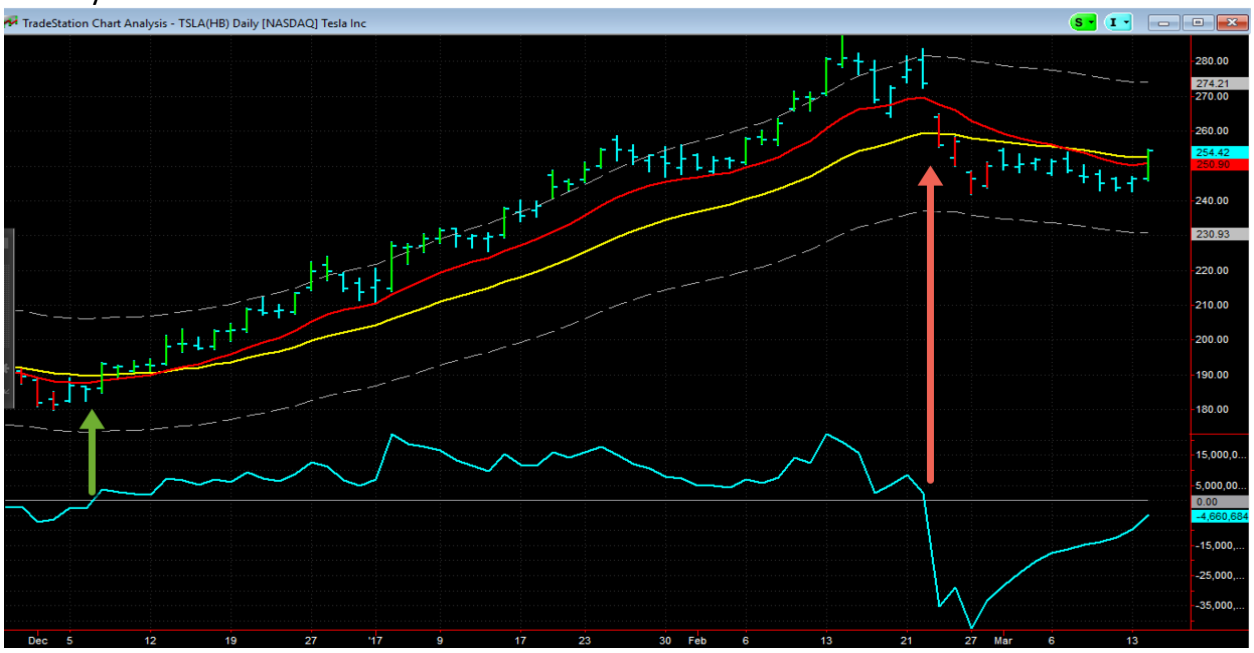


Chart: TSLA daily, Force Index smoothed by 13-bar EMA. Arrows mark zero line crossovers.

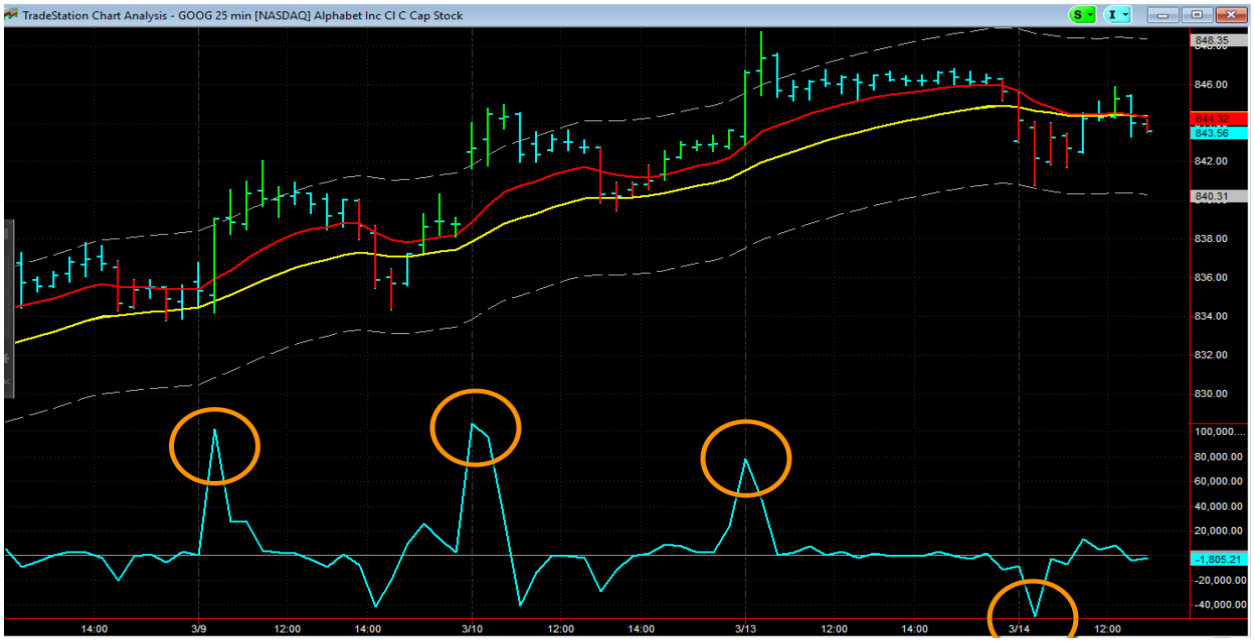


Chart: GOOG 25-minutes, Force Index smoothed by 2-bar EMA. Circles mark tradeable extremes.

Elder.ForceIndex with ATR channels (new for Elder-disk v4)

Adding Average True Range (ATR) channels to Force Index had been suggested by Kerry Lovvorn who runs www.SpikeTrade.com together with Dr. Elder. Adding these channels turns Force Index into an excellent tool for identifying intermediate tops and bottoms. Force Index with ATR channels does not catch all turns, but the ones it identifies deserve very serious attention.

(Note: the word "true" in Average True Range refers to dealing with price gaps. Since there are no gaps in Force Index, here ATR is the same as the Average Range.]

Whenever the Force Index rises above or falls below its 3-ATR channel, it signals that the ticker has reached an area of an unsustainable extreme. That's where rallies and declines become exhausted and prices tend to reverse. This is one of very few tools that are equally efficient in calling both top and bottom areas. Elder-disk places a yellow dot above the plot when the EMA of Force Index rises above the 3-ATR channel. It places a yellow dot underneath the plot when that EMA declines below the 3-ATR channel.

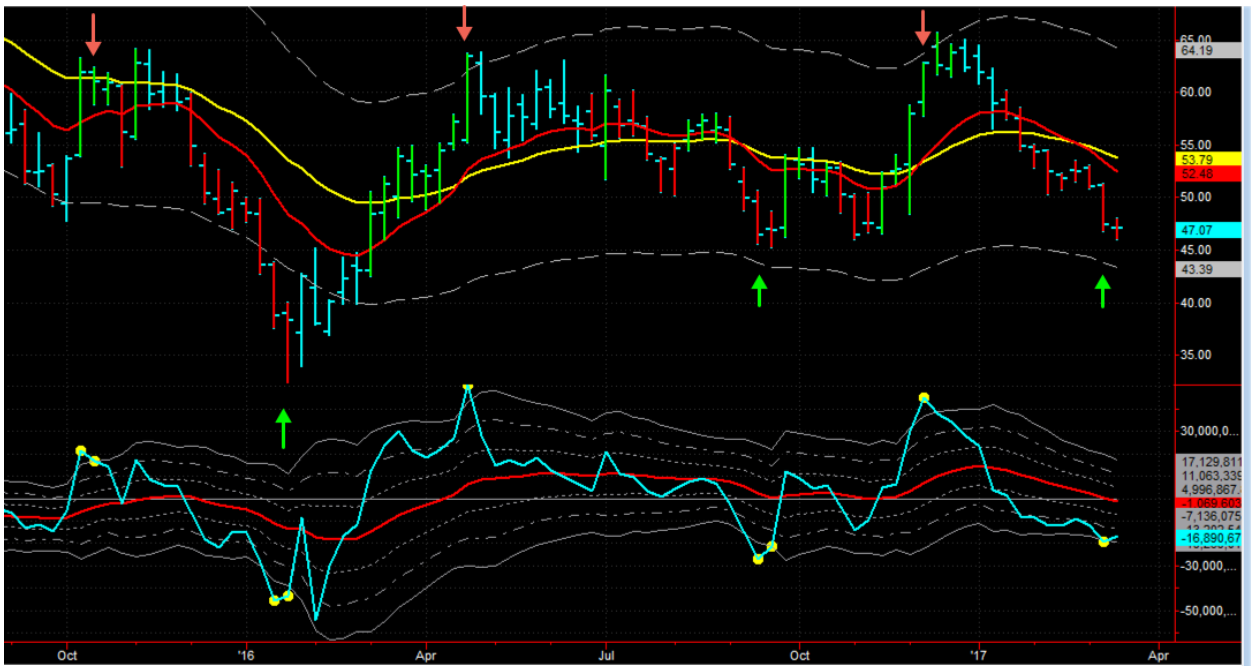
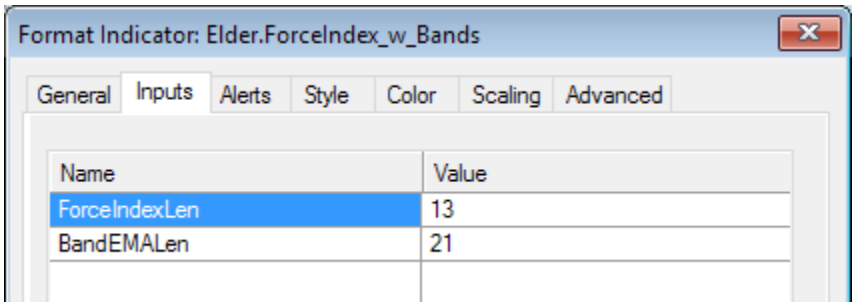


Chart: HES weekly, Force Index smoothed by 13-bar EMA. Red and green arrows mark where 13-week Force Index extremes identified tops and bottoms.

In our experience, these signals work especially well on the weekly charts. Of course, users are welcome to experiment with them in any timeframe.

To prevent any extreme value from flattening the rest of the plot, Force Index with ATR Channels is programmed to truncate values at the 4-ATR level.

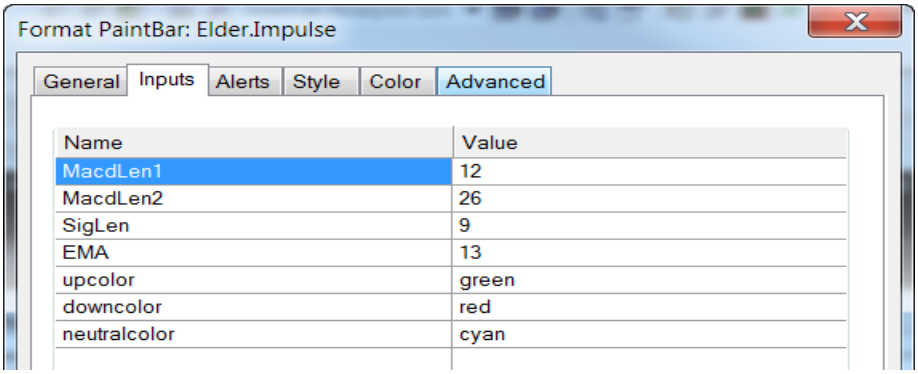
You can choose which Force Index to use: the original "classical" version or the new one, with ATR channels. One possible option is to use the new Elder.ForceIndex_w_Bands on your weekly charts and the original Elder.ForceIndex on your daily chart.



- EmaLen – sets the length of the EMA used to calculate Force Index.
- BandEMALen– sets the length of the EMA used for the channel calculation.

Elder.Impulse (PaintBar)

The Impulse system was first described in COME INTO MY TRADING ROOM. It colors price bars green when both the EMA and MACD-Histogram are rising, red when both are falling, and blue when they move in opposite directions.



- MacdLen1, MacdLen2, SigLen - These are the parameters for the MACD-Histogram calculation
- EMA – This is the short term EMA used for computing the Impulse
- UpColor, DownColor, NeutralColor - These allow you to customize the color choices for the bars.

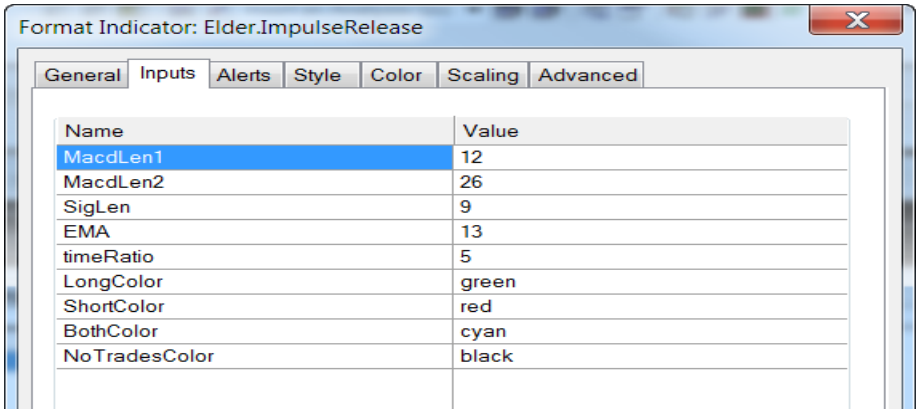
Impulse (Note: this is a Paintbar)

Avoid the temptation to fashion a method like Elder.Impulse into an automatic trading system. Our testing shows that this does not work, but the indicator is capable of delivering one of the most important messages in technical analysis – when not to trade! When Elder.Impulse is in a green (buy) mode, short positions may not be opened or held. When it is in a red (sell) mode, long positions may not be opened or held. This rule helps keep a trader out of countless minefields, forcing him or her to be either in gear with the trend or stay out.

Elder.ImpulseRelease

ImpulseRelease is an indicator designed to work with the Impulse System, as described in COME INTO MY TRADING ROOM. It uses the Impulse System in two timeframes to give a visual representation of when you are 'released' to trade. The best use of this indicator is to wait for the signal to stop pointing against the direction of your planned trade, thus releasing you to trade.

The ImpulseRelease indicator checks both the longer and the shorter timeframes for the Elder.Impulse direction. If one timeframe is in a buy mode and the other is in a sell mode, the signal is No Trades Allowed, normally a black bar. If both are neutral, then Both Are Allowed, showing a cyan bar. When one is bullish while the other is also bullish or neutral, there is a buy signal, showing a green bar. When one is bearish while the other is either also bearish or neutral, there is a sell signal, showing a red bar.



- MacdLen1, MacdLen2, SigLen - These are the parameters for the MACD Histogram calculation
- EMA – The short EMA used to calculate value in the impulse system
- TimeRatio – This is the ratio of the two timeframes. For a system using daily for the short and weekly for the long this is 5. If you are trading 10 min bars and using hourly as long use 6, etc.
- LongColor – The color of the bar when only long trades are allowed.
- ShortColor – The color of the bar when only short trades are allowed.
- BothColor – The color when either long or short trades are allowed.
- NoTradesColor – The color of the bar when no trades are allowed.

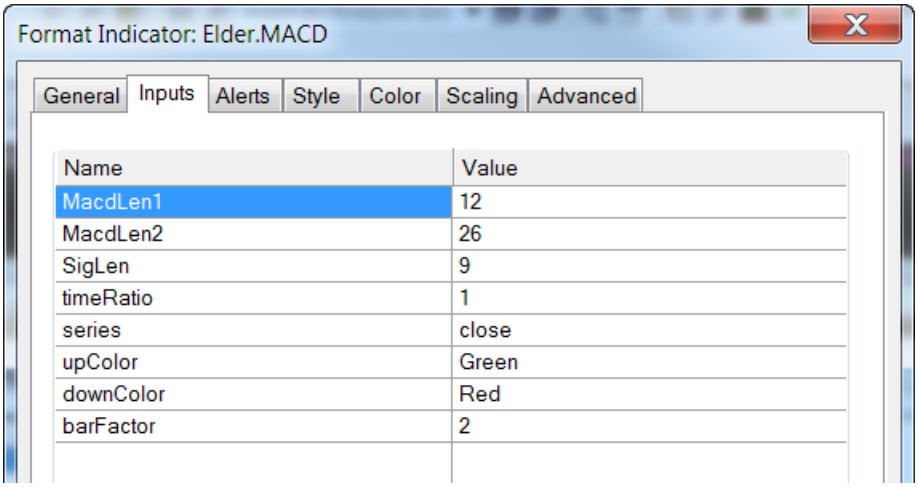
When you use this indicator, it looks best if you shrink the size of the window so that it appears as a narrow horizontal strip across the chart.

ImpulseRelease

If alerts are enabled, they signal when the color of the last bar differs from that of the previous bar.

Elder.MACD

The Elder.MACD indicator is a combination of MACD-lines overlaid on a MACD-Histogram, putting both plots in the same window.



- MacdLen1, MacdLen2, SigLen - These are the parameters for the MACD-Histogram calculation
- TimeRatio – Normally 1, this can show the MACD for an extended timeframe. For example, if you are looking at daily data and want to see a weekly MACD, this can be set to 5. This has the effect of multiplying all the parameters above by five.
- Series – This is the data series that the MACD is computed on. Normally the close, but you could change it to other series, such as high or low. You can even enter a simple formula, such as (high+low)/2 or (high+low+close)/3, to create a MACD based on the average price.
- UpColor, DownColor – These signal the rising and falling of the MACD-Histogram. Note that for timeframes greater than 1, the bar is compared to the bar TimeRatio periods ago. To turn off this feature, select the same color for all.
- BarFactor – Since both MACD-Histogram and MACD-Lines are shown in the same window, the Histogram must be scaled up for readability. This is the factor the Histogram is scaled to. The default (2) is usually quite readable.

If alerts are enabled, they signal when the histogram changes direction, i.e. when the last bar of the histogram changes color.

Elder MACD


TradeStation Chart Analysis - AAPL Daily [NASDAQ] Apple Inc
AAPL - Daily NASDAQ L=703.81 1.90 0.27% B=703.81 A=703.87 O=700.26 Hi=703.99 Lo=699.57 V=9,196,587
703.81
650.00
600.00
550.00
500.00
450.00
400.00
Elder.MACD (12,26,9,1,close,Green,Red,2) 2.85 16.25 14.83 0.00
16.25
2.85
-10.00
'12
Apr
Jul

Elder.MacdHistXover

This indicator was developed by John Bruns to predict the price point that has to be reached for MACD-Histogram to change direction. The catch is that this indicator is plotted one day ahead into the future. If your strategy depends on when the MACD changes direction, you can predict that point for tomorrow. The interpretation is simple - if the close is above the predicted number, the Histogram will rise, and if below it, will fall.

TradeStation allows you to plot a bar into the future, but for some reason does not show its value. This is why we use the commentary window on the last bar to read its value.

- All parameters must exactly match the MACD-Histogram you are using. See Elder.MACD.

Elder.MacdHistXover - shown with MACD

To access the Commentary window – press the commentary button on the toolbar (see red circle in picture) and select the last bar on the chart. Alternatively, right-click below the last dot and watch the quote window appear with the MACDXover value.

Elder-Ray BullPower & Elder-Ray BearPower

Bull Power and Bear Power are the components of Elder-Ray, an indicator described in TRADING FOR A LIVING. Since both are based on an EMA, this example shows both with an EMA of the same length.

Both have a single input:

- EmaLen – EMA used to compute Bull Power or Bear Power.

Note that the inputs for Bull and Bear Power are identical and set to the same value, which should match the EMA line on the price chart.

If alerts are enabled, they signal when the indicator crosses 0.

Elder-Ray

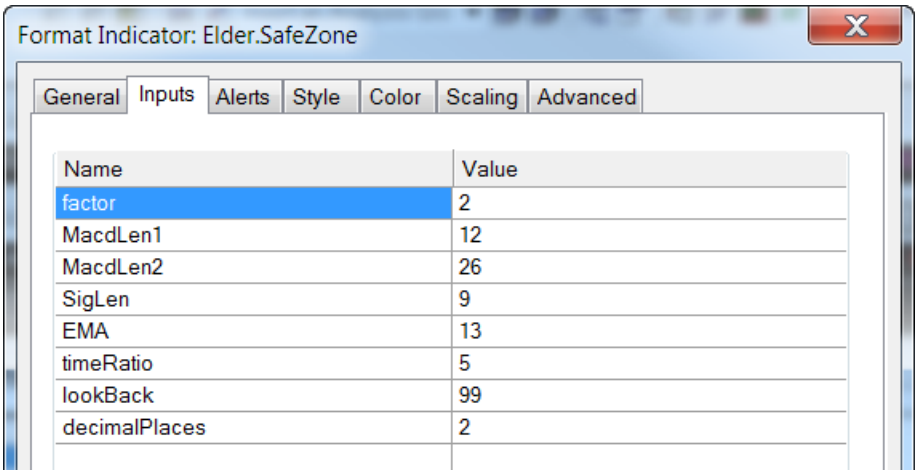
Elder.SafeZoneMP

Elder.SafeZoneMP is a companion indicator for Elder.SafeZone (below) that shows the current SafeZone stop for any active strategy. It is described in the strategy section, below. Without active strategies, this indicator shows nothing. This is not an error.

Elder.SafeZone

SafeZone is a method for setting stops, described in COME INTO MY TRADING ROOM. SafeZone measures the level of 'noise' in the current trend, defined as moves that go against the trend. It sets stops at a distance away from the current that is equal the level of noise times a coefficient (factor).

Before setting stops, you need to define your entries. Since SafeZone was designed at the same time as the Impulse System, we set up this template using the Impulse System for entries. Once a stop is set, it is moved in the correct direction until stopped out. A new trade is created only if the Impulse System allows a trade in that direction and there is no current trade in that direction. Since this is an indicator and not a strategy, it may show open trades in both directions simultaneously.



- Factor – This is the factor by which we multiply the level of noise computed by SafeZone while calculating the SafeZone stop.
- MacdLen1, MacdLen2, SigLen, EMA, TimeRatio – are used for calculating the Elder.ImpulseRelease for starting another trade. See Elder.ImpulseRelease for these settings. Note – when using both indicators, they work best if the values are the same for both indicators
- LookBack – The number of days that the SafeZone looks back when calculating market noise.

- DecimalPlaces – Since the values for stops are always calculated for the next bar, this indicator places their values in a commentary window for the trader to use when setting stops for the next period. This also controls the number of decimal places.

SafeZone

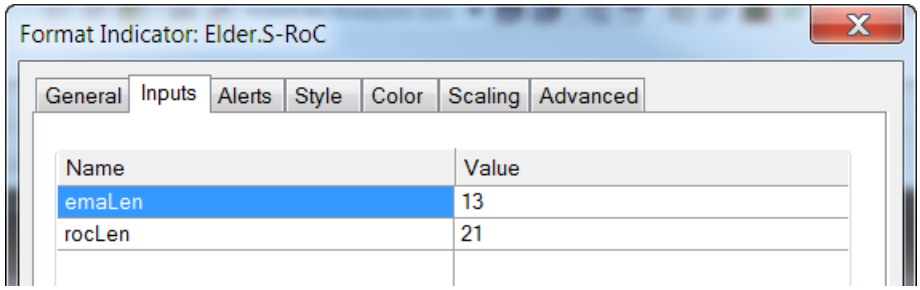
Comment Analysis (see MACD Histogram Xover) enabled – last bar selected for display of tomorrow's stops.

Note that if you use our new Risk_Control_SZ indicator in a Radar Screen, you'll get a column constantly updated to the current SafeZone value.

Elder.S-RoC

Smoothed Rate of Change

This indicator, developed by Fred Schutzman, is described in TRADING FOR A LIVING. It is created by calculating the rate of change for an exponential moving average of closing prices.



- EmaLength – The length of the EMA
- RocLen – Length of the rate of change calculation

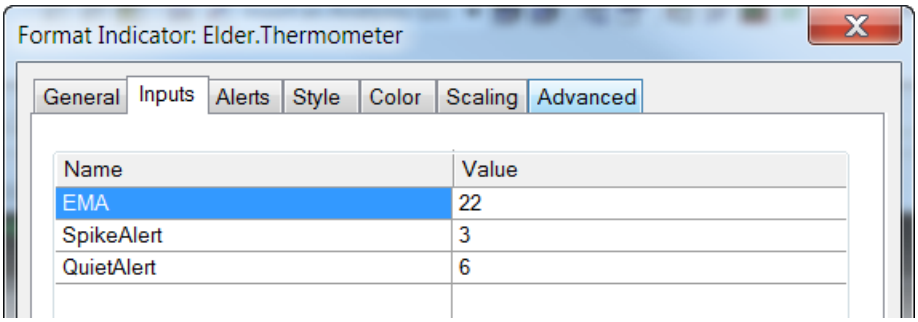
If alerts are enabled, they signal when this indicator signals a change of direction.

S-RoC

Visual signals of turning points are provided. Red dots appear above downturns and green dots under upturns.

Elder.Thermometer

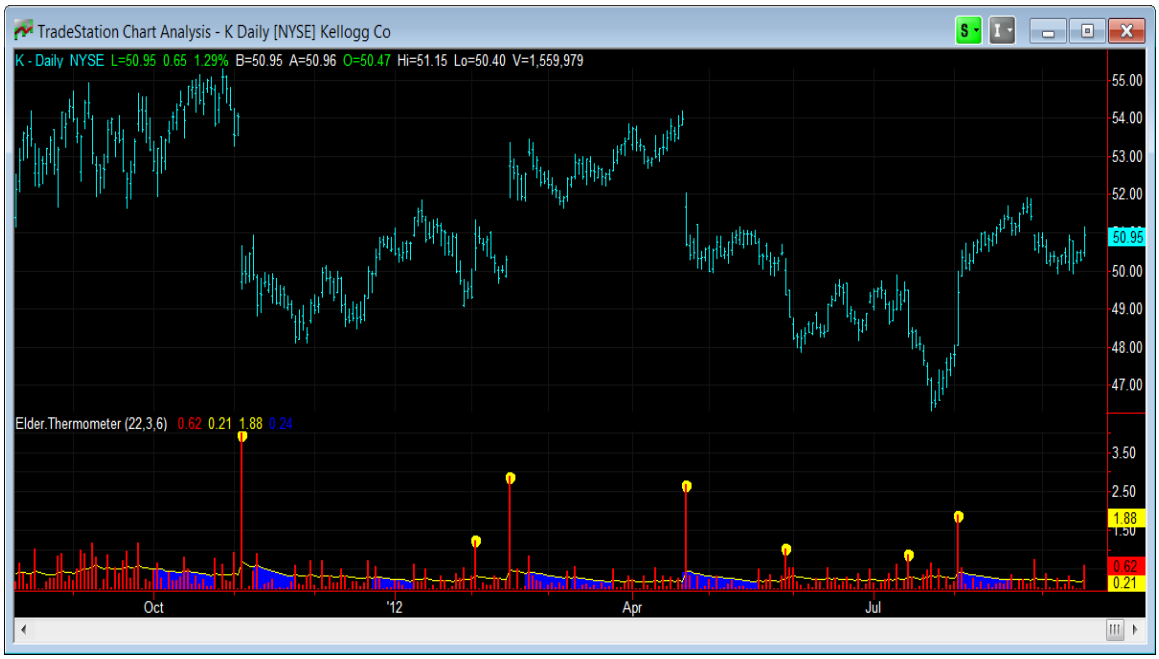
The Market Thermometer is described in COME INTO MY TRADING ROOM. It measures the Temperature of the market as indicated by greater or smaller daily ranges.



- EMA – Length of the moving average of the Market Temperature.
- SpikeAlert – If the Temperature exceeds its EMA by this factor, an alert is signaled. Set to 0 to turn off.
- QuietAlert – If the Temperature remains below its EMA for this number of days, an alert is signaled. Set to 0 to turn off.

Note that alerts must be turned on for the indicator in order for either alert to signal.

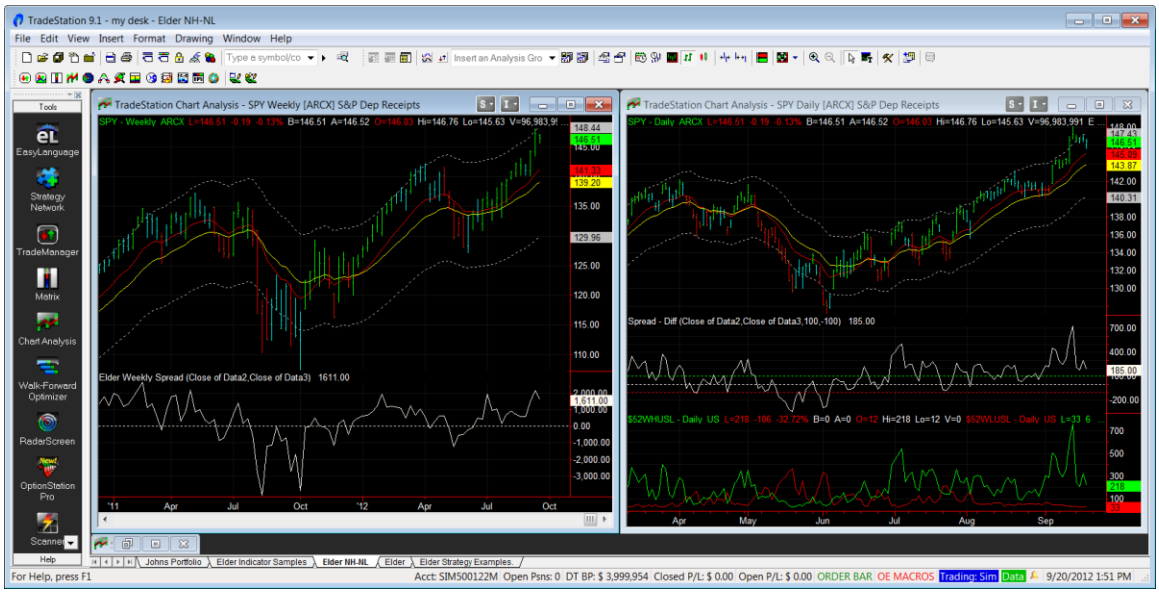
Thermometer



Spikes are highlighted by bright yellow dots. Quiet periods are highlighted with a blue background throughout the quiet period. Spikes are truncated at 6 times the current average. This prevents a single day from compressing the entire graph.

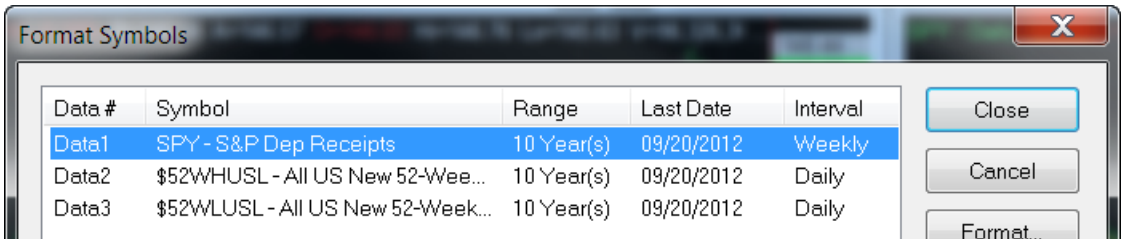
Elder New High-New Low Charts

The Elder NH-NL Workspace contains the New High – New Low charts: Weekly on the left and Daily on the right.



These charts are created using TradeStation tickers $52WHUSL and $52WLUSL which cover US stocks traded on NYSE, AMEX and NASDAQ exchanges. If you'd like to use different tickers, you'll need to change the data2 and data3 symbols on the chart.

The daily NH-NL value is computed by subtracting the New Lows from the New Highs. Since the data is only available as daily, we aggregate 5 daily totals for the Weekly plot.



Note that for the weekly chart, the dat2 and data3 streams are interval: Daily. This is required to get the correct values. All intervals are daily for the daily chart.

There are two versions of the Daily NH-NL chart. One displays the indexes as standard line graphs, the other as a histogram with lows going negative. You can use whichever you prefer.

Strategies

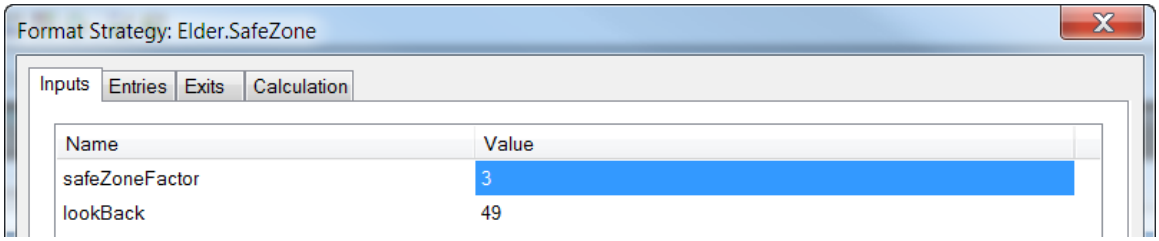
Please note that the following strategies are exit strategies. If you do not combine them with an entry strategy, nothing will happen. We've used a simple TradeStation-supplied "Historical Entry" strategy, using a moving average cross for long entries to show examples of how this works. We do not recommend this entry for trading, and are using it only for demonstration purposes.

The strategies work extremely well with manual entry points for your own trades. This eliminates the guesswork as to when to exit a trade, while preserving your own judgment when to enter.

Elder.SafeZone

The Elder.SafeZone strategy implements the SafeZone, as described in COME INTO MY TRADING ROOM. This strategy uses the 'mix and match' approach of TradeStation allowing it to be combined with other entry and exit strategies.

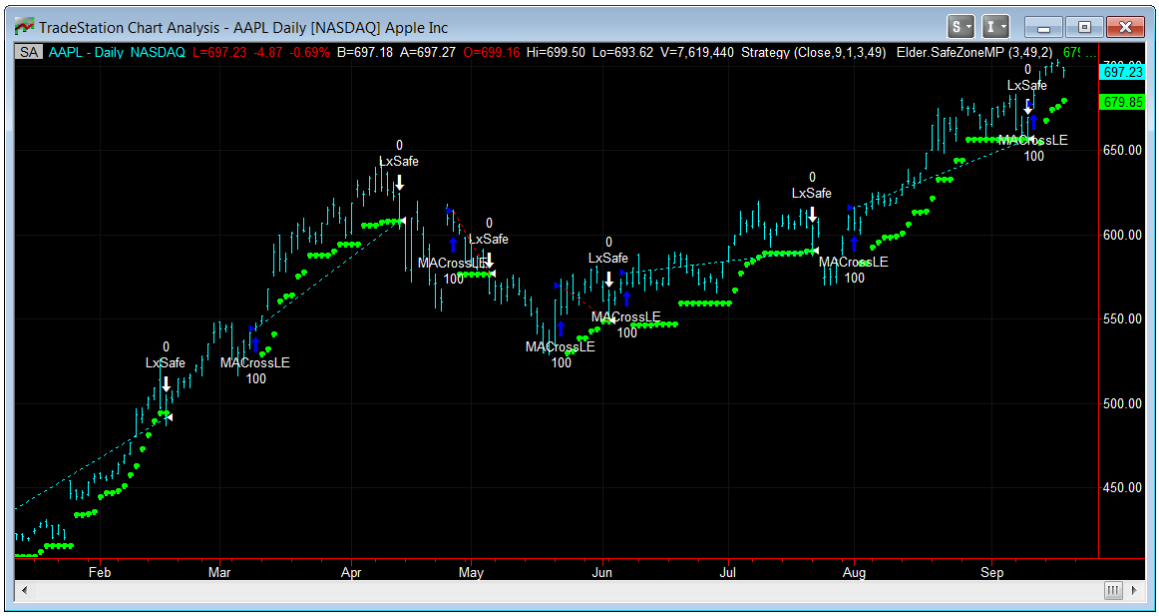
The indicator ***Elder.SafeZoneMP*** is a companion indicator for the ***Elder.SafeZone*** strategy. It only displays when a market position is open. If you want to see the effect of the SafeZone strategy, add Elder.SafeZoneMP with the same parameters as the Elder.SafeZone.



- SafeZoneFactor – This is the factor by which you multiply the level of market noise, computed by SafeZone, when calculating the SafeZone stop.
- LookBack – The number of bars to scan for calculating the noise level. This is set at 49 since 50 days is the default backtest period for most strategies.

The SafeZone strategy automatically provides protection on the first entry day of a trade by setting protective stops using the high and low of the previous day when no positions are open.

SafeZone Strategy and SafeZoneMP Indicator

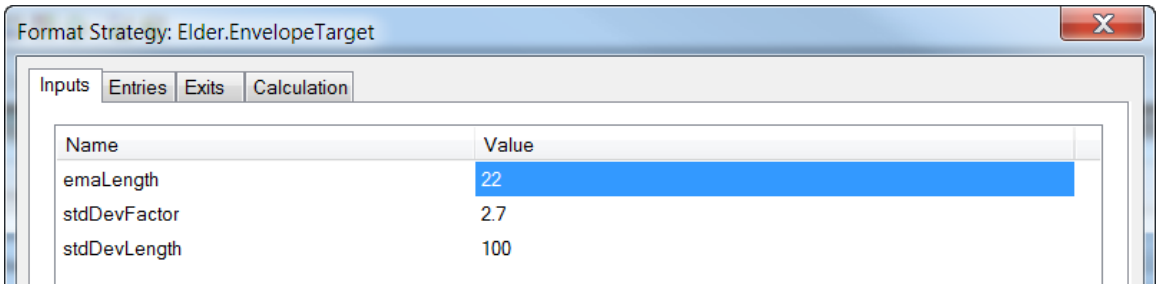


The above chart was created using the SafeZone strategy and SafeZoneMP indicator. The entries were created using the TradeStation supplied moving average cross strategy – merely to populate the graph. For the example we used only long trades, but SafeZone protects short trades as well.

Elder.EnvelopeTarget

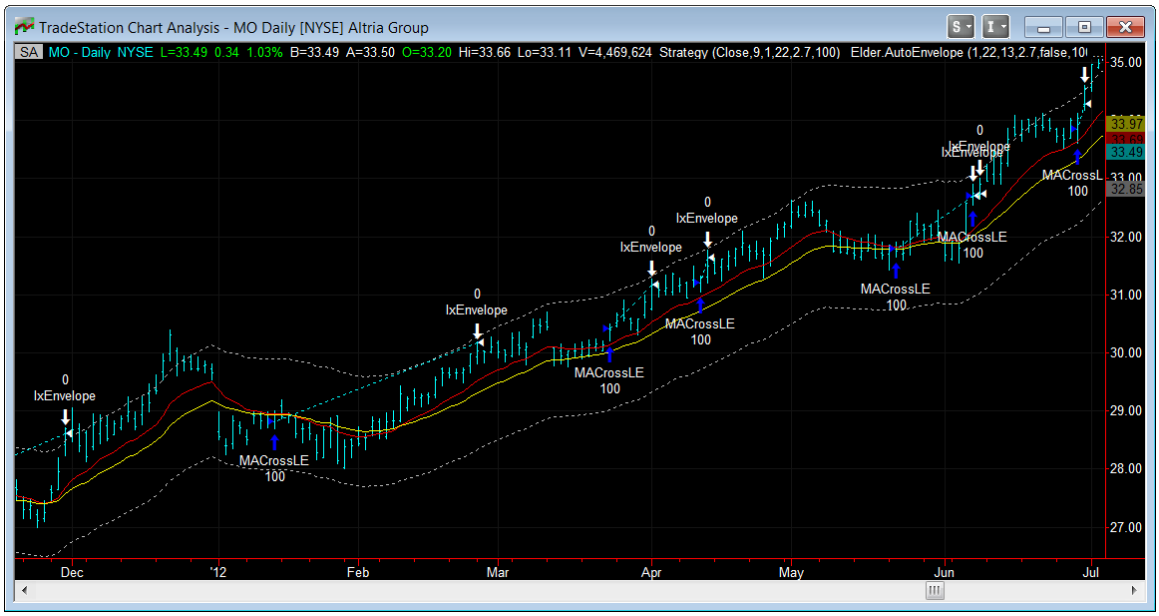
Elder.EnvelopeTarget is an exit strategy that uses the AutoEnvelope as a profit target, exiting when that target is hit. For visual monitoring, use the AutoEnvelope indicator with the same settings as Elder.EnvelopeTarget. Be sure to set that indicator's "ChangeWeekly" parameter to "true" because the strategy code uses this setting. The inputs must match the AutoEnvelope settings if you want the strategy to match the visuals.

Once again, please remember that this is an exit strategy. If you use it without an entry, nothing will happen.



- Inputs are the same as described in AutoEnvelope Indicator.

EnvelopeTarget Strategy with AutoEnvelope indicator

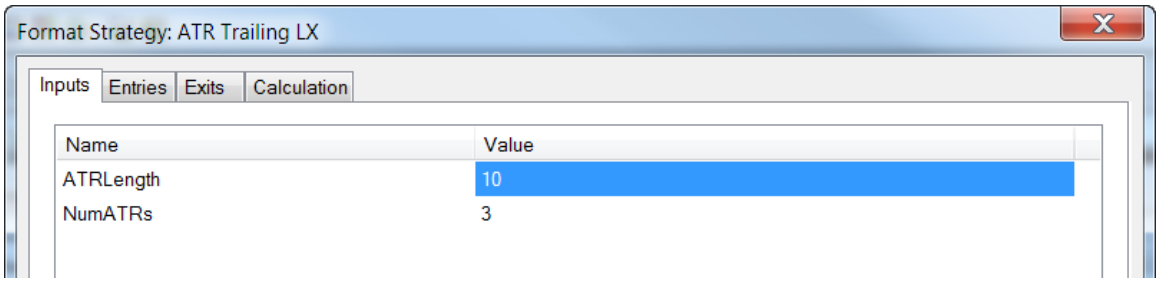


The chart above was built by mixing a Simple Moving Average Cross Strategy (standard in TradeStation) with the AutoEnvelope Strategy. The AutoEnvelope indicator was applied for better visualization.

Important: Using a strategy such as AutoEnvelope provides no downside protection. You should add a stop strategy, such as SafeZone.

Chandelier Exits

The Chandelier Exits, invented by Chuck LeBeau, are described in COME INTO MY TRADING ROOM. TradeStation comes with two strategies for implementing the Chandelier Exits, as originally described by Chuck LeBeau. They are named 'ATR Trailing LX' and 'ATR Trailing SX' which implement long and short exits respectively.



- ATRLength – Number of days used to compute ATR. Use 22 to follow the suggestion in the book.
- NumATRs – This is the factor for multiplying the ATR for computing the Chandelier.

Both strategies use the same parameters. The high (or low) value used in the calculation is the highest high (or lowest low) since the position was entered.

Chandelier Exits using ATR Trailing LX

Analysis Groups (previously called Templates)

Most people do not want to custom-build each and every chart. They use TradeStation templates to streamline their charting. To make a template from a chart, set up that chart exactly how you want it, then right-click and select “Save Analysis Group …” Give your group a name. When you want to create another chart, just right-click and choose ”Insert Analysis group” to add these indicators to your chart.

In this product, in the “Elder” workspace we have set up a weekly and daily charts. You can use them as templates by saving analysis groups on each of them.

Elder Weekly

Elder Weekly Analysis Group

Dr. Elder’s students are taught to ‘Always look at the weekly chart first!’ Here you see a 26-week EMA, a standard MACD-Histogram, and the 13-week Force Index with ATR Bands. The Impulse PaintBars are also added.

Elder Daily

Elder Daily Analysis Group

The Daily Template bars are colored using the Impulse PaintBars. The ImpulseRelease ribbon takes into account both the daily and the weekly Impulse trends. Note that it is reduced in size to a ribbon, you may have to do this manually when you format each chart. The MACD and a 2-day Force Index complete this chart.

Elder.Risk_Control

Risk Control using Radar Screen (new in Version 4)

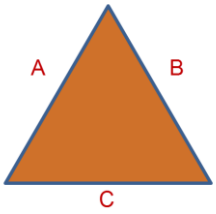
This tool will help you control risk in every trade (stocks or futures) by showing where to place stops and the maximum number of shares or contracts you may buy or sell short, depending on the dollar amount of risk you accept. It will also allow you to compare different risk management methods, such as tightening or loosening stops, increasing or decreasing trade size, etc.

Foundation

Risk control is essential for your survival and success. Controlling risk in every trade is just as important as finding attractive trades.

The principal rules of risk control have been laid out in detail in the book *The New Trading for a Living* (referred to as **N-TFL** throughout this text). They boil down to several essential points:

- Each trade requires three numbers: your entry, target and stop; without them a trade is not a trade but a gamble.
- Set your stops outside the range of normal market noise. One of the best measures of that noise is ATR (Average True Range). Place your stop at least 1.5 ATRs away from your entry. If using more than one timeframe for trading (i.e. weekly and daily), set the stop on the shorter timeframe.
- Move your stops only in the direction of your trade.
- Never risk more than 2% of your account equity on any trade; it is perfectly fine to risk less, but never more.
- Use "The Iron Triangle of Risk Control" to calculate maximum permitted size for any trade:



A = Your maximum risk for this trade in dollars (never more than 2% of your account).
B = The distance, in dollars, from your entry to your stop – your maximum risk per share.
C = Divide "A" by "B" to find the maximum number of shares you may trade. You may trade fewer shares, but never more.

The **Elder.Risk_Control** is a Radar Screen indicator that will help you implement these rules in TradeStation. You'll still need to supply the **discipline** to follow its signals. For help in developing discipline please join www.spiketrade.com

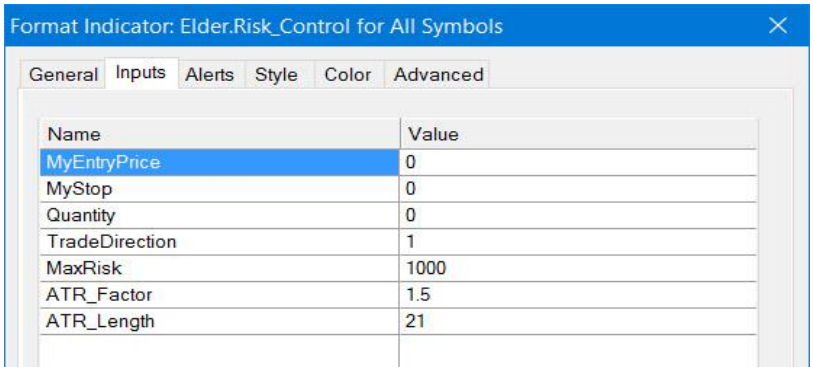
How to set up Risk Control

1. Create a Radar Screen window in your TradeStation and name it Elder.Risk_Control.
2. Right-click on any symbol in that window, select "Format All Symbols" and select the timeframe you trade in (choose the shorter of your two timeframes if you use Triple Screen – see **N-TFL**).
3. Right-click on the 'Last' column heading and choose "Insert Analysis Technique."
4. Choose the "Elder.Risk_Control" indicator and position it where you like. Its columns are fixed and cannot be moved.

Indicator Settings – Global Values

Radar Screen allows you to set indicator parameters globally for all rows OR individually for specific rows. The values you set globally will apply to all trades, but you can change them for any individual trade. We highly recommend setting your overall risk parameters **globally first** and then changing the specifics for any selected trades in their own rows.

To set your global risk parameters, right-click on the Elder.Risk_Control heading and choose "Format Elder.Risk_Control for all symbols". You'll see this pop-up:



Skip the first three lines, which deal with individual line items – we'll return to them later.

As you set the following global values, remember that you'll be able to change them for individual trades on their own lines:

- **TradeDirection** – the default is **1** for long. If you change it to **-1**, the default will be short. Select the one you use more often as the global value. When you trade in the opposite direction, you'll change that individual line.
- **MaxRisk** – this is the maximum risk you want to take on any single trade. The default of $1,000 would be appropriate if you trade a $50,000 account and use the 2% Rule (as

described in **N-TFL**). Adjust this number to your capital size and feel free to lower it depending on your risk tolerance.

- **ATR_Factor** – your stop will be set by multiplying ATR by by this factor (as described above). The bigger the ATR_Factor, the wider your stop will be, and vice versa.
- **ATR_Length** – the number of bars used to calculate the ATR, default is 21.

Indicator Settings for Specific Lines

Right-click in the Elder.Risk_Control cell on any line and choose "Format Elder.Risk_Control for your symbol to edit that line. The app gives you a choice to edit a **specific line** or all symbols. Please note that if you choose All Symbols, you'll override all existing rows (That's why you should not enter MyEntryPrice, MyStop or Quantity for All Symbols).

Editing a specific line overrides global settings only for that line. For example, the global trade direction may be set to Long, but you can change a specific line to Short. Another example: you can change the MaxRisk on any line to a very low number to reduce your dollar risk for a specific trade – for example, when testing a new technique. On the other hand, raising the ATR factor for a specific trade would give that trade more wiggle room.

A Basic Plan for Risk Control

A basic plan gives you a stop and the maximum number of shares or futures contracts you may trade within the risk limit you've set. It is based on global parameters, unless you change them for a specific line.

When you type a ticker into a line, the program uses your global parameters to calculate the maximum permitted trade size and displays it in white in the Quantity column (If trading short, quantity will be negative). This basic trade plan will show these default values in white:

- Entry – the current Last price.
- Stop – the value from the ATR Stop column.
- Quantity – the calculated maximum quantity – feel free to reduce but not to increase it.

	Symbol	Interval	Last	ATR Stop	Stop	Entry	Quantity	Risk	Net ...	Net %...	Bid	Ask	High	Low	Volume To...
1	AMZN	Daily	599.10	577.01	577.01	599.10	45	$1,000.00	5.24	0.88%	599.08	599.26	603.24	595.00	3,476,486
2	ABT	Daily	41.73	40.67	40.67	41.73	189	$200.00	0.26	0.63%	41.72	41.73	41.94	41.49	2,735,173
3	FB	Daily	114.92	111.72	111.72	114.92	312	$1,000.00	-1.22	-1.05%	114.92	114.93	116.99	114.36	30,774,900
4	HRL	Daily	43.91	45.02	45.02	43.91	-899	$1,000.00	-0.49	-1.11%	43.90	43.91	44.68	43.48	2,044,284
5															
6															

In the screen above, the global settings were set for long trades and $1000 risk.
Row 2 shows a specific trade risk lowered to $200.
Row 4 shows trade direction changed to short.

Entering trade-specific data

Go to the line you want to edit and right-click in the Elder.Risk_Control cell. Choose "Format Elder.Risk_Control for your symbol to edit that line. Input your entry, stop and quantity. These are the top three entries, and they need to be filled in for every trade. Due to TradeStation naming restrictions Entry is named MyEntryPrice and Stop is named MyStop on the entry screen. You are allowed to enter only one or two of these three when exploring your options as described below. You must enter all three to finalize a trade. Note that the values you enter will be displayed in yellow.

Beyond the basics: exploring your options

You may explore your risk control options by drafting more than one plan for a trade. Do it by entering only one or two of the three parameters (Entry, Stop, and Quantity). The parameters you enter will be displayed in yellow.

- Entering a Stop is useful if you want to set a non-ATR stop, for example a point below a support level. If you input both a Stop and Entry, the app will show you the permitted Quantity.
- Entering an Entry is useful if you are going to enter with a limit order.
- Entering the Quantity changes the calculation entirely. Now the program uses the parameters to calculate the risk for the trade. If the risk exceeds your entered maximum risk, the risk column will be highlighted in red.

From a Plan to a Trade

To activate your plan for a specific stock or a future contract and turn it into a trade, you need to fill the three boxes on a trade line: Stop, Entry and Quantity.

- Entry: type in your actual entry.
- Stop: copy the number for the ATR Stop or your chosen stop.
- Quantity: use the number calculated or a lower one if you like.

The Elder.Risk_Control considers a trade open when the Stop, Entry, and Quantity for that symbol have been filled in. Once the program has this information, it reacts by:

- Moving the ATR Stop only in the direction of the trade
- Displaying the entered quantities in yellow
- Displaying the open risk in red

As a trade moves in your favor and the ATR stop moves with it, your risk gradually decreases. The app displays the latest ATR Stop in green when it has moved in your direction. You should update the stop in the app as well as in the actual trade to get an accurate open risk figure for the trade.

This risk for each of your open trades is displayed in red which allows you to easily monitor your total open trading risk. Remember that the risk shown on the screen only changes when you

update your stop. Once your stop moves beyond entry point, the risk for that trade becomes zero. You can still lose you gains, but the trade has become successful. Needless to say, on rare occasions a stock may gap across your stop, and the loss will be more than the indicated risk.

	Symbol	Interval	Last	Elder.Risk Control				
				ATR Stop	Stop	Entry	Quantity	Risk
1	QCOM	Daily	51.47	50.39	50.39	51.78	700	$973.00
2	AMZN	Daily	598.00	575.91	575.91	598.00	45	$1,000.00
3	AMZN	Daily	598.00	575.91	570.00	598.00	36	$1,000.00
4	AMZN	Daily	598.00	575.91	575.00	595.00	50	$1,000.00
5	PYPL	Daily	39.04	40.85	41.05	41.44	-500	$0.00
6	HRL	Daily	43.95	42.90	42.90	43.05	900	$135.00
7	ABT	Daily	41.65	40.59	40.59	41.65	189	$200.00
8	FB	Daily	114.65	111.45	111.45	114.65	312	$1,000.00
9	FB	Daily	114.65	111.45	111.45	114.65	200	$641.00
10	HRL	Daily	43.95	42.84	42.05	43.15	800	$880.00
11								

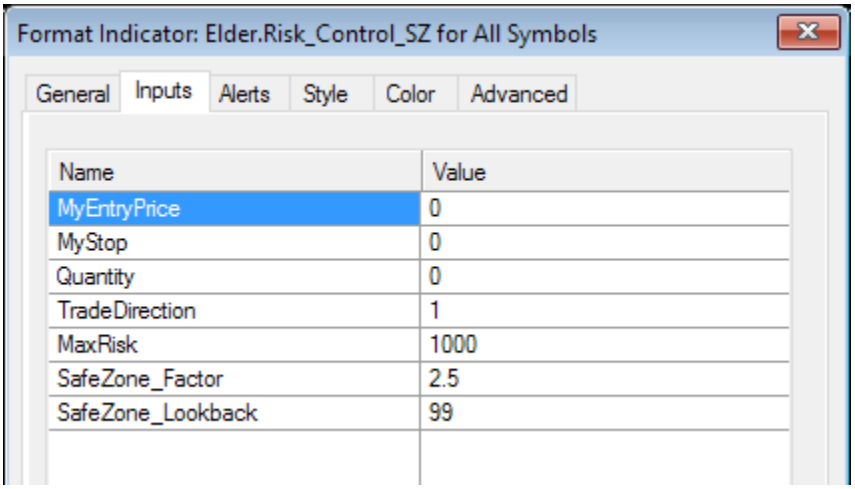
Lines 1, 5, 6 and 10 show open trades with all values entered. You can easily spot the open trades as their Risk cells are displayed in red. Lines 5 and 10 show suggested stop changes in the direction of the trade.

Line 9 shows how adjusting the quantity down calculates the reduced risk.

Lines 2, 3 and 4 show how you can test different approaches to a trade plan. Line 3 adjusts the stop, while line 4 also suggests entering with a limit order. You can enter as many variations as you like, or just continually update a single line till it meets you requirements.

Risk Control using SafeZone

If you want to use SafeZone stops, then Elder.Risk_Control_SZ indicator for Radar Screen provides the same features with the suggested stop calculated using the SafeZone methodology.



The first five parameters are the same as described above in the section on Risk Control.

- **SafeZone_Factor** – The multiple of the noise level calculated for SafeZone. Increasing this loosens the stop values and decreasing this tightens them. Change this to accommodate your trading style.
- **SafeZone_Lookback** – The number of periods the SafeZone uses to calculate the average noise level.

Risk Control using Alternate Stops

Either Elder.Risk_Control indicator allows you to use any method you like to set your stops. While they suggest stops and calculate plans based on those, the stop you enter is the one that is used and it can be calculated using any method you choose. If you use an alternate method to set stops you may right-click on the calculated stop column heading and use the “show/hide plots” entry to hide it.

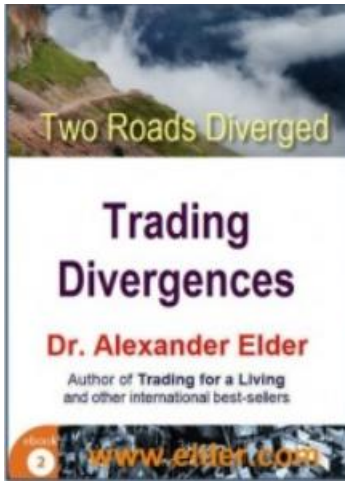
Scanners (Elder-disk Enhanced version)

Please note that scanners are advanced tools. You need to have a Radar Screen in your TradeStation in order to be able to scan (contact TradeStation to find out what conditions your account has to meet to qualify for a free Radar Screen). Furthermore, our scanners are included only in the **Enhanced** version of the Elder-disk. If you have a regular Elder-disk and would like to upgrade, please contact our office.

MACD Semi-Automatic Divergence Scanner

This Scanner is a market research tool – no trading advice is given or implied. As with any tool, when using it to find trades you must back it by proper risk management, including stops and position sizing.

Introduction and Logic



Divergences are disagreements between the patterns of prices and indicators. They are among the most powerful signals in technical analysis. Dr. Elder addressed divergences in all of his books, and he recently dedicated an entire e-book to them, with dozens of charts that show how to identify and trade divergences.

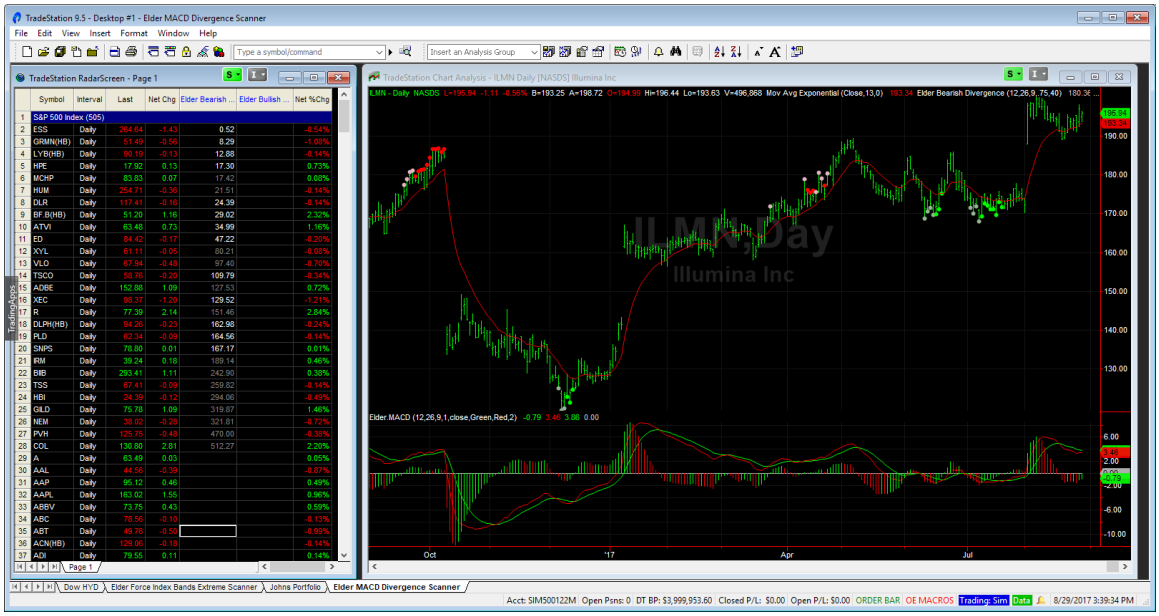
Since true divergences rarely occur, it makes sense to scan a large number of trading vehicles when you look for these important patterns.

There's always been a great deal of interest among traders in scanning for divergences. All developers of had to face a frustrating problem: divergences, which are so clearly visible on the charts, are extremely difficult to recognize using automatic scanners. Some of the top trading programmers told us that building a MACD divergence scanner was the hardest task of their professional lives – and they were never fully satisfied with the results. No scanner we saw worked as well as the human eye. All scanners miss many good divergences, while giving many false positives – misidentifying divergences that do not really exist.

Recent research into trading psychology explained this dilemma. Divergences are analog patterns, while computer scans are digital. If good automatic divergence scanners are ever built, they'll be built using 'fuzzy logic.'

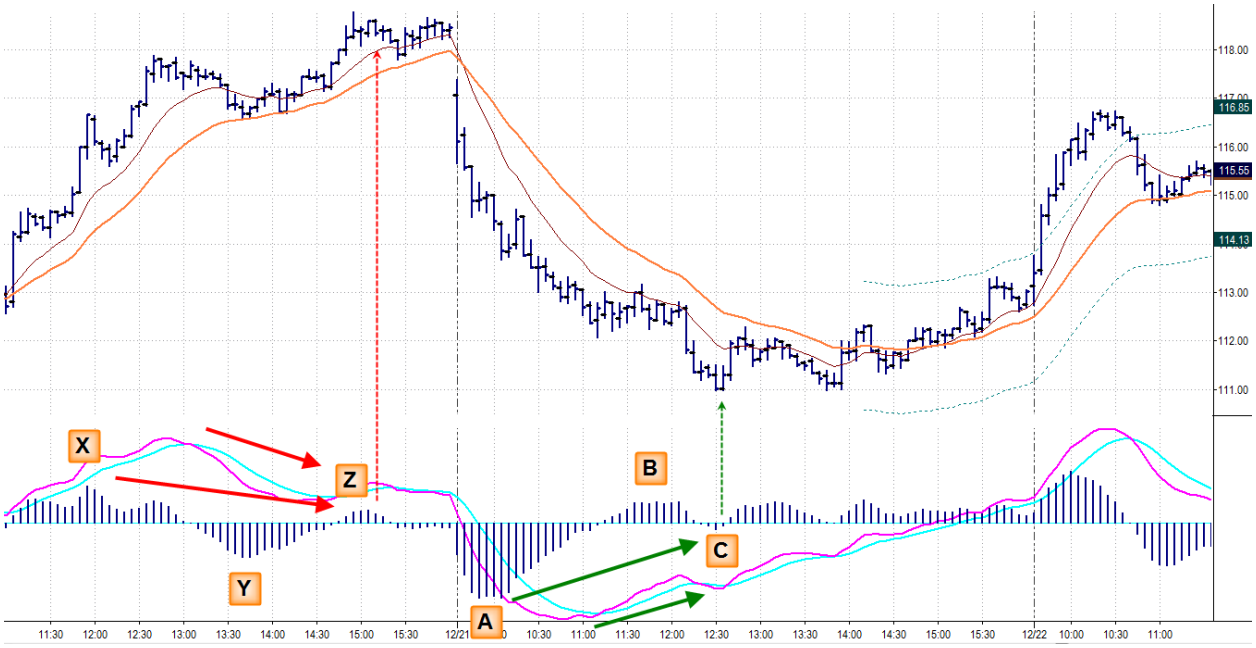
Version 4.1 update:

We have improved the display of MACD Semi-Automatic Divergence scanner. Until the second peak or valley in the MACD-Histogram actually occurs, the divergence is only potential. We now display this as a less intense color dot on the charts or grey on the radar screen. The confirmed divergences are displayed in the original color. This provides a quick method of seeing whether a divergence is confirmed.



Rationale

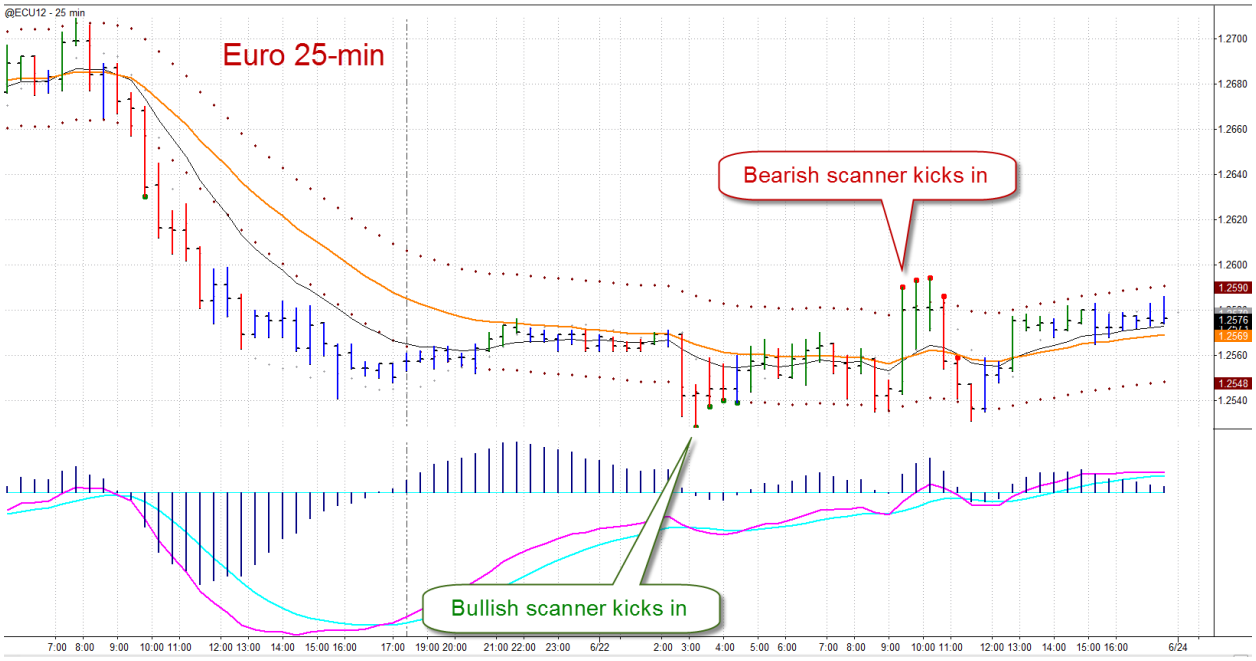
While writing his e-book on divergences, Dr. Elder came up with a new concept. Instead of trying to create an automatic scanner, why not make a semi-automatic one that will signal when a divergence may be developing. Use the power of digital processing to identify market conditions in which divergences are likely to occur – and then switch to a visual scan of those charts. We created this program to alert you when a divergence may be developing, so that you can start monitoring that chart.



Here you see the classical pattern of a **bearish divergence**: tops X and Z with a MACD-Histogram crossover below the centerline Y between them. Price top Z is higher than X, MACD-Histogram top lower.

Here's a classical pattern of a **bullish divergence**: bottoms A and C with a MACD-Histogram crossover above the centerline B between them. Price bottom C is lower than A, MACD-Histogram top C lower than A.

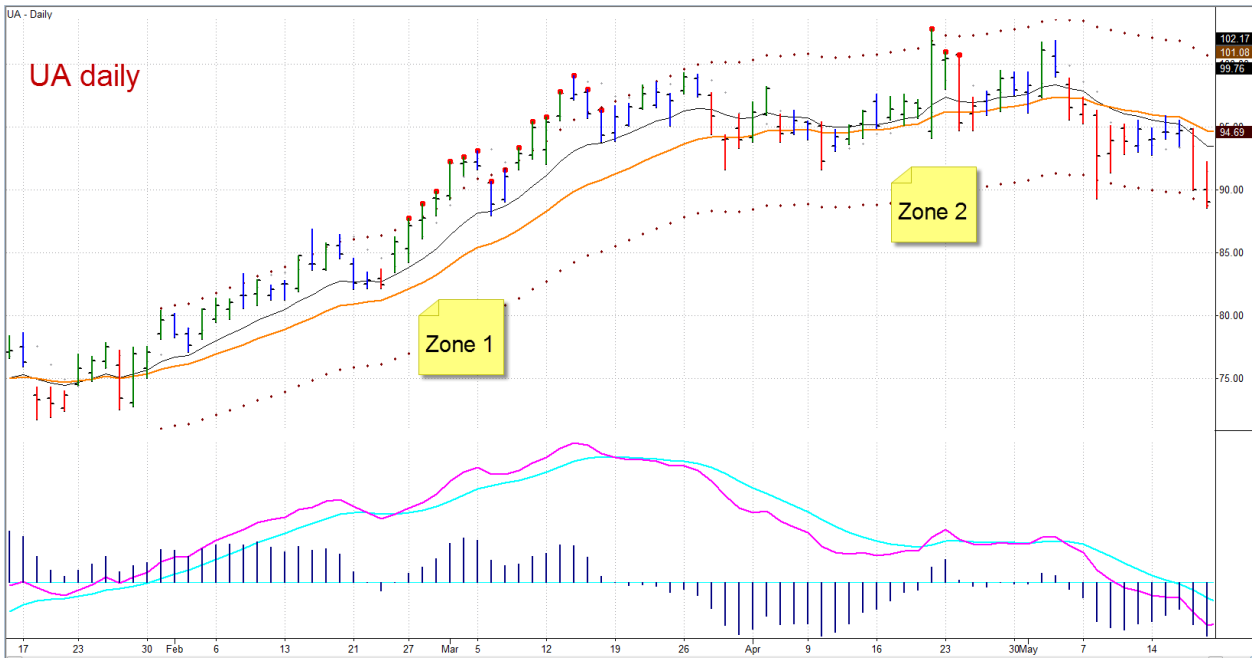
Scanner Examples



This 25-minute chart of the Euro shows how early in the day the green dots of Semi-Automatic Scanner warn you that conditions are ripe for a bullish divergence. Prices are lower than they have been at the previous bottom, while MACD-Histogram had crossed above the zero line and is now declining to a much more shallow level. These green dots alert you to a trading opportunity on the long side.

During a sharp rally later in the day, red dots appear. They alert you to the fact that a bearish divergence may be building: prices are higher, while MACD-Histogram had crossed below zero and is now rising to a much lower level in a feeble rally.

MACD Divergence Semi-Automatic is not an automatic trading method. It generates alerts when market conditions are ripe for a divergence. Once you see its signal, you need to mobilize your skills and trading methods to take advantage of a divergence if one is completed.

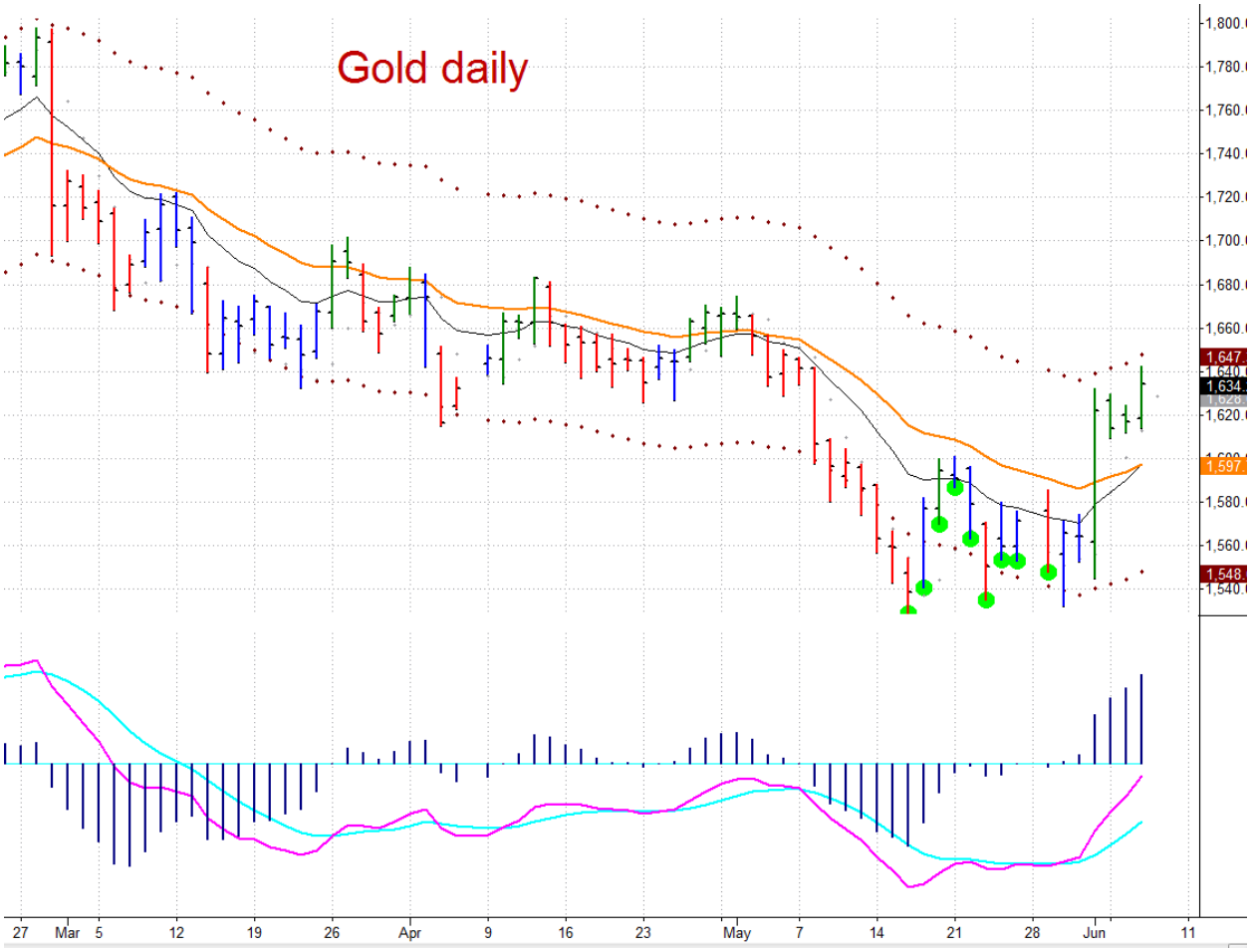


Our semi-automatic scanner marks potential bearish divergences by placing red dots above the relevant bars. It marks bullish divergences by placing green dots below relevant bars.

You may apply our semi-automatic scanner to ant chart or any group of charts. For example, you may scan all stocks or futures in your watchlist, or all stocks in the Nasdaq100, S&P500, and so on.

Our scanner works in any timeframe – as easy to apply to a weekly as to a 5-minute chart. Just keep in mind the principle of Triple Screen: make your strategic decision to go long or short on a long-term chart, then a tactical decision where to enter on a short-term chart.

You need to use judgment when operating **MACD Divergence Semi-Automatic**. On this chart of UA, red dots appear in Zone 1, warning you of a potential bearish divergence, but their quality is low. The histogram is almost as high as before the break (which was very shallow), and MACD Lines are hitting new highs, showing that bulls are strong. The signals in Zone 2, however, are superb. The stock breaks out to a new high but cannot hold it. The breaks between two MACD-Histogram tops is deep, while the second peak is puny and MACD Lines are much lower. Now's the time to use your trading methods to sell short and benefit from a sharp break.



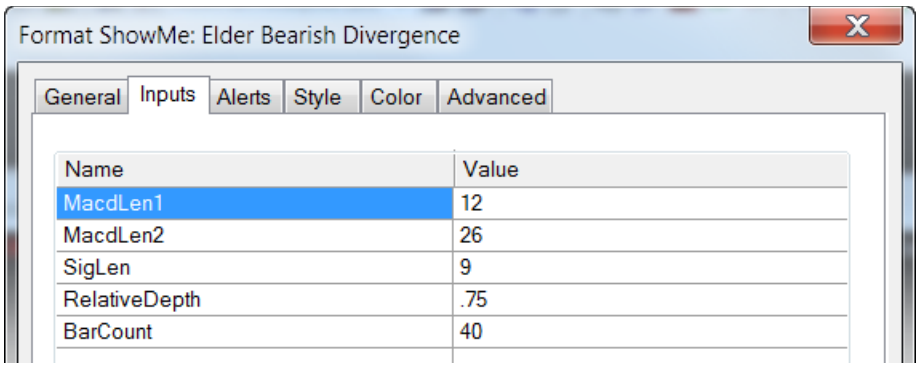
Bullish green dots appear on the chart of gold after its MACD-Histogram breaks out above the zero line and then begins to sink to a more shallow bottom. Now's the time to use your trading skills to position long near the lows in gold.

How to use Radar Screen to find potential MACD divergences

Load the list of tickers you wish to scan into Column A. This can be a list of components of an index, such as S&P500 or Nasdaq100 (all available in TradeStation) or your personal stock list. Make sure that the correct time interval is selected (right-click on any ticker and select Format All). Click on Elder Bullish (Col. B) or Elder Bearish (Col. C) to bring the relevant list to the top and afterwards review those tickers one at a time.

Using MACD Divergence Semi-Automatic in a chart

To add **MACD Divergence Semi-Automatic** to a chart, simply right-click on a chart and choose “Insert analysis technique”. Then select either “Elder Bullish Divergence” and/or “Elder Bearish Divergence.”
Important: You’ll find these under the ShowMe tab.



You can change the following parameters on the Elder Divergence ShowMe’s.

The first three parameters define the MACD Histogram used to calculate the divergence. It is important that these match the parameters of the MACD Histogram you plot on the chart.

Relative Depth is the ratio between the peaks or valley of the MACD Histogram defining the divergence. The default is .75 which means that any secondary peak that exceeds 0.75 times the primary peak (75%) is eliminated from consideration.

BarCount defines the maximum number of bars between the primary peak (valley) and the divergence.

Using MACD Divergence Semi-Automatic in Radar Screen.

If you have Radar Screen enabled in TradeStation, you can use the "Elder Bullish Divergence" and the "Elder Bearish Divergence" ShowMe indicators to find securities that are currently building up divergences. The scanner column displays a value only if a potential or actual divergence is present. The value displayed shows higher values when the divergences are visually greater.

	Symbol	Last	Elder Beari...	Elder Bulli...	Net ...	Net %...	High	Low	Bid	Ask	Interval	Volume To...
1	S&P 500 Index (501)											
2	NEM	39.65		492.81	0.76	1.95%	40.20	39.34	39.64	39.65	Daily	2,760,134
3	HRS	44.49		154.20	-0.33	-0.74%	44.89	44.47	44.50	44.52	Daily	360,744
4	JCP	15.53		141.19	0.48	3.19%	15.70	14.84	15.53	15.54	Daily	18,415,761
5	ROST	56.04		106.73	-0.14	-0.25%	56.49	55.95	56.03	56.05	Daily	471,851
6	AVB	124.00		72.60	-0.02	-0.02%	124.16	123.55	123.99	124.01	Daily	431,297
7	A	42.90			0.09	0.21%	43.00	42.69	42.89	42.90	Daily	947,771
8	AA	8.61			-0.06	-0.69%	8.70	8.58	8.61	8.62	Daily	4,351,165
9	AAPL	430.90			-6.97	-1.59%	438.88	429.28	430.81	430.90	Daily	7,910,277
10	ABC	48.66	148.59		0.11	0.23%	48.75	48.44	48.65	48.66	Daily	319,977
11	ACN	77.99	29.62		-0.31	-0.40%	78.40	77.88	77.98	78.00	Daily	460,174
12	ADBE	41.22	36.12		-0.26	-0.63%	41.53	41.15	41.22	41.23	Daily	1,340,578
13	ADI	46.39			-0.05	-0.11%	46.64	46.22	46.38	46.39	Daily	529,793
14	ADM	32.44			-0.02	-0.06%	32.69	32.30	32.43	32.44	Daily	1,489,092
15	ADP	63.83	130.88		-0.04	-0.06%	63.98	63.77	63.82	63.83	Daily	767,953
16	ADSK	39.95			-0.41	-1.02%	40.37	39.72	39.95	39.96	Daily	640,017
17	AEE	33.77			-0.16	-0.47%	33.94	33.77	33.77	33.78	Daily	488,562
18	AEP	47.26	218.70		-0.13	-0.26%	47.52	47.20	47.26	47.27	Daily	528,415
19	AES	12.51	81.61		-0.01	-0.04%	12.63	12.46	12.50	12.51	Daily	1,822,685
20	AET	50.50			0.60	1.20%	50.67	49.60	50.50	50.51	Daily	1,398,780
21	AFL	50.67			-0.38	-0.74%	50.99	50.60	50.67	50.68	Daily	1,025,524
22	AGN	109.92			-0.57	-0.52%	110.82	109.77	109.92	109.93	Daily	371,524
23	AIG	39.16			-0.31	-0.79%	39.60	38.91	39.15	39.16	Daily	5,833,455
24	AIV	30.07			-0.15	-0.50%	30.20	29.95	30.07	30.08	Daily	339,592
25	AIZ	43.83	249.26		0.26	0.60%	43.83	43.41	43.82	43.84	Daily	210,018
26	AKAM	34.63			-0.97	-2.73%	35.54	34.55	34.62	34.64	Daily	3,769,571

The above screen shows a RadarScreen scanning all component stocks of the S&P 500 for daily Bearish and Bullish divergences. The table is shown sorted on Bullish divergences and shows only 5 while selecting Bearish divergences showed 156, a comment on the current market.

Important: If you want to change the search parameters in RadarScreen you must right-click on the column heading and select Format "*Indicator Name*" for All Symbols. Changing parameter on the chart or a single symbol will not affect a scan. If you change the parameters on the Scanner, you must make the identical one on the chart to get matching results.

Using Force_Index with ATR Bands in Radar Screen

Force Index scanner finds stocks or futures whose 13-bar EMA of Force Index extends outside of its 3-ATR channel – a zone of unsustainable pressure where reversals tend to occur. This scan visually marks Force Index excursions outside of its 3-ATR channel by yellow dots.

Note that this scan delivers best results on the weekly charts. Notice also that some of its best signals occur in clusters. A cautious trader will wait until a cluster of yellow dots is followed by a price bar which is not accompanied by such a dot. It shows that the volume extreme has burned itself out and a reversal is probably at hand.

How to set up Radar Screen to find Force Index extremes

1) Load the list of tickers you wish to scan into Column A. This can be a list of components of an index, such as S&P500 or Nasdaq100 (all available in TradeStation) or your personal stock list.
2) Make sure that the correct time interval is selected in Col B (right-click on any ticker and select Format All). Weekly format is especially recommended.
3) Right-click on the headings, choose Insert Analysis Technique , choose "Elder.Force_Index_Band_Extreme" NOTE: - This is a SHOW ME
4) Click on Elder Force Index Band Extreme (Col. C) to bring the relevant lists to the top. Notice that in this scanner bullish and bearish lists immediately follow each another, marked by different colors. To switch their positions and bring either bullish or bearish to the top, double-click the heading of Col. C. Afterwards review those tickers one at a time.
5) The numbers in this column are the bars since the excursion occurred. You can adjust the maximum by editing the indicator.

Support

Elder-disk for TradeStation, version 4.0

For information on other software, videos and books for traders, as well as Traders' Camps, please contact

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John Bruns
tech@elder.com

John is also available for private consulting and custom programming – please inquire directly if interested.

If your email address changes, please advise us at info@elder.com – we need your address to offer you our latest updates.

We would like to take this opportunity to thank Fred Schutzman, the programmer of the original Elder-disk. He was generous with his time in helping the new programmer master TradeStation. He also was kind enough to donate many of the original indicators from version 1.0 TRADING FOR A LIVING.

Books

We recommend the following for a better understanding of tools on this Elder-disk: