

Elder-disk Scanners for TradeStation

version 4.0 (for TradeStation v9.5 and newer)

Thank you for purchasing Elder-disk Scanners. Scanners provides only the scanning tools and the divergence studies from the original Elder-disk..

This software is designed for use with **TradeStation** online. You must be a registered user of TradeStation Software to use this disk. These 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.

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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.

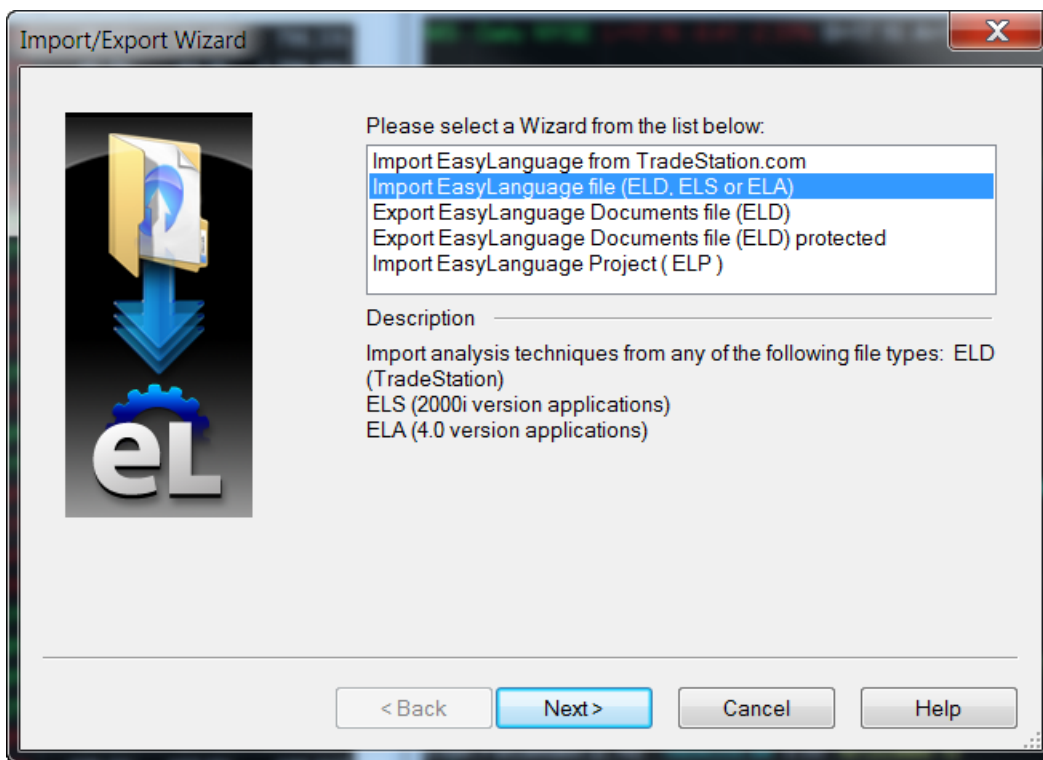
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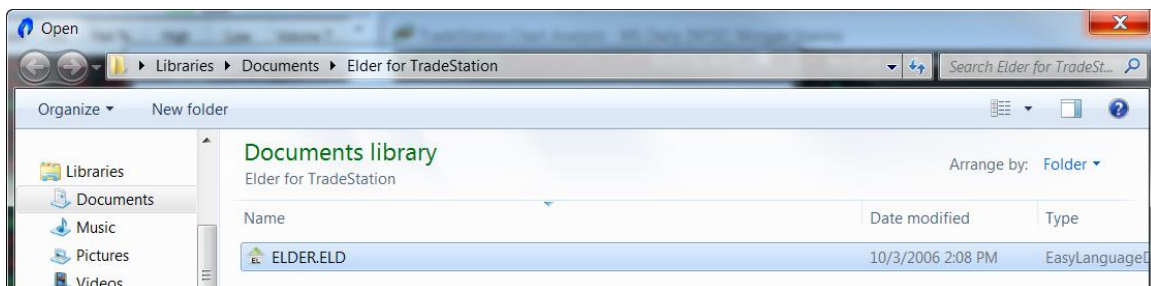
Loading the Software

The folder you have downloaded contains the Elder-enhanced.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

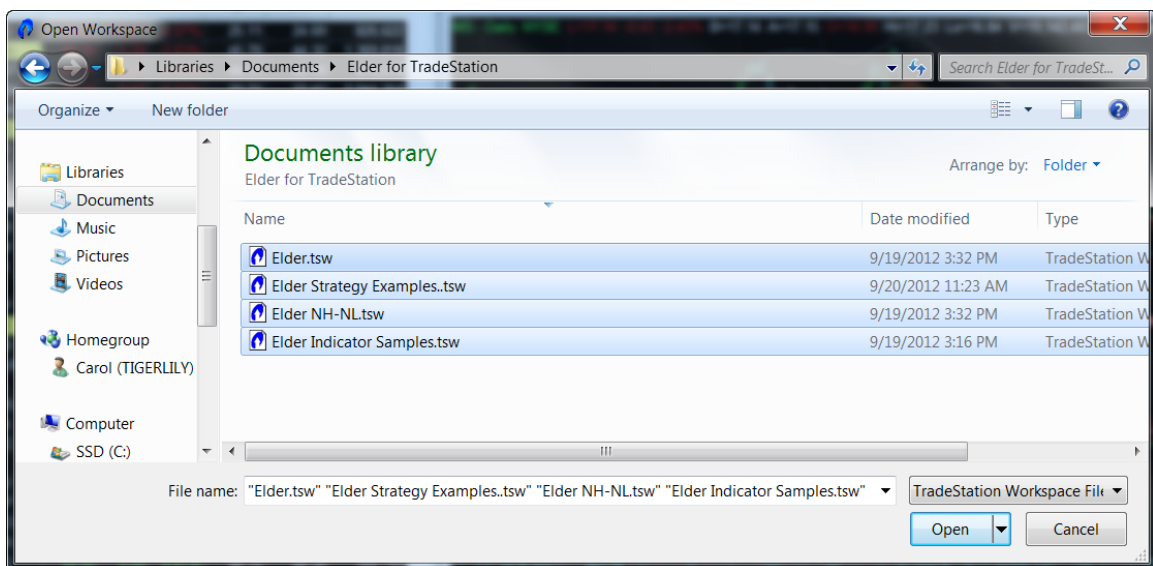


Unless you have previously purchased an Elder-disk or have created your own studies with identical names (“Elder...”), you will not have any conflicts. If you have conflicts, the program will ask you whether you want to install over the previous study. You must answer Yes, but if you want to keep your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

NOTE: Scanner users receive only the eld file: “Elder_Enhanced.eld” Load it using the described 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 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.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.

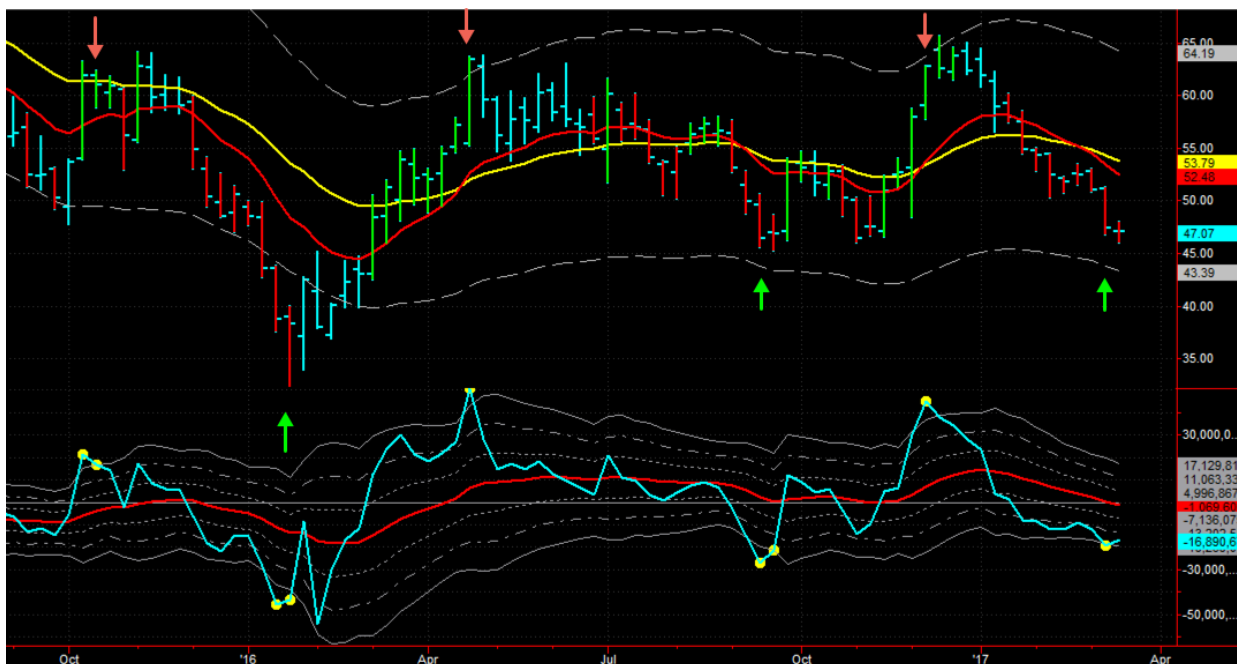
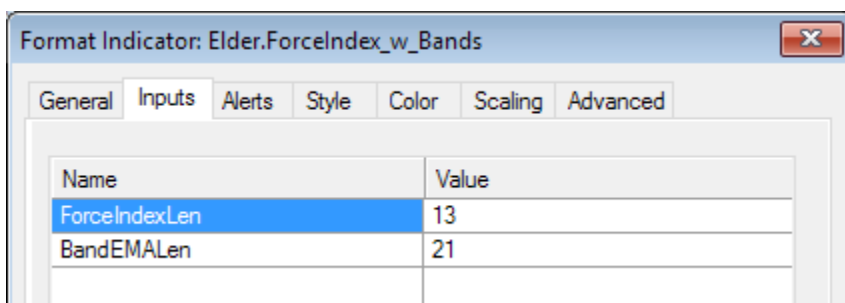


Chart: HES weekly, Force Index smoothed by 13-bar EMA. Red and green arrows mark where 13-week Force Index extremes identified tops and bottoms.

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

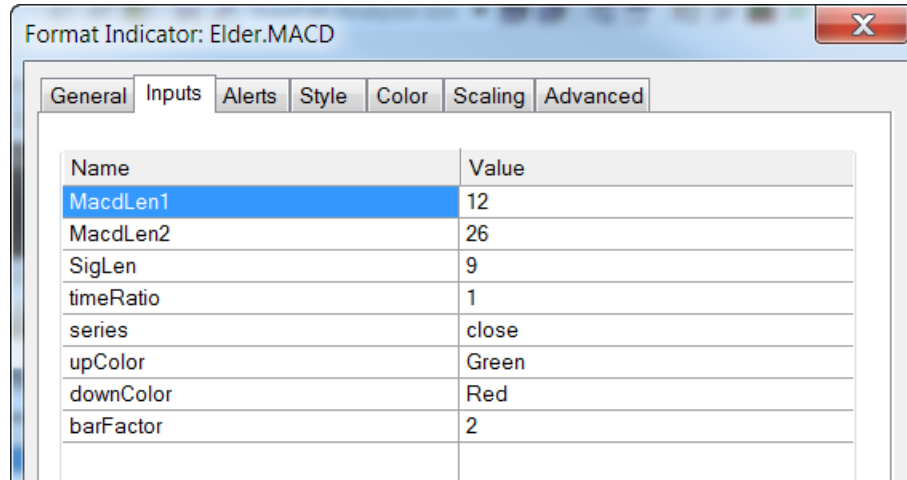
To prevent any extreme value from flattening the rest of the plot, Force Index with ATR Channels is programmed to truncate values at the 4-ATR level.



- 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.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



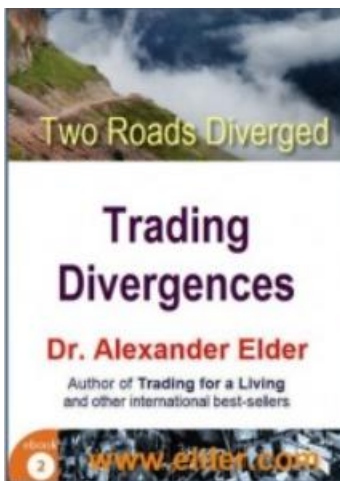
Scanners (Elder-disk **Enhanced version**)

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.

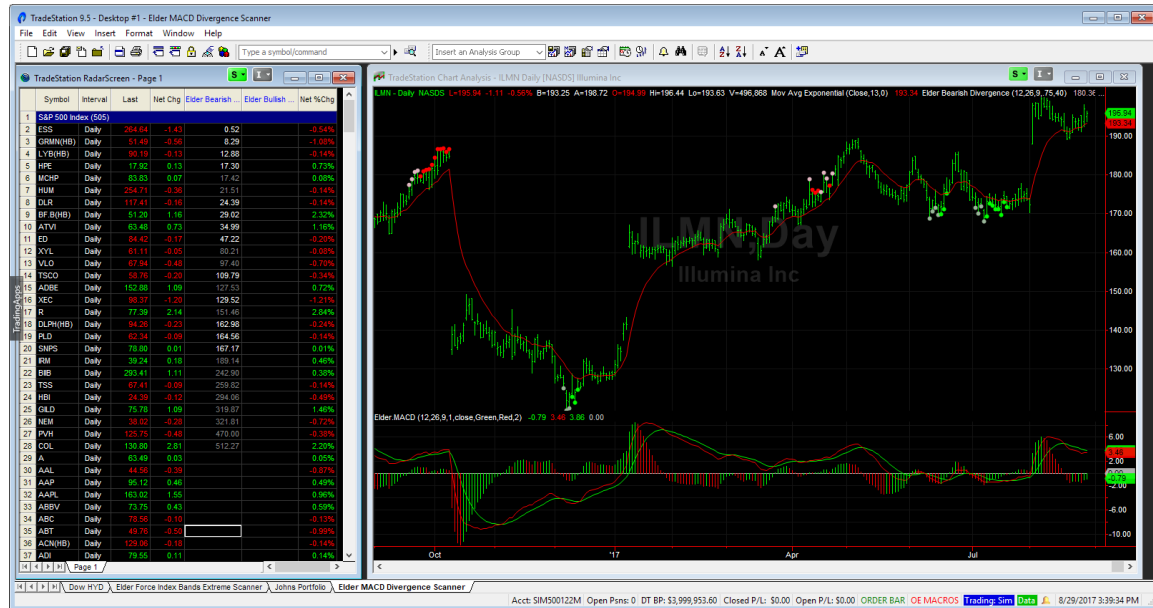
Since true divergences rarely occur, it makes sense to scan a large number of trading vehicles when you look for these important patterns.

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.'

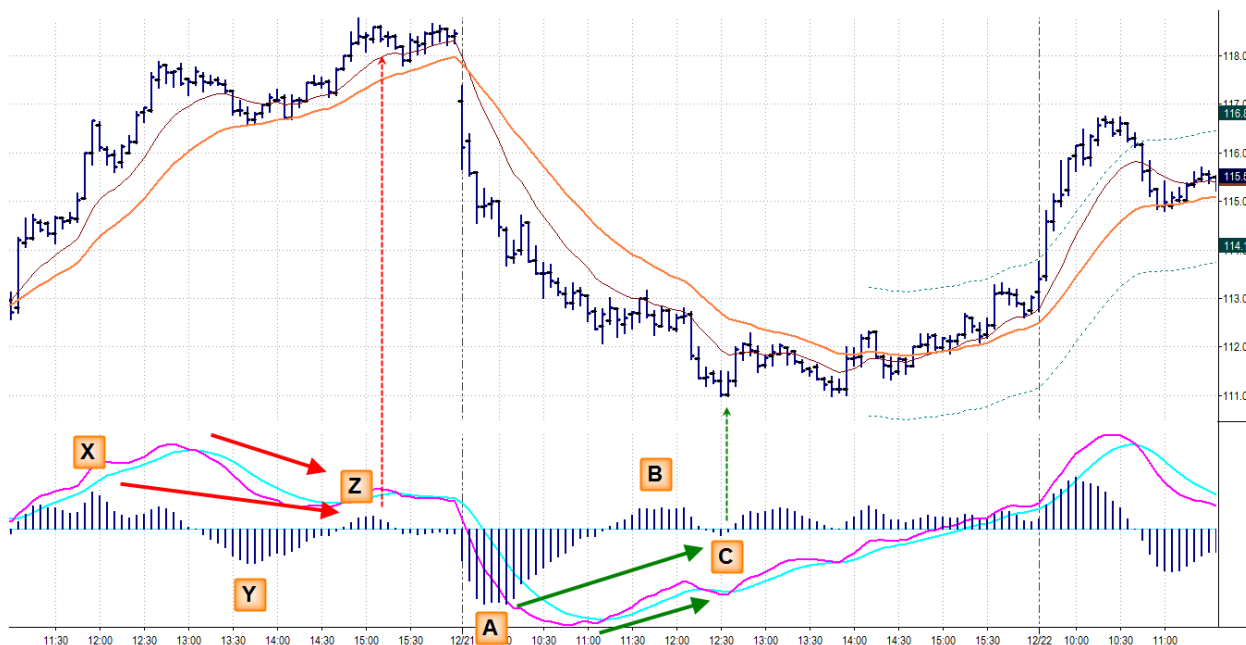
Version 4.1 update:

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

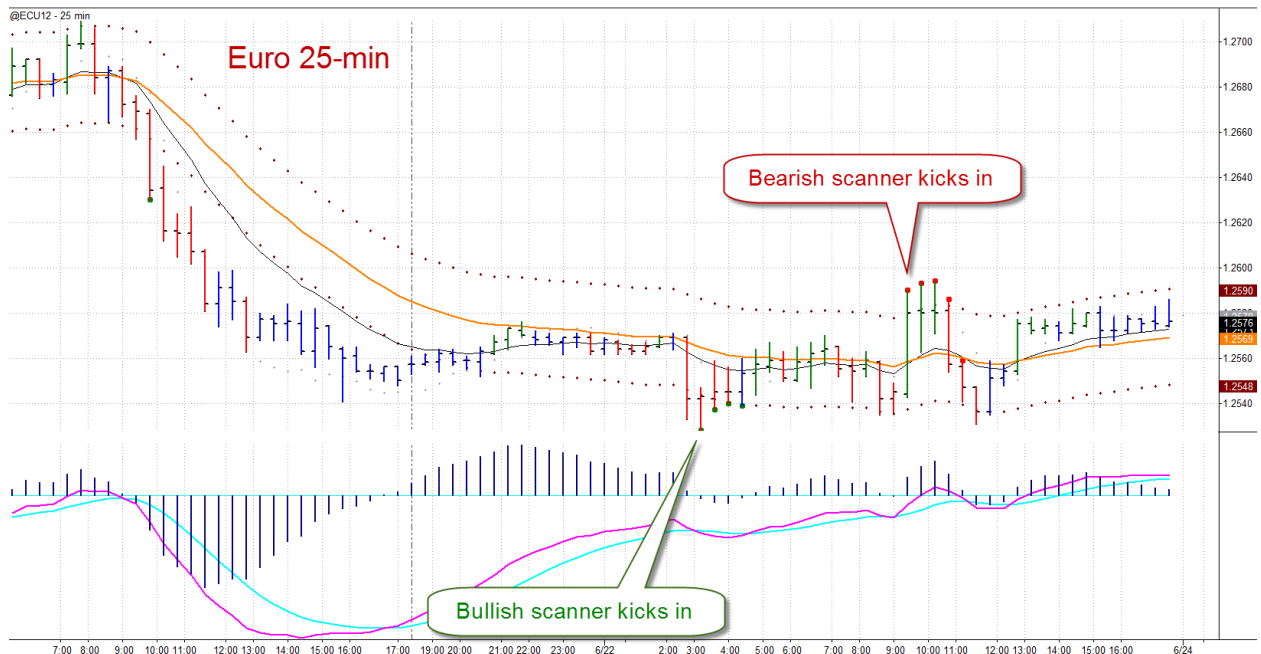
While writing his e-book on divergences, Dr. Elder came up with a new concept. Instead of trying to create an automatic scanner, why not make a semi-automatic one that will signal when a divergence may be developing. Use the power of digital processing to identify market conditions in which divergences 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.

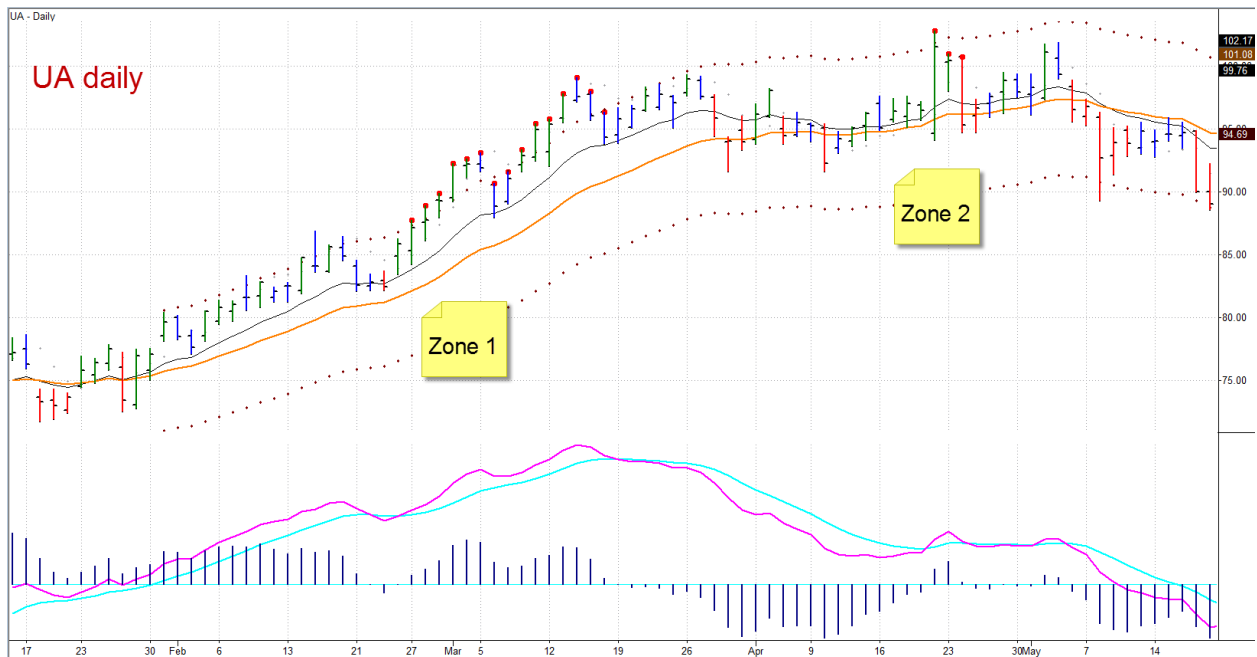
Scanner Examples



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.

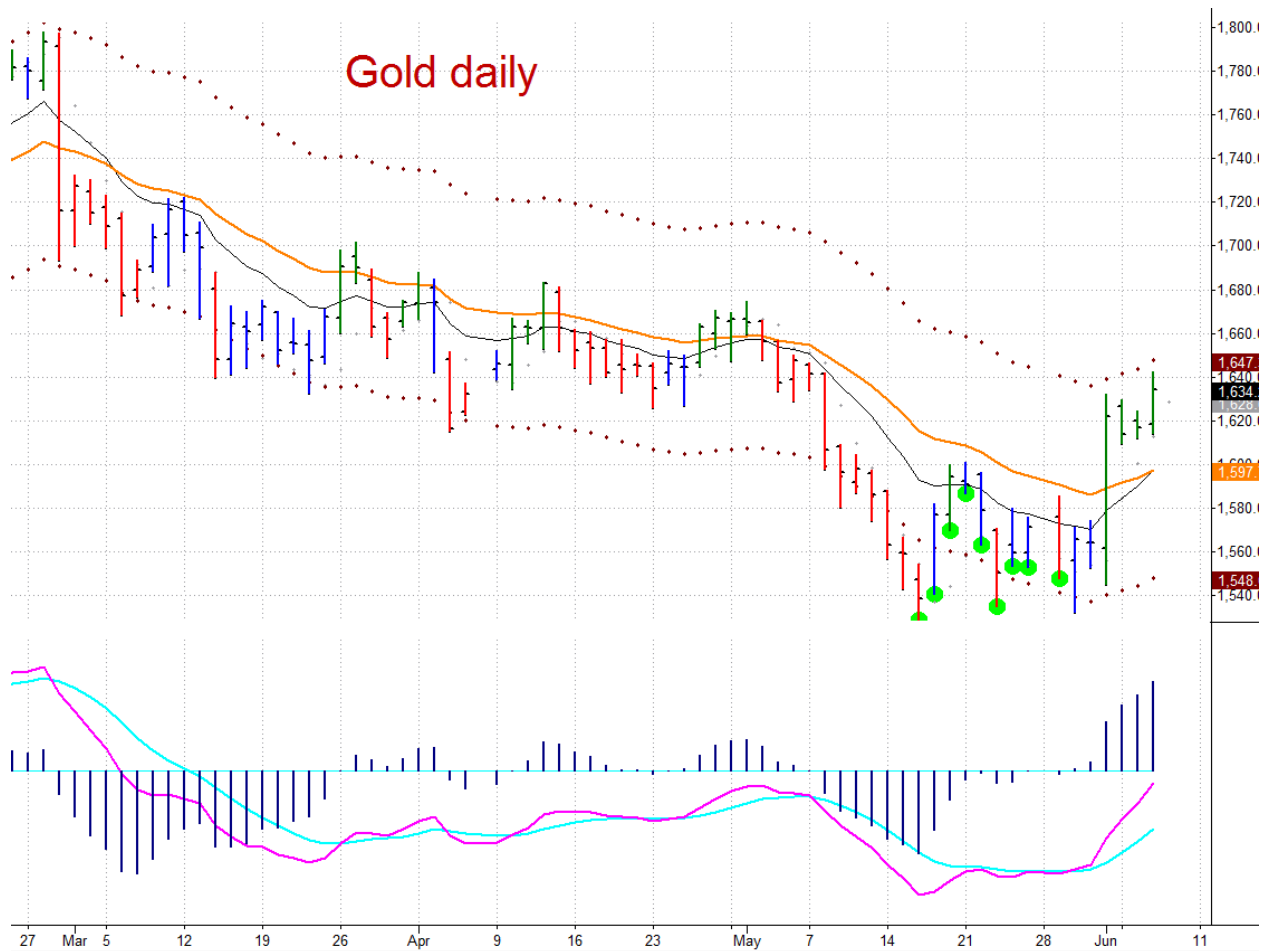


Our semi-automatic scanner marks potential bearish divergences by placing red dots above the relevant bars. It marks bullish divergences by placing green dots below relevant bars.

You may apply our semi-automatic scanner to any 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



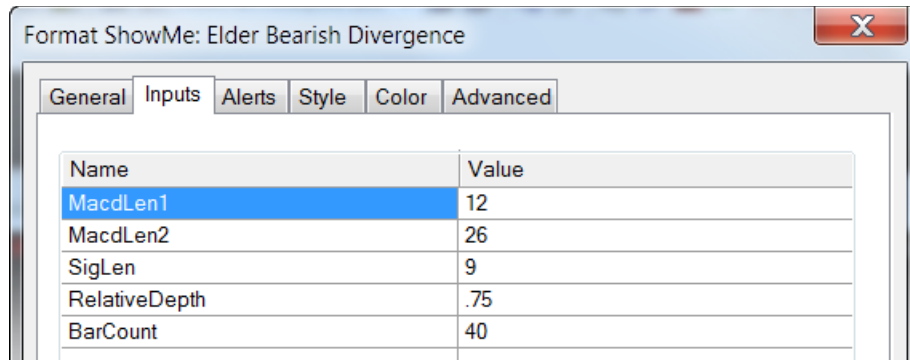
	Symbol	Last	Interval	Elder B...	Elder Be...
1	ESH17	2384.50	Weekly		
2	S&P 500 Index (506)				
3	XOM	82.97	Weekly	73.28	
4	SEE	42.69	Weekly		
5	FLR	51.13	Weekly		
6	ICE	59.83	Weekly		
7	FLS	47.72	Weekly		
8	CCL(HB)	57.73	Weekly		
9	FMC	72.89	Weekly		
10	EQR	63.44	Weekly		
11	FOX	30.14	Weekly		
12	CMI	146.92	Weekly		
13	FOXA	30.65	Weekly		
14	KR	29.86	Weekly		
15	CTSH	58.66	Weekly		
16	FRT	134.87	Weekly		
17	CVS	77.96	Weekly		
18	AVB	187.43	Weekly		
19	CVX	108.97	Weekly		
20	AON	118.67	Weekly		630.52
21	CXO	132.27	Weekly		

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.

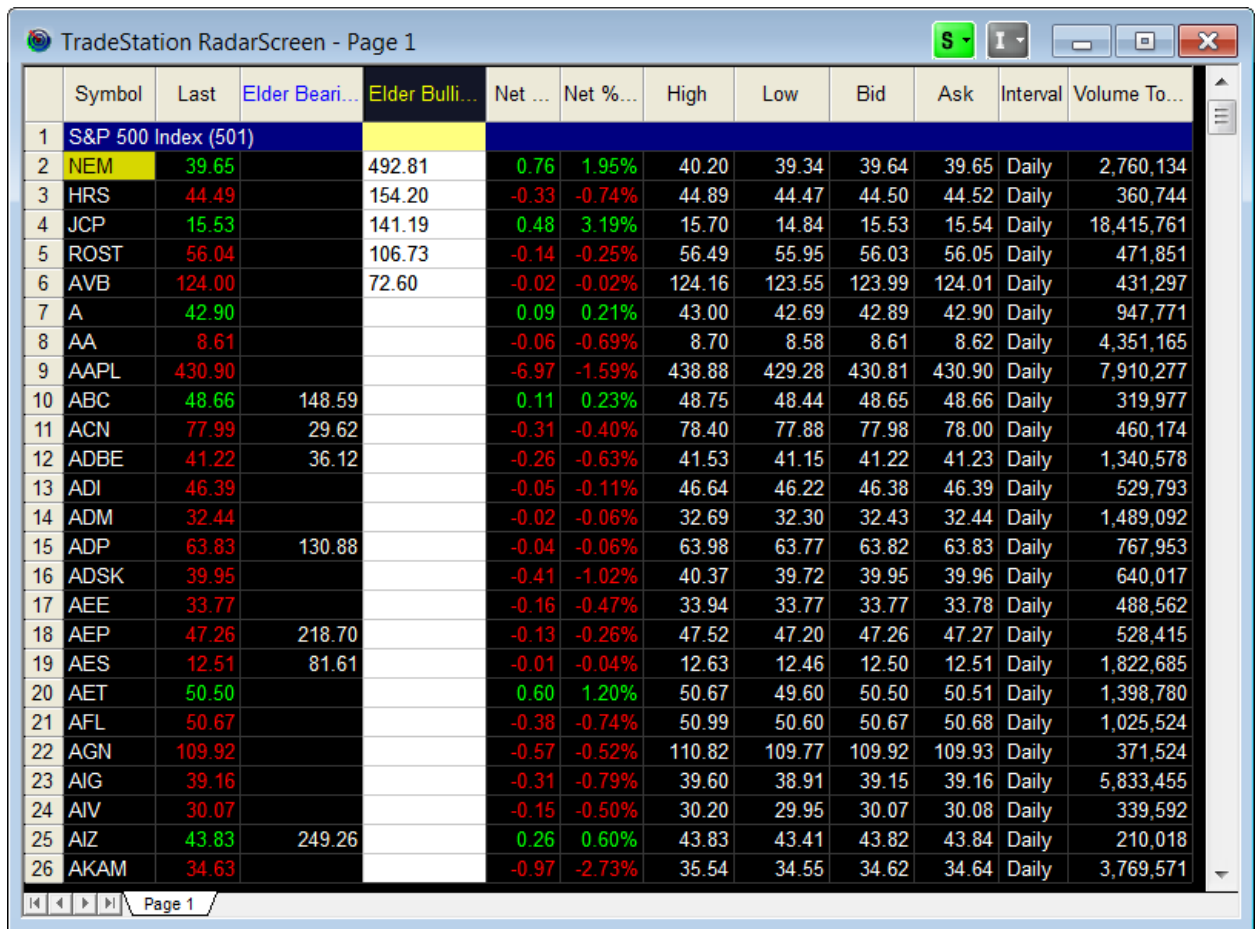
The first three parameters define the MACD Histogram used to calculate the divergence. It is important that these match the parameters of the MACD Histogram you plot on the chart.

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

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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:

