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Pro Trader software was developed to fill a void in the software market. With hundred of programs based on computer indicators, Frank Watkins saw the need for “pattern recognition” software. The Pro Trader software has always been an industry leader in this area. Since the first version of the software became available to the general public Pro Trader has lead the way with many unique features. The incorporation of the Darvas Scan Box Scanner in August 2002 placed Pro Trader in front of the pack. The recent addition of the “Trading Plan” in February 2004 has again been another world first.

Pro Trader has perfected its Darvas Box Scanner and has incorporated this into its already powerful PT1867 software... This program is certainly different.... The nifty PT1867 is more powerful than it first looks...Pro Trader's complete package known as the Full Service Pac.... is a seriously nice offering.

Software Review, Shares Magazine, Oct 2003

Nothing in the world can take the place of persistence. Talent will not; nothing is more common than unsuccessful men with talent. Genius will not; un-rewarded genius is almost a proverb. Education will not; the world is full of educated derelicts. Persistence and determination alone are omnipotent. The slogan “Press On” has solved and always will solve the problems of the human race.
Calvin Coolidge

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Pro Trader
INVESTING IS VISUAL
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Background

Stock selection is the age-old problem for any investor or trader, whether they are new to the market, professional traders earning a living from trading, brokers or research analysts, there are usually more questions than answers.

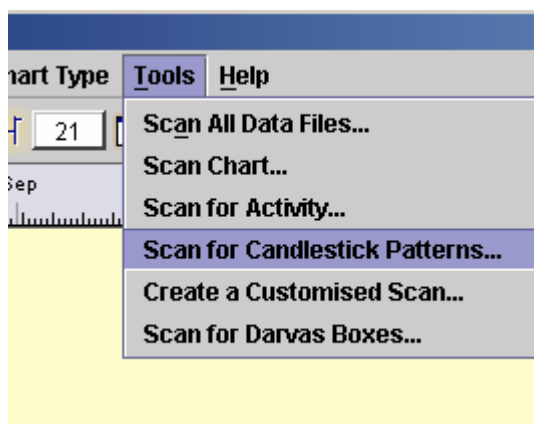
Where is that hidden gem? What is a blue chip stock? How do I find a stock that will perform well in the future? For how long can I expect a stock to rise in price? Of what value is a dividend? Let me attempt to answer these questions and pass on some of my observations from a lifetime of trading and in particular, a ten-year broking career.

- What is a “blue chip” stock? Traditionally a blue chip stock has been described as a higher priced stock that generally performs well in any market conditions. Unfortunately the old adage of buy and hold does not work in today’s market, with many blue chips failing to live up to their reputation.
- How do I find a stock that will perform well in the future? Strange though it may seem this is not difficult. The Pro Trader philosophy is, buy rising stocks. Look for a small cap stock that has the potential to become a large cap. We search for small cap stocks that have been on the rise for at least a few months then simply join into a rising stock. If the stock fails to continue to rise then we sell the stock. Finding these types of stocks is exactly what the Pro Trader software is designed to do.
- For how long can I expect a stock to rise? Forget about expectations, this market is about reality! A stock’s price may rise based on seasonal tendencies, it may rise for the duration of an economic cycle or it may just rise because it is the “flavour of the month” (as was the case during the gold boom in 1980 and the Telco boom in 1999). The point is that no one can answer this question with any accuracy. At Pro Trader we aim to buy rising stocks, stay with them if they continue to rise and sell them if the trend turns down.
- Of what value is a dividend? Dividends can be fantastic if they are received during an upward price movement, but they are worthless if the stock price is declining.

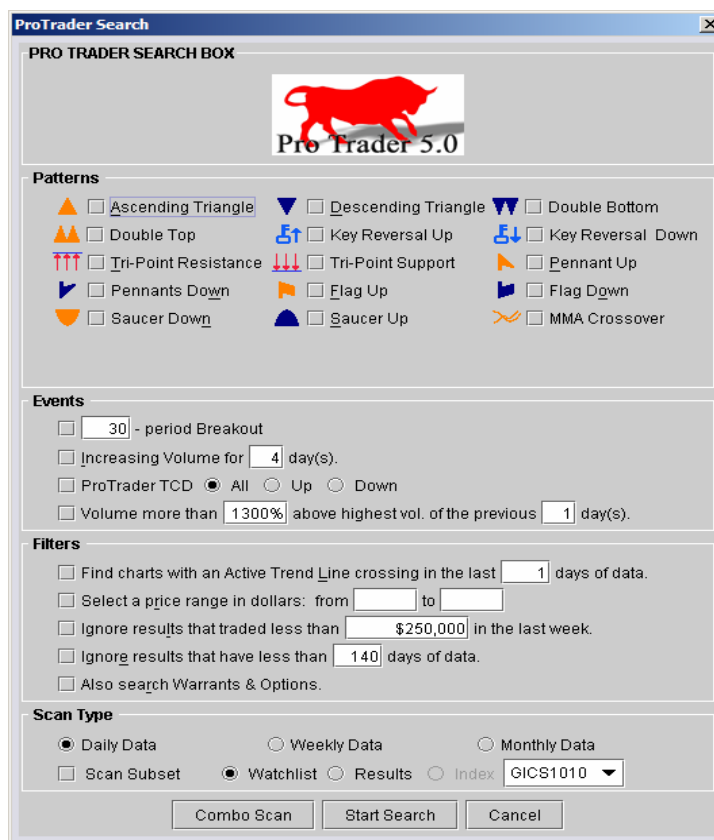
The scanning toolbar

The “drop-down” menu under the “Tools” icon displays six scanning functions.

1. Scan All Data Files ... will scan the entire ASX database for various patterns.
2. Scan Chart ... allows you to scan the particular chart that you have open for current or historical patterns.
3. Scan for Activity ... allows various “Top Twenty” scans.
4. Scan for Candlestick Patterns ... allows you to scan for nine specific candle patterns.
5. Create a Customised Scan ... is for the more professional trader who wants to create his or her own scans.
6. Scan for Darvas Boxes ... will search the entire database for Darvas opportunities.



Scan All Data Files

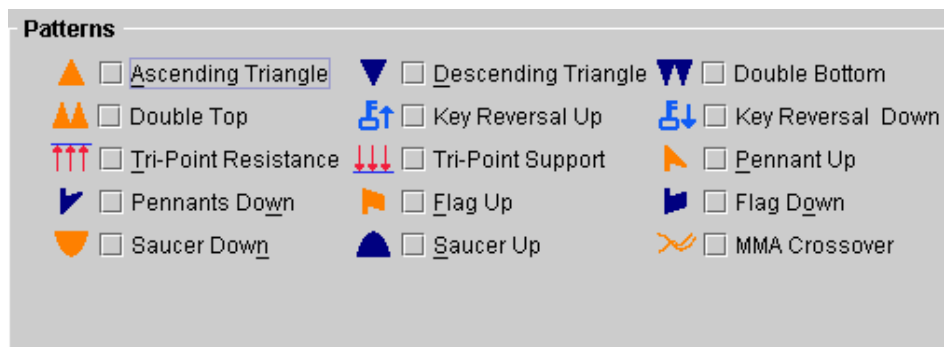


The original “Pro Trader Search Box” was developed more than six years ago, in response to the lack of “pattern recognition” software available on the retail market. While there were literally hundreds of software programs based on computer indicators, nothing was written specifically with pattern recognition in mind. Given that traders have been successful trading patterns since the advent of the first stock market, Pro Trader decided to fill this void. The Pro Trader Search box has stood the test of time but with each upgrade we have been able to make one or two additional improvements each year. There have been four major upgrades since 1998 and several minor alterations (Pro Trader members have never paid for an upgrade).

The whole reason behind the development of the Pro Trader software was to produce a short list of stocks that gave the best potential for profits in both the short and medium term. This short list had to be

produced with speed, accuracy and common sense. Pro Trader has achieved that goal but despite thousands of hours programming, we continuously seek further improvement.

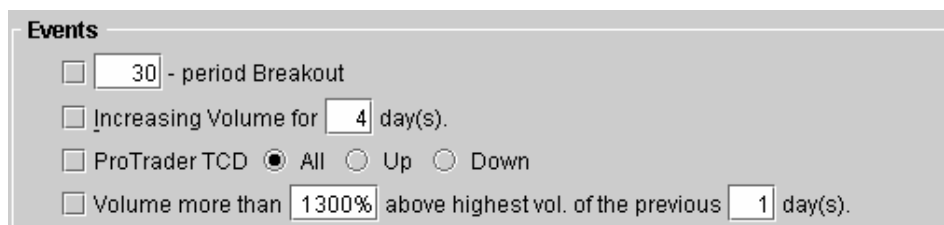
Patterns



Bullish patterns include: Ascending Triangles, Double Bottom, Key reversal Up, Triple-point Support, Pennant Up, Flag Up, Saucer Down and MMA Crossover.

Bearish patterns include: Descending Triangles, Double Top, Key Reversal Down, Triple-point Resistance, Pennant Down, Flag Down and Saucer Up.

Events



30-period breakout – the principle behind this scan is both simple and logical. The scan looks for a stock that has closed at a new 30-period high price. (Thirty trading periods) Any stock that trades and closes at a new 30-day high represents a company that is doing something right. Rising prices are the first sign of a strongly performing company.

N.B. The program defaults to 30 days – we suggest you experiment with this parameter. Long-term investors may look for a stock that is trading at a 100-day high whereas short-term traders may use a 15-day high.

Increasing volume for (4) days – Increasing volume is obviously a sign of increased interest in a stock and is generally an early warning signal. If the volume is increasing and On Balance Volume is rising, then the buyers are well and truly in control of the stock.

Pro Trader TCD. – All, Up, Down – the TCD is a proprietary indicator developed by Pro Trader. It was designed to show any stocks that have deviated from their previous trend. A stock may have been rising in a steady trend for some time, then deviated either into a higher or lower trend channel. This scan allows you to find all stocks that deviated today, or stocks that deviated up from the previous trend, or stocks that deviated down from the previous trend.

When a stock does deviate from the previous trend, the colour of the daily bar chart will turn black and remain black for 21 days until the new trend is confirmed.

Volume more than (X%) above highest vol. of the previous (X) days – this scan is designed to show a sudden and very sharp increase in volume. If volume suddenly increases dramatically (ie. 1300% more than yesterday) it is almost safe to assume that there is some “inside” information about to be released to the general public.

Filters

Filters

Find charts with an Active Trend Line crossing in the last days of data.

Select a price range in dollars: from to

Ignore results that traded less than in the last week.

Ignore results that have less than days of data.

Also search Warrants & Options.

Find charts with an active trend line crossing in the last X days of data – this is a very important and unique scan that should be performed every day. Most technical analysts will draw support and resistance lines on various charts, with the intention of buying when prices break above resistance or selling a stock when prices break below

a support line. The problem is tracking these support and resistance lines and knowing when prices break through the lines. Pro Trader has solved this problem with the “active trend line” scan.

Select a price range – this filter allows you to select stocks priced between certain levels. For instance if you feel that stocks between \$4.50 and \$10.00 suit your style of investing, then you can select this price range.

Ignore results that traded less than \$X in the last week – this filter was designed by programmers at Pro Trader as an aid to keeping traders out of stocks that do not have sufficient trading volume. The program defaults to \$250,000 but we suggest that new traders raise this level to \$1,000,000 during the early stages of your trading.

Ignore results that have less than X days of data – this is another specialized Pro Trader scan allowing the trader to select only those stocks that have a sufficient history. The program defaults to 140 days, which is satisfactory in excluding newer companies without a track record from your search.

Scan type

The screenshot shows a dialog box titled "Scan Type". It contains the following controls:

- Radio buttons for "Daily Data" (selected), "Weekly Data", and "Monthly Data".
- Checkboxes for "Scan Subset" (unchecked), "Watchlist" (checked), "Results", and "Index".
- A dropdown menu currently showing "GICS1010".
- Buttons for "Combo Scan", "Start Search", and "Cancel".

Daily Data, Weekly Data, and Monthly Data – this scan allows you to choose your time frame for scanning. For instance someone with a self-managed super fund may choose to invest over a longer time frame and scan monthly data.

Scan subset – another innovation by Pro Trader allows you to scan a subset. Tick the “Scan Subset” box then choose the subset that you want to scan, either a “Watch list” or your “Results”. Scanning your results subset can be advantageous for narrowing the number of stocks to analyse. For instance if you have done a scan on daily data, and ticked all the patterns, you may have over fifty stocks in the search results. You could then scan this subset using weekly data. Any stocks that appear in a daily and a weekly scan are worthy of further analysis.

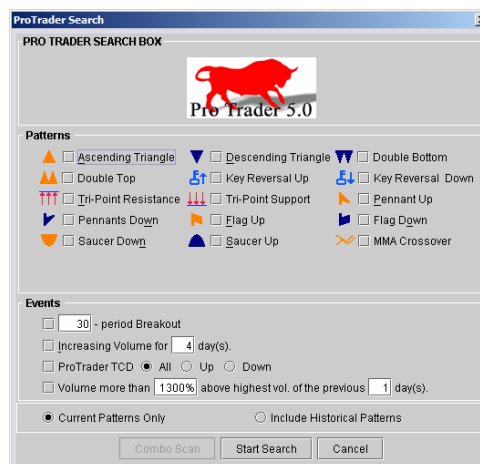
Combo Scan – the combo scan is a particularly interesting scan. Comprising a select set of proprietary conditions designed by Pro Trader, the Combo Scan ensures that stocks found by this scan are stocks that are currently rising in price.

Tips and hints

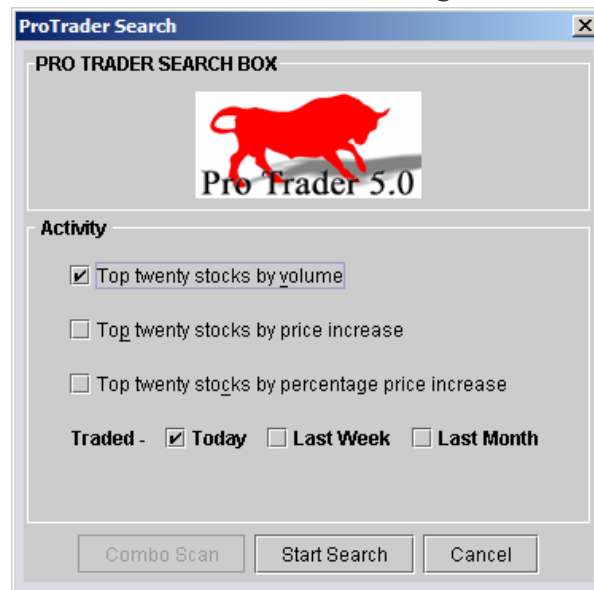
- Try doing a “Combo Scan” on weekly data.
- Always scan for a “Key Reversal Up” and a “Key Reversal Down” as these are very powerful one-day reversal patterns.
- If you are a “pattern recognition” fan, learn all you can about ascending triangles. Interpreted correctly, they can produce very reliable and profitable trading results.
- Play around with all of the parameters until you are comfortable with the affect that each parameter has on the search results.
- Do your best to avoid owning stocks that are “blue”.
- When you need to confirm market direction, check weekly and monthly data.
- Draw resistance lines on charts wherever possible, then scan for a break of these lines each day.

Scan Chart

This scanner is designed to scan the chart that is currently open. Similarly you can scan for “Events” as described on pages 7 and 8.



Scan for activity



Activity

Top twenty stocks by volume – a self explanatory scan that will search the total ASX data base and produce a list of the twenty most heavily traded stocks.

Top twenty stocks by price increase – self-explanatory.

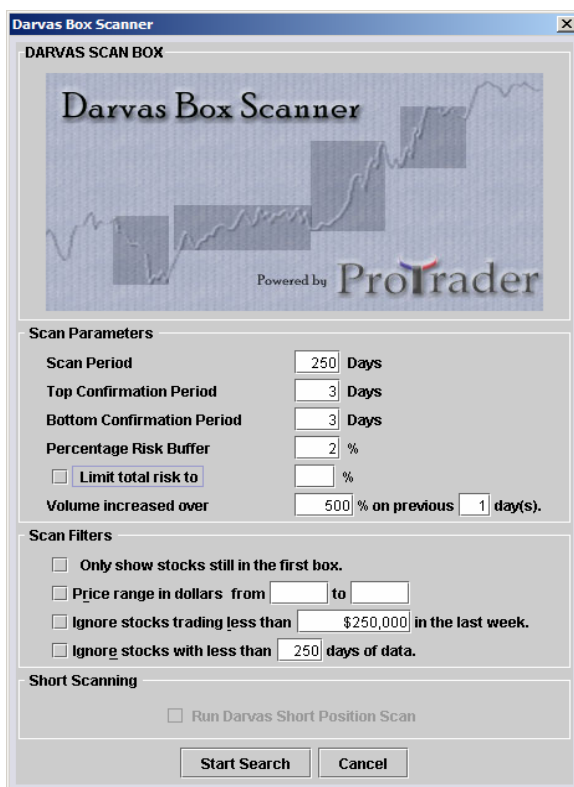
Top twenty stocks by percentage price increase – this can be an interesting scan in that it often scans up the more speculative stocks.

Traded - Today - Last week - Last month – the top twenty scans can be performed on daily, weekly or monthly data.

Tips

I will often do a top twenty scan by percentage price increase. This will often show me the very speculative stocks that have moved from say 3 cents to 3.8 cents in one day. A jump of this percentage can be the prelude to a further rise if other conditions are met.

Darvas Box Scanning



Default parameters

Scan Period 250 days – at this setting the program is looking for stocks that are at or have recently been at a 250 day-high.

Top Confirmation Period – Darvas waited for a 250 day-high that was not exceeded for three days. This confirmed the top of the “Darvas Box”.

Bottom Confirmation Period – to define the bottom of the “Darvas Box”, once the high is confirmed, the program will look for a low that has not been exceeded for three days.

Percentage Risk Buffer – Darvas’ initial stop loss was described as being “one tick below the bottom of the Box”. Pro Trader has

programmed this as a “Percentage Risk Buffer” that the trader can set to suit her own style.

Limit total risk to – another Pro Trader innovation that allows the trader to scan for stocks with a limited overall risk. If you set this to say 10%, the program will find only those stocks where there is an overall risk of ten percent or less.

Volume increased over X% on previous X day(s) – the default setting allows the program to scan for volume characteristics similar to those used by Darvas. In the default scan the stocks must display a day where the volume must be 500% higher than the previous day’s volume and must be within the last twenty trading days.

Scan filters

Scan Filters

- Only show stocks still in the first box.
- Price range in dollars from [] to []
- Ignore stocks trading less than \$250,000 in the last week.
- Ignore stocks with less than 250 days of data.

Short Scanning

- Run Darvas Short Position Scan

Start Search Cancel

Only show stocks still in the first box. This scan is designed for an investor looking for a new stock to enter on a break of the first Darvas box.

Price range in dollars from _____ to _____ This allows you to set your favourite price range.

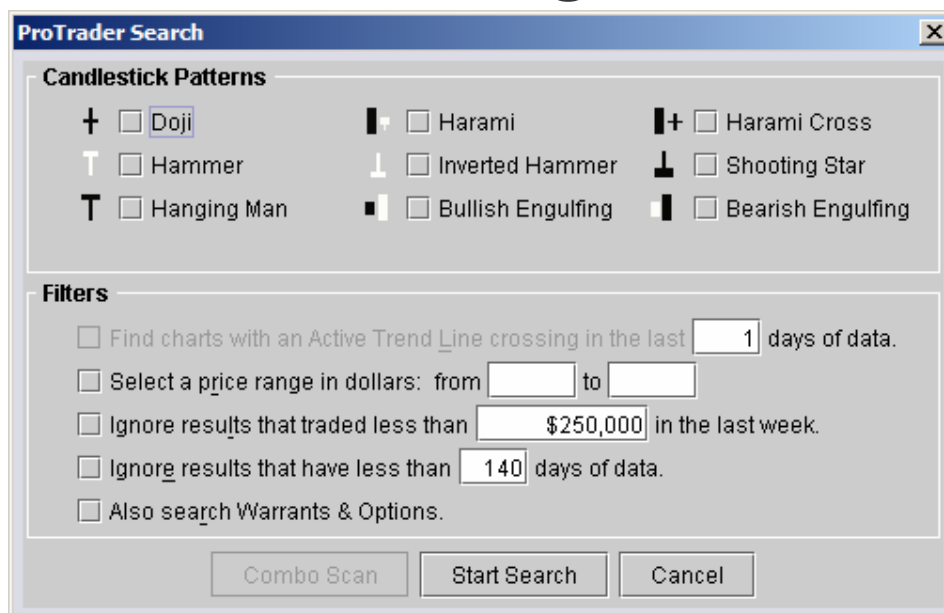
Ignore stocks trading less than (\$250,000) in the last week. As with all Pro Trader scans we advise investors to trade in stocks that are reasonably well traded.

Ignore stocks with less than (250) days of data. This setting is to ensure that the stocks being scanned are stocks with a long history.

Tips and hints

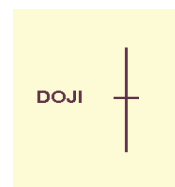
- Play with different parameters until you find the most suitable scan for you.
- Plan your Darvas trades – an appropriate rule for Darvas trading may be to “buy a break of the first box, and add to that position on a break of the second box”. Pyramiding a profitable position was one of the reasons Darvas was so successful.
- The volume parameter setting at 500% needs to be reduced in order to find higher priced and highly traded stocks. It is unreasonable to suggest that a stock like the Commonwealth Bank or News Corporation would suddenly trade 500% more volume than yesterday. Set the percentage at 100 and check the difference in the search results.
- Scanning for stocks at a 100-day high may get you into a trending stock earlier than a scan for stocks at a 250-day high.
- Setting your overall risk to 10% will generally bring up higher priced stocks. To find lower priced stocks you will need to increase your risk level.

Candle Scanning



Candlestick patterns

Doji - A Doji occurs when the open and close occur at the same price. This signals indecision when open and close occur in the middle of the trading range.



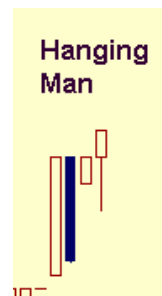
Hammer - a hammer signals a reversal after a downtrend – with buyers beginning to take control from the sellers. There is a sharp sell off after the market opens during a downtrend; however, by the end of the trading day, the market closes at or near its high for the day. This signifies a weakening of the previous bearish sentiment, the trend reversal can be confirmed by a higher open and an even higher close on the next trading day.



Identifying a hammer:

1. Small real body at the upper end of the trading range.
2. Lower shadow at least twice as long as the real body.
3. No (or almost no) upper shadow.

Hanging Man - There is a sharp sell off after the market opens during an uptrend. However, by the end of the trading day, the market closes at or near its high for the day. This signifies the potential for further sell-offs. A black candlestick can confirm the trend-reversal or a large downward gap on the next trading day accompanied by a lower close.

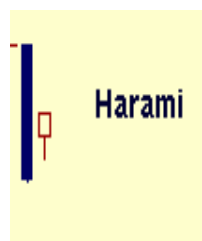


Identifying a hanging man:

1. Real body at the upper end of the trading range.
2. Lower shadow at least twice as long as the real body.

No (or almost no) upper shadow

Harami – The Harami is a two-candle pattern potentially indicating a slowing of momentum and can often warn of trend reversal after a strong trend. Harami means 'pregnant'. After a long black day at the low end of a downtrend, a white candlestick opens higher than the previous day's close. The price is driven up, as many shorts are covered, which encourages further buy-ins. The Harami pattern should be confirmed with the next trading day's candlestick following the reversal trend.



Identifying an Harami

1. A long black day occurs.
2. The second day is a white day where the real body is completely engulfed by the real body of the first.

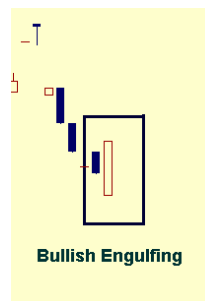
Inverted Hammer - As the market opens below the close of the previous day, the bulls rally briefly, but not enough to close above the previous day's close. The Inverted Hammer presents the potential for an upcoming rally. Confirmation of the trend reversal would be an opening above the body of the Inverted Hammer on the next trading day.



Identifying an Inverted Hammer

1. Small real body at the lower end of the trading range.
2. Upper shadow usually no more than twice as long as the real body.
3. No (or almost no) lower shadow.

Bullish Engulfing - Engulfing patterns consist of 2 candles with the second body engulfing the first. These signals are only significant after a prolonged trend. Occurring in a downtrend, the Engulfing depicts an opening at a new low, followed by a high buy-in that closes at or above the previous day's open. This signifies that the downtrend has lost momentum and the bulls may be gaining strength.



Identifying Bullish Engulfing patterns

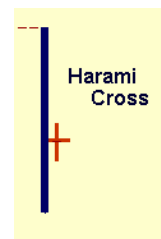
1. A long black day occurs.
2. The second day is a white that completely engulfs the real body of the first day.

Bearish Engulfing - Occurring in an uptrend, the Engulfing depicts an opening at a new high, followed by a high volume sell-off that closes at or below the previous day's open. This signifies that the uptrend has been hurt and the bears may be gaining strength.

Identifying a Bearish Engulfing pattern

1. A long white day occurs.
2. The second day is a black day that completely engulfs the real body of the first day.

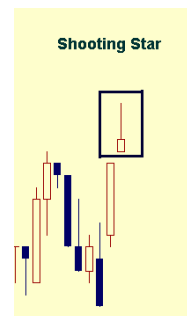
Harami Cross - After a long black day at the low end of a downtrend, the market opens higher than the previous day's close and closes at the open. The Harami Cross indicator is more definite than the basic Harami indicator, and signifies a reversal for the bulls.



Identifying an Harami Cross.

1. A long black day occurs.
2. The second day is a Doji within the real body of the previous day

Shooting Star - With a Shooting Star the body on the second bar must be near the low - at the bottom end of the trading range. The upper shadow must be longer. This is also a weaker reversal signal after a trend. The market gaps open above the previous day's close in an uptrend. It rallies to a new high then loses strength and closes near its low: a bearish change of momentum. Confirmation of the trend reversal would be by an opening below the body of the Shooting Star on the next trading day.



Identifying a Shooting Star

1. Small real body at the upper end of the trading range.
2. Prices gap open.
3. Upper shadow usually at least three times as long as the real body.
4. No (or almost no) lower shadow

Filters

Filters

Find charts with an Active Trend Line crossing in the last days of data.

Select a price range in dollars: from to

Ignore results that traded less than in the last week.

Ignore results that have less than days of data.

Also search Warrants & Options.

While scanning for your favourite candle patterns, it is still advisable to filter the results. Pro Trader has incorporated some common filters in all scanning functions. These filters are described on pages 8 and 9.


Tips and hints

- Candlestick patterns are generally recognized as giving very short-term turning points.

Custom Scan Builder

ProTrader Proprietary Custom Scan Builder

PROTRADER CUSTOM SCAN BUILDER



INDICATORS

MA WMA XMA Above Below Crossed

ROC period Overbought Oversold

RSI period Overbought Oversold

STOC period Overbought Oversold

Bollinger Band of period Top Break Bottom Break

EVENTS

- period Breakout

Increasing Volume for day(s).

TCI Up Trend Down Trend Horizontal Period

MACD days from a crossover

OBV % above the level of day(s) ago

Volume more than % above highest vol. of the previous day(s).

FILTERS

Select a price range in dollars: from to

Ignore results that traded less than in the last week.

Ignore results that have less than days of data.

Also search Warrants & Options.

Open Save Scan Cancel

Indicators

- MA WMA XMA (21,34) Above Below Crossed
- ROC (10) period Overbought Oversold
- RSI (14) period Overbought Oversold
- STOC (15,5) period Overbought Oversold
- Bollinger band of period (20) Top Break, Bottom Break

Events

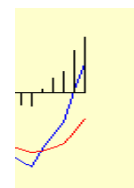
EVENTS	
<input type="checkbox"/>	<input type="text" value="30"/> - period Breakout
<input type="checkbox"/>	Increasing Volume for <input type="text" value="4"/> day(s).
<input type="checkbox"/>	TCI <input checked="" type="radio"/> Up Trend <input type="radio"/> Down Trend <input type="radio"/> Horizontal <input type="text" value="21"/> Period
<input type="checkbox"/>	MACD <input type="text" value="2"/> days from a crossover
<input type="checkbox"/>	OBV <input type="text" value="2"/> % above the level of <input type="text" value="2"/> day(s) ago
<input type="checkbox"/>	Volume more than <input type="text" value="1300%"/> above highest vol. of the previous <input type="text" value="1"/> day(s).

30-day breakout – see page 7

Increasing volume – see page 8

Trend channel indicator – the trend channel indicator is designed to show an established price trend. You can scan for trends that are either sideways, up or down. An added feature is the ability to select the length of the desired trend. The default setting is a 21-day trend.

Moving average convergence divergence – in this example the MACD histogram and the moving average lines crossed over 5 days ago. A generally accepted confirmation of a buy signal is generated when these lines cross over.



On-balance-volume – OBV is a measure of whether the buyers or the sellers are in control of a stock. Used correctly as a confirmation factor, it can be one of the very few predictive computer indicators. In the example alongside the scan was set-up to search for stocks with OBV 20% higher than 5 days ago.



Volume more than 1300% - see page 8

Filters

FILTERS

Select a price range in dollars: from to

Ignore results that traded less than in the last week.

Ignore results that have less than days of data.

Also search Warrants & Options.

Select a price range in dollars from ____ to ____ see page 9.

Ignore results that traded less than (\$X) in the last week – see 9.

Ignore results that have less than (X) days of data – see explanation page 9.

Potential scans

Long term:

- a. Check boxes for 60-day breakout, ignore results that traded less than \$1,000,000. You could also filter the price range if necessary.
- b. Check boxes for an exponential 34 and 55 day moving average crossover and ignore results that traded less than \$1,000,000.

Medium term:

- a. Check boxes for 40-day-breakout, ignore stocks that traded less than \$1,000,000 and use a price range between 80 cents and 3 dollars.
- b. Check boxes for: trend channel indicator horizontal for 21 days, MACD 4 days from crossover, OBV 15% above 4 days ago and the same filters as the previous scan.

Short term:

- a. Check boxes for: *increasing volume for 3 days, MACD 2 days from a crossover, OBV 20% above 3 days ago, volume 800% above 1 day ago. Three filters can be used, price range 1 cent to 90 cents, ignore results that traded less than \$500,000 and ignore results with less than 140 days data.*

Tips and hints

1. Try to combine OBV with all your scans; OBV 10% above 5 days ago is a good starting point.
2. I often use an exponential triple moving average for my trailing stop loss. My preferred time frames are 21, 34 and 55 days. You will note that these are Fibonacci numbers.
3. Under the filter section of the Custom Scan Builder is a “Save” button. This enables you to save and name your scans.
4. Each day I will usually do at least 6 scans with the custom scan builder.
 - a. Exponential moving average cross above
 - b. 60 day breakout scan
 - c. Trend Channel Indicator horizontal 55 days
 - d. Volume increasing for 4 days
 - e. OBV 30% above 10 days ago
 - f. Several personal scans

Fibonacci Trivia

At various training sessions or on a “Friday Broadcast” you will often hear talk of Fibonacci retracements or when discussing moving averages we will suggest using Fibonacci numbers for your time periods. With this in mind we thought it may be appropriate to add a little information in this booklet to help you understand what we are talking about. We suggest that you visit the web-site below to gain a far better understanding of the sequence of numbers that Fibonacci discovered.

<http://plus.maths.org/issue3/fibonacci/>

Fibonacci sequence

Fibonacci is perhaps best known for a simple series of numbers, introduced in *Liber abaci* and later named the *Fibonacci numbers* in his honour.

The series begins with 0 and 1. After that, use the simple rule:

Add the previous two numbers to get the next number.

1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987.

In 1225 Fibonacci participated in a mathematical competition at Pisa ordered by the emperor Frederick II. It was in this competition that the following problem arose:

Beginning with a single pair of rabbits, if every month each *productive* pair bears a new pair, which becomes productive when they are 1 month old, how many rabbits will there be after n months?

Answer to rabbit problem

Imagine that there are x_n pairs of rabbits after n months. The number of pairs in month $n+1$ will be x_n (assuming the rabbits never die!) plus the number of new pairs born. New pairs are only born to pairs at least 1 month old, so there will be x_{n-1} new pairs.

$$x_{n+1} = x_n + x_{n-1}$$

This is the rule for generating the Fibonacci numbers.

Fibonacci numbers appear in nature. For example, some plants branch in such a way that they always have a Fibonacci number of growing points. Flowers often have a Fibonacci number of petals; daisies can have 34, 55 or even as many as 89 petals.

I have not seen a comprehensive explanation for why the growth of some organisms should follow this pattern. However, it seems logical to me to assume that since the market is driven by millions of human beings interacting, that the Fibonacci number sequence may be involved in the explanation of this complicated organic system also.