# AQ Opening Bell Newsletter

## September 2003 Vol. 12 Issue 9

## In This Issue

Identify market tops and bottoms with the VIX (Volatility Index)6
Market Review: AIQ's market timing signals for month of August are reviewed7
Data Maintenance7
S&P 500 Changes7

Reserve you seat for AIQ's 'hands-on' seminar, with attendees using PCs to follow sessions focusing on trading system design ......7

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## Day Trading the Stochastic Pop

## 'What Is Overbought Can Stay Overbought' – This Alternative Approach To the Stochastic Indicator Works!

#### **By David Vomund**

he stochastic indicator, developed by Dr. George Lane, is one of the most popular of all technical indicators. This oscillator is most commonly used to determine overbought and oversold levels.

A buy signal occurs when the underlying security's stochastic rises out of oversold territory. A sell signal occurs when the underlying security's stochastic falls from overbought territory.

Most traders use a level of 80 or higher as overbought.

Once the stochastic rises above 80, it serves as a warning that the security rose too fast and that a short-term top is near. The actual sell signal occurs once the stochastic falls below 80.

Jake Bernstein created an alternative approach to the interpretation of the stochas-

tic indicator. He observed that what is overbought can stay overbought. He was correct. Using an approach he termed the "Stochastic Pop," you establish a long position when the stochastic enters overbought territory. In other words, you enter just when most traders consider the



DAVID VOMUND

security to be overbought and incapable of going higher. According to Mr. Bernstein, once the stochastic hits an

"Jake Bernstein created an alternative approach to the interpretation of the stochastic indicator. He observed that what is overbought can stay overbought...the security tends to POP like a kernel of corn at the right temperature once the stochastic hits an overbought level."

> overbought level, the security tends to POP like a kernel of corn at the right temperature.

#### AIQ Opening Bell

This is why it works. The stochastic is a short-term indicator. Using an end-of-day chart, it doesn't take much of a rally for a stock's stochastic to rise above 80.

Switch to a real-time chart and the indicator moves even quicker. A stochastic above 80 hardly means that the security is so overbought that a downward move is imminent.

Here is the entry and exit rule for the Stochastic Pop. Buy when the stochastic rises above 80 and sell when it falls below 80. Profit protection rules can be established as well.

An example is shown in **Figure** <u>1</u>, a 5-minute chart of Comverse Technology (CMVT) along with its stochastic indicator. Notice at 12:25 that the stochastic rose above the 80 buy point. A long position is established (see up arrow). To say that it didn't take much for the stochastic to rise above 80 is an understatement.

After about 30 minutes of no activity, it only took one good up bar to lift the stochastic above 80. Although technically CMVT was overbought, it stayed overbought as it continued to rally. The position was held for 2 hours for nearly a 3% profit.

For this example we waited until a drop below 80 before we sold.

#### **PLEASE NOTE**

In order to use the real-time charting and alert features covered in this article, myTrack must be your data vendor. To get real-time charts, you must subscribe to myTrack's real-time service. Otherwise, stock quotes are 20-minute delayed. Market indexes such as the Dow Jones Industrial Average, S&P 500, and Nasdaq Composite, however, are real-time for all myTrack subscribers. To see your account features, open myTrack and from the menu bar click Functions and Chat. In Community Chat, click Entitlements and Exchanges.



**Figure 1**. RT Alerts window with 5-min. chart of CMVT displayed. Stochastic indicator is displayed below price plot. Arrows designate Stochastic Pop intraday Buy and Sell signals.

Once the position was profitable, we could have locked in more of the profit by determining that the position would be closed once the stochastic fell below 90.

Although the Stochastic Pop technique is very simple, it requires close attention. You must enter

when the buy unfolds and exit the position even if it whipsaws and turns into a loss. This is a day-trading system so positions should be exited before the market closes at the end of the day. New

positions shouldn't be added in the first half hour of trading. AIQ realtime features such as Color Studies and Alerts will help identify the entry and exit points.

#### **Color Studies**

The colors of the AIQ charts can be changed whenever a position

should be established or sold. This is helpful in identifying the entry and exit points on the price chart. For the Stochastic Pop model, we'll change the price bar to green when there is a Stochastic Pop buy signal and change the bar to red on a Stochastic Pop sell signal.

"Although the Stochastic Pop technique is very simple, it requires close attention. You must enter when the buy unfolds and exit the position even if it whipsaws and turns into a loss. AIQ real-time features such as Color Studies and Alerts will help identify the entry and exit points."

> To set this up, open TradingExpert's Quick Launch Menu and choose Alerts. You'll need to add the ticker symbols for the securities that you'd like to follow for possible trades. This may be the Nasdaq 100 tracking stock (QQQ) or specific stock issues. Click *Ticker* and *Add*. Enter the ticker

#### September 2003

symbols separated by semicolons. The only critical element here is that you add volatile and highly liquid securities.

In order to perform a Color Study in real-time charts, you'll need to create an Expert Design Studio (EDS) model that defines the strategy. There is a large list of pre-built systems that help with that process.

[Editor's note: If you are unfamiliar with using the Builder to create Expert Design Studio rules, please refer to the February 2003 *Opening Bell*, page 5. It can be viewed at *www.aiqsystems.com*/ *feb2003.pdf*]

To get to the EDS code, open the EDS application and click on *File* and then *Color Study Properties*. In the Color Studies screen, click *Edit Rules*. The rules in the Alert Code screen contain some pre-built rules for realtime traders.

Rather than entering the Stochastic Pop rule, we'll use the Builder to



**Figure 2.** RT Alerts screen with Alert Code window displayed. EDS code for Stochastic Pop rules appear in Alert Code window.

help write the code. Click on the *Rule Wizard* icon. Under *Select Category*, choose *Pre-built Routines*. There isn't a pre-built entry rule that says to buy when the stochastic rises above 80 but there is one for the



**Figure 3.** RT Alerts window with 5-min. chart of Bed Bath & Beyond displayed. Stochastic Pop intraday Buy and Sell signals are designated with colored price bars.

stochastic rising above 20.

Under *Select Item To*, choose the rule *Stochastic up from below 20*. Click *Paste Selected Item Below*. The prebuilt rule will appear in section 4. In the code, change each 20 value to 80. Click *OK*.

The entry code for the Stochastic Pop will appear in the *Alert Code* box. Here is the EDS formula:

> ! Stochastic cuts from below 80% to above 80%

STOCHup80 if VAL([stochastic],1)<80 and [stochastic]>80.

There is a pre-built rule for our sell formula so no manipulation of the code is needed. We want to sell when the stochastic falls below 80. Follow the steps above to paste the pre-built rule that says that the stochastic fell below 80. Here is the EDS formula:

> ! Stochastic cuts from above 80% to below 80%

STOCHdn80 if VAL([stochastic],1)>80 and [stochastic]<80.

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Figure 2 on page 3 shows what your screen should look like. Notice that the first set of rules in the Alert code screen contains our two Stochastic Pop rules. Click OK to return to the Color Studies screen.

With our rules created, adding a Color Study is an easy process. In the Color Studies screen, click Create New Color Study. Since we want to change the color of a price bar instead of an indicator. check Price Plot and click Next. Under Select Plot Component, highlight Pricebar and click Next.

We'll first work with the buy signals. Under Select EDS Rule, highlight the STOCHup80 rule and click Next. Under Select a Color, change the color of our entry rule to green. Click Finish.

The same process is then repeated for the sell rule, except we changed the price bar to red when a sell is triggered. With this completed, in the Color Studies screen make sure "Don't show color studies" is unchecked and click OK.

Now, each time a real-time chart is plotted, the price bar is green when the stochastic rises above 80

Properties Alerts Right click on alert name for options Alert Name Sound file STOCHdn80 STOCHup80 C:\wintes32\RTAlert.wav TrendChangeDown TrendChangeUp TrendDn10Period Alerts Enabled Edit Alerts OK Cancel

Figure 4. Properties screen of the RT Alerts function. Window displays a list of all alerts available to the user. To enable an alert, right click on the Alert Name and select Alert Enabled. A speaker icon will appear next to the alert in the list. Be sure also that Alerts Enabled is checked.

quickly see their entry and exit points. You'll get a feel for the number of profitable trades versus the number of whipsaws.

An example chart is found in Figure 3 on page 3. Notice that each buy signal is denoted by a green bar and each sell signal is denoted by a

"The colors of the AIQ charts can be changed whenever a position should be established or sold. ...each time a realtime chart is plotted, the price bar is green when the stochastic rises above 80 and red when it falls below 80. This allows us to easily see the entry and exit points without having to plot the stochastic indicator."

and red when it falls below 80. This allows us to easily see the entry and exit points without having to plot the stochastic indicator.

This also allows us to scroll through a list of stock charts and red bar. In case the colors aren't apparent in this newsletter figure, I've manually placed up and down arrows next to each colored bar.

tive approach would be to use the pre-

built rule that is designed to find time periods when the stochastic is above 80. With this rule the price bars would be green anytime the stochastic is above 80, representing the time period that the position should be held.

#### **AIQ's Real-Time Alerts feature** will alert you when a Stochastic **Pop has registered**

The AIQ software has the capability to alert you anytime a stock meets your system's requirements. This allows you to run a screening on a large list of stocks. In our example, we'll get an alert anytime a Stochastic Pop is registered.

Instead of tracking a few volatile securities, we'll have the software monitor the 100 stocks in the Nasdag 100 index and alert us anytime a Stochastic Pop is registered on any one of the stocks.

The Alerts application provides users with the capability of adding lists of stocks and thus avoiding the task of manually entering each individual ticker symbol. From the menu bar of Alerts, select Tickers and Add Tickers From List. Select the desired list file and click OK.

It is generally best to limit the amount of tickers tracked in Real-Time Alerts to a few hundred. If you have a dial-up connection, you may want to track even fewer stocks.

An alterna-

[Editor's note: you can download an AIQ Nasdaq 100 list file at *www.aiqsystems.com*]

Since our EDS Stochastic Pop rule is already created, establishing an alert is an easy process. In Alerts, select *File* and *Alert Properties*. A list of possible alerts, including all the pre-built alerts, will appear.

We want to be alerted anytime a stock passes the STOCHup80 rule. Scroll down to that alert, right-click the mouse, and select *Alert Enabled*. A speaker should appear next to the alert. Disable any other alert that has a speaker next to its name by right-clicking on its rule.

Rather than just receiving a text message when the alert is triggered, the computer can make a sound when an alert is triggered. Right click the STOCHup80 rule and select *Add Sound*. In the wintes32 folder, highlight *RTAlert* and click *Open*.

On the *Properties* screen, make sure *Alerts Enabled* is checked. Your monitor should resemble <u>Figure 4</u>. Click *OK*. 🔀 ndx100 - Real Time Alerts □ 📽 🖬 📰 🚛 乌 聰 📵 Q 🖑 🗑 W D 60 30 15 5 RT 1 ÷ 🙌 🙌 ⋈ ⋈ ↔ 👐 📟 🜆 <u>▶</u> <u>↑</u> ↓ **№ № № №** *№ №* ICOS IDPH IJS NUTCE INTU IVGN JDSU JDSU LAMR KLAC LAMR KLAC LAMR MERU MERU MERU MINTAP NVDA NVTLS NXTL NXTL NXTL PAYX NXTAP PDCO PETAN QCOM ROST RYAAY SABUX 35.8 35.6 35.5 35.4 35.3 35.2 35.1 15:40 09.45 10:05 10:25 60 40 20 Interval 81.06 12.55-0 08/15/2003 08/15/2003 08/15/2003 08/15/2003 08/15/2003 30.98 43.93 35.11 35.26 12.64 12:55:00 12:55:00 12:55:00 12:55:00 12:55:00 STOCHup80 STOCHup80 STOCHup80 STOCHup80 STOCHup80 BEAS 08/15/2003 08/15/2003 08/15/2003 08/15/2003 08/15/2003 08/15/2003 08/15/2003 12:55:00 3.56 STOCHup80 47.08 STOCHup80 12:55:00 35.42 STOCHup80 51.20 STOCHup80 3.56 STOCHup80 AYX Connected to: NT24-3

**Figure 5.** RT Alerts window with 5-min. chart of MEDI displayed. Stochastic indicator is displayed below price plot. Stochastic Pop intraday Buy and Sell signals are designated by green and red price bars.

an alert is fired, the computer makes an audible chirp as well.

The Stochastic Pop works best in

"The AIQ software has the capability (with Real-Time Alerts) to alert you anytime a stock meets your system's requirements. This allows you to run a screening on a large list of stocks....and get an alert anytime a Stochastic Pop is registered."

The software is now set to alert us to any Stochastic Pop buy signal. In <u>Figure 5</u>, a list of the Nasdaq 100 tickers appear on the left portion of the screen. You can use the icons located at the top portion of the screen to select the charting time period that you want to display.

The graph displayed is a fiveminute chart. A green bar designates a Stochastic Pop buy signal and a red bar designates a sell signal. A list of every stock alert appears at the bottom of the screen. Each time active markets. The strategy will most often lead to unprofitable whipsaws when the market environment is quiet and there is little equity movement. As you watch CNBC, if the broadcasters are

struggling to find things to talk about, then don't trade this system on that day!

One way to determine whether the strategy is worth trading on a particular day is to chart the stocks from previous alerts and see how many were profitable.

With the color coding scheme discussed in this article, identifying profitable and unprofitable trades is an easy process. David Vomund publishes VIS Alert, a weekly investment newsletter. For sample issues, visit **www.visalert.com**.

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## **AIQ Opening Bell Newsletter**

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While the information in this newsletter is believed to be reliable, accuracy cannot be guaranteed. Past performance does not guarantee future results.

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## Market Timing with the VIX

# Use Volatility Index (VIX) to Help Identify Market Tops and Bottoms

#### **By David Vomund**

arket timing technical indicators use past price data to predict future price movement. A twist

to this concept is to use as a market timing tool the Volatility Index (VIX), which measures people's expectation for the future. This works well because most people's timing decisions are wrong.

The VIX represents the implied volatility of the Standard & Poor's 100 index, calculated by the Chicago Board Options Exchange. This is where it gets a bit complicated. Implied volatility is the volatility that the market is anticipating for the underlying asset. Implied volatility is most often calculated using the Black-Scholes option pricing model. With this model, you take the price of the option (the known value) to calculate the expected volatility (the unknown value) over the next year.

Here is a simplified explanation. Implied volatility represents investor's fear level. The higher the implied volatility, the greater the

> "The VIX tends to rise as financial markets decline and investors become fearful. Conversely, the VIX falls when markets stabilize and investors become complacent."

expectation for big price swings during the next year. The VIX tends to rise as financial markets decline and investors become increasingly fearful about the future. Conversely, the VIX falls when markets stabilize

View Draw Explore Taol ist Window Helr B SPX 08/04/03 IFIC S & P 500 (Daily) Û 1536 1433.6 1331.2 1228.8 1126.4 1024 921.6 819.2 MAMJJASON D01 FMAMJJASON D02 FMAMJJASON D03 FMAMJJ Volatility Index (Daily) 56.32 512 46.08 40.96 35.84 30.72 25.6 20.48 R

**Figure 1**. Daily chart of the S&P 500 with the Volatility Index indicator (VIX) plotted in lower window. Up arrows on price plot show short-term low points. Notice that these coincide with upward spikes by the VIX. Notice also that market tops (down arrows) coincide with VIX lows.

and investors become complacent.

You can use the relationship between prices and implied volatility to help identify potential market tops and bottoms. Extreme levels in

the VIX tend to accompany extreme levels in prices.

In <u>Figure 1</u> we chart the S&P 500 along with the VIX. Notice how major market lows occur when the

VIX spikes higher. Just when things are at their worst and fear is at its greatest, the market hits a bottom. That's because everyone who was going to sell has already sold.

What are the VIX buy levels? Rather than picking strict levels, it's best to view the VIX as a barometer. For instance, we drew a horizontal trendline at the VIX 50 level. This level tends to signify major market bottoms. That doesn't mean a level of 49 is not a buy, however. When the VIX is near 50 then the market is ready to hit a bottom. This happened in September 2001, July 2002, and October 2002 (see upward arrows). Over time this level will change depending on the current market environment.

The VIX doesn't hit 50 often. While it approached 50 in 1998, it typically takes a bear market for the VIX to reach 50. In a bull or a consolidating market, a level of 35 often represents a buy range. These levels should be adjusted over time to fit the market environment.

Looking at the sell side, a low

#### September 2003

VIX level often, but not always, implies a market top is forming. The low VIX level implies investors are complacent and are not expecting a big move. They're usually wrong. Low VIX levels signify a big move, whether up or down, is near. Most often the big move is down but that is not always the case.

The lower trendline drawn in Figure 1 corresponds to the 20 level. During the bear market this level served as a good market timing sell signal.

To add the VIX to your TradingExpert system, go to the Data Manager and type *Ticker* and *New*. Enter *VIX* as the ticker symbol, check *Index*, and *OK*. The ticker name is Volatility Index. A good start date is 01/28/93. The VIX can be charted once its data is down-loaded.

Summing it all up: Rather than simply using past trends, the VIX measures people's anticipation of the future. As most people's expectations are wrong, the VIX serves as a good counter-trend indicator. The VIX works best at determining bullish situations. A high VIX has bullish implications for the market. The VIX is not as accurate in determining bearish situations. A low VIX implies a big market move is approaching. That move is usually, but not always, down.

2000, S&P Midcap 400, and even the

hitting new near-term highs. Even

an unweighted index of the S&P 500

because the S&P 500 is consolidating

This market is stronger and there

is more money to be made than what

the S&P 500 is revealing. That's why

most portfolios are outperforming

the benchmark index this quarter.

NYSE advance/decline line are

stocks is hitting new highs. Just

doesn't mean the average stock is

drifting sideways as well.

#### **Market Review**

he Standard & Poor's 500 index (S&P 500) is commonly used to represent the "market." Right now this index is

in a three-month consolidation range where 960 represents the lower end of the range and 1015 represents the upper end of the range. In this market environment, this index is doing a lousy job of representing the market.

While the S&P 500 is consolidating, the Nasdaq Composite, Russell

## STOCK DATA MAINTENANCE

Stock Splits and other changes: None

#### **Trading Suspended:**

Airborne Inc. (ABF), Aurora Food (AOR), BMC Industries (BMM), First Virginia Banks (FVB), Lending Tree (TREE), Loral Space & Commun. (LOR), Mirant Corp. (MIR), Signal Technology (STCO)

#### Name Changes:

CDW Computer Centers (CDWC) to CDW Corp. (CDWC) Dell Inc. (DELL) to Dell Computer (DELL) PacifiCare Health Systems (PHSY) to PacifiCare Health Systems (PHS) Sunrise Assisted Living (SRZ) to Sunrise Senior Living (SRZ) SVI Solutions (SVI) to Island Pacific (IPI) U.S. Industries (USI) to Jacuzzi Brands (JJZ) USA Interactive (USAI) to InterActiveCorp (IACI)

## AIQ's 14<sup>th</sup> Annual Lake Tahoe Seminar

## "Hands-on Trading System Design"

## October 13, 14, and 15 At Harvey's Resort and Casino South Lake Tahoe

This year's AIQ Seminar will be entirely hands-on, with attendees using PCs to follow sessions focusing on trading system design.

#### DAY 1 Monday October 13

Getting Started with Expert Design Studio. With AIQ's David Vomund and Steve Hill.

#### DAY 2 Tuesday October 14

Developing and Testing Trading Systems. With AIQ's Dean Kasparian and Mary Jane Evans.

#### DAY 3 Wednesday October 14

Advanced Trading Systems. With Steve Palmquist and Rich Denning.

#### **LIMITED SEATING!**

For more information or to reserve your seat: Call 1-800-332-2999

All 3 days \$885 Days 2 & 3 only \$590 AIQ users experienced with EDS can skip Day 1 and enroll for Days 2 & 3

#### S&P 500 Changes

Changes to the S&P 500 Index and Industry Groups:

Medco Health Solutions Inc. (MHS) replaces McDermott International (MDR).

MHS is added to the Health Care Services (HEALTHSS) group.

## New Features & Trading Strategies

# **AIQ Announces Release of TradingExpert Pro v7.2**

#### **By Stephen Hill**

Now's the time to upgrade to AIQ TradingExpert Pro v7.2. Best of all it's FREE for clients on the monthly plan with myTrack. New features are concentrated in two very important areas of the software, Real-Time Alerts and Portfolio Manager. Also available are over 60 new trading strategies and indicators.

## **Real-Time Alerts Features**

#### RTalerts is now the mainstay charting and analysis area within AIQ.

This module offers the ability to run trading systems both real time and end of day, in addition to traditional charting capability. TradingExpert Pro 7.2 has several new features added at the request of AIQ clients. These include:

- Space on right-hand side of the chart. This is ideal for drawing tools and chart pattern users. You can configure the size of the right-hand space to suit your needs; the drawing tools all extend into the space.
- Multiple instances of RTalerts launched from AIQ Menu. New feature allows alerts on multi-time frames. Now you can launch multiple instances of RTalerts, and each can have its own time frame and ticker list running different trading systems.
- Vertical grids. This tool helps divide the chart into zones.
- **Parallel Lines**. Draw one line and the next 4 lines drawn with this tool are all drawn parallel.
- Zoom feature. Click and drag the zoom box around chart area and zoom it. This high-powered zoom allows close-up scrutiny of any selected chart area.

## Other RTalerts Features in TradingExpert Pro v7.2

- - +/- DMI indicator.
- Per-indicator color selection.
- Clear alert list at exit.
- Modified toolbar icon for drawing arrow to indicate attribute is actually arrow and text.
- Keyboard shortcuts: CTRL + for increase spacing, CTRL for decrease spacing.
- Candlestick colors independent of hi-lo bar colors.
- Added hot key (F11) and menu item to show/hide the price/data pane in the indicator panel.
- Center divider in indicator panel now acts like a splitter.

## New in Portfolio Manager

AIQ's Portfolio Manager and the built-in Simulator are fast proving to be invaluable in trading system development.

Often overlooked, Portfolio Manager and the built-in trading system Simulator are again proving to be valuable for money management and trading system design. The new features in TradingExpert Pro v7.2 include many fine tuning additions that make the Portfolio Manager a professional money management system for traders.

## **New Features in Risk:**

- Addition of automatically calculated SEC fees.
- Calendar-based Performance analysis.
- Charting of IRR or Portfolio Value. Allow use of comparative index.

For a complete list of all new features in TradingExpert Pro v7.2 and to download this upgrade visit:

http://www.aiqsystems.com/TESindex72.htm