

# Enhanced Indicator for Tradestation Charts

designed and programmed by Jim Cooper w2jc

## Volatility Stops Indicator



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# Volatility Stops for Tradestation Charts

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## Volatility Stops

### Introduction



This is a very useful indicator for use with TradeStation charts. It calculates stop levels based on the ATR of the recent candles/bars on the chart, which is a measure of the stock's volatility.

## Special Features

### "Automatic" Trailing Stops

As shown above, this indicator provides a form of trailing stop, but the trailing is not based on a fixed percentage or dollar value; rather, it is based on the volatility (candle size) of recent trading.

The Volatility Stop indicator can also be used as a "trend reversal" indicator, when the stop levels flip to the opposite side.

Another feature, which I call the "un-stop," will be discussed later.

## Alerts

Very descriptive alerts are included in this indicator, which are configured so that audible alerts will be informative even if you are across the room and cannot see the chart!

The alerts include the ticker, the time base of the chart ( # ticks, # minutes, daily, weekly or monthly), the direction of movement, and a repeat of the ticker (in case you missed it at the start of the alert!). The company name can optionally be included in the alert messages.

Tickers used in the alerts are generated with a space between each letter, so that the Windows text-to-voice speaker will pronounce them as individual letters instead of trying to pronounce the ticker as a word.

An example audio alert might be:

**"EYE BEE EM ON THIRTY MINUTE CHART, SWITCH FROM LONG TO SHORT POSITION, ON EYE BEE EM"**

or

**"EYE BEE EM INTERNATIONAL BUSINESS MACHINES CORP ON DAILY CHART, SWITCH FROM SHORT TO LONG POSITION, ON EYE BEE EM"**

Note that the commas shown in the text alerts are used to create a pause in the audible alert, so that the message is more easily understood when spoken.

Each alert message begins with the Ticker (unfortunately, Tradestation uses the standard Microsoft 'text to voice' utility - which tries to pronounce things as words rather than spelling out items that are all capitalized. Maybe some day they will fix that... we have fixed it by inserting a space between each letter of the ticker automatically.)

The audible alert then pauses, and next describes the time base of the chart (works for tick charts as well as minutes, daily, weekly and monthly charts -- even point & figure charts!).

The action causing the alert is then described in detail.

The alert message then repeats the ticker symbol, in case you missed it when the alert began to announce!

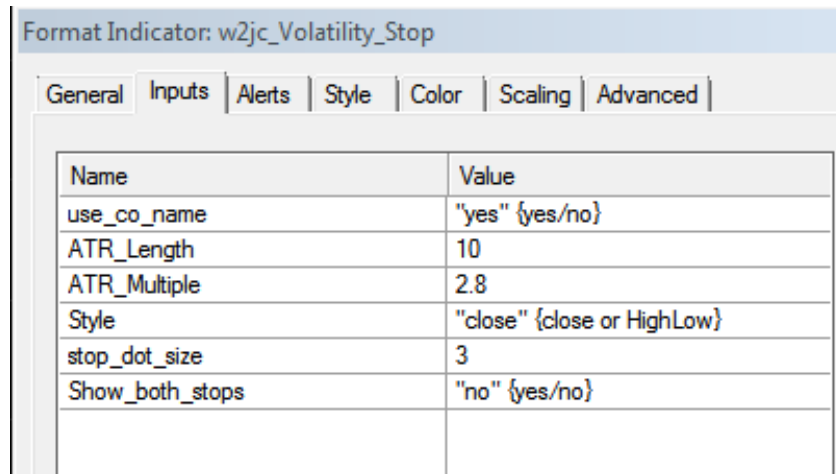
There are two basic conditions that are alerted using this custom indicator --

- Price crossing below the long stop level.
- Price crossing above the short stop level.

A very useful feature of the Tradestation visible alert box is that you can mouse-over the alert box and click, and you will be taken directly to the chart and workspace that generated the alert.

# Formatting and Setup

## User Inputs



Name	Value
use_co_name	"yes" {yes/no}
ATR_Length	10
ATR_Multiple	2.8
Style	"close" {close or HighLow}
stop_dot_size	3
Show_both_stops	"no" {yes/no}

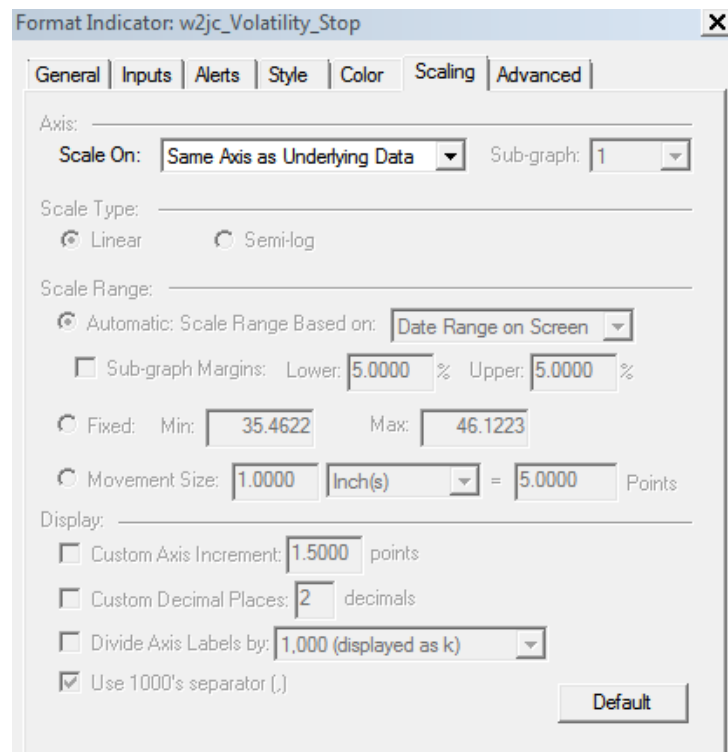
- use\_co\_name With "yes" alert messages will contain the full company name; with "no" they will only contain the ticker. Must use quote marks.
- ATR\_Length Selects how many bars back to use for Average True Range.
- ATR\_Multiple Selects how many ATRs to use for setting stop level; you want more than one to avoid excessive stop-outs.
- Style You can use either the close price or the 'high minus low' average for calculation of ATR; most people use the close price. Must use the quote marks -- "close" or "HighLow" here.
- stop\_dot\_size Allows you to easily set the size of the stop dot on the chart (instead of using Format/Style menu). Use value 1 through 5.
- Show\_both\_stops If "yes" chart will show what I call the "un-stop" as well as the stop. The un-stop dot will be shown smaller than the stop dot. Must use quote marks.  
This feature will be fully explained on page 10.

Note: The default values we have chosen for the two ATR entries have been found to work extremely well for keeping one IN the position during minor pullbacks yet exiting on trend reversals. The charts shown in this document display this feature quite well.

## Format Scaling

Normally, the **w2jc\_Volatility\_Stop Indicator** should install automatically in the upper Price area of your chart, since it should match the vertical price scale.

Also, insertion of the **w2jc\_Volatility\_Stop Indicator** should not change the appearance or scaling of the price chart (candles, bars, etc.). If it does, follow the procedure below for properly scaling the **w2jc\_Volatility\_Stop Indicator**.



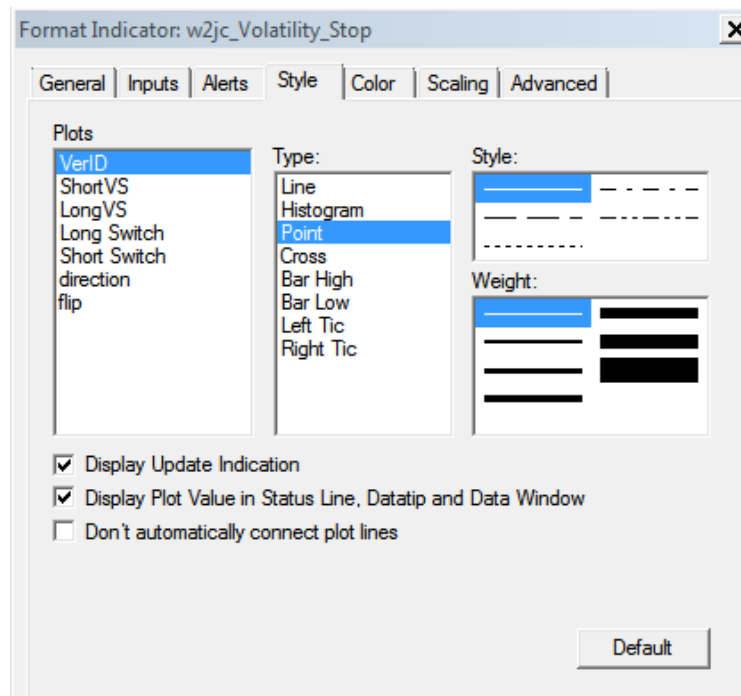
Select the **Scaling** tab and be sure the Axis: Scale On: window appears as above; if not, use the drop-down menu to select the "**Same Axis as Underlying Data**" setting.

## Format Style

The styles of the **w2jc\_Volatility\_Stop Indicator** are set by defaults within the indicator, and should load without any need to make changes in the Format Style menu.

The stop dot size is selected in Format / Input window, so any changes here will have no effect.

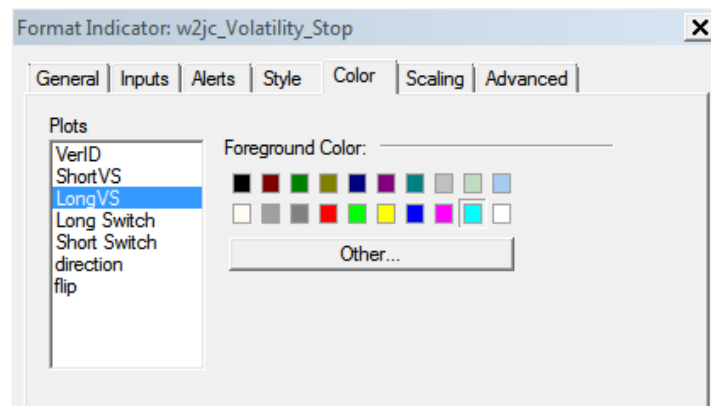
None of the items shown in the Format / Style window should be changed by the user.



## Format Color

Most users want the various items on their chart to be different colors, so they are easily recognized. The default color of the **w2jc\_Volatility\_Stop Indicator** Long stop (**LongVS**) is cyan and the Short stop (**ShortVS**) is magenta, but you can change those using the **Color** tab of the Format Indicator window.

The version level (**VerID**) of this indicator is shown in the status line on the chart, just before the display of current values. This text normally shows as white. If, for some reason, you wish to change the color of this text you can do it in the Format / Colors menu.



Note: None of the other items in this menu are displayed on the chart, so the color settings are not important.



# Using the Indicator

## Using on charts

The **w2jc\_Volatility\_Stop Indicator** is used just like other standard indicators. To add it to a Tradestation chart, just right click in an open area of the chart and select "**Insert Analysis Technique...**" from the drop down menu.

Use the "**Indicator**" tab of the "**Insert Analysis Techniques**" window, and scroll to find the "**w2jc\_Volatility\_Stop Indicator**" indicator. Left click on it and then click the [OK] button.

## Inputs

When the "**Format Indicator:**" window appears, click on the "**Inputs**" tab first. Using the information in the User Inputs section on page 5, make the appropriate changes to the Input settings, such as the "**use\_co\_name**" and "**Show\_both\_stops**" items.

## Alerts

If you want to have the advantage of the alerts built into this indicator, click the "**Alerts**" tab of the "**Format Indicator:**" window and then be sure there is a check mark in the "**Enable Alert**" box -- if not, left click once on the box and the check mark should appear.

Our suggestion is to select "**Alert once per bar (interval)**" -- however, you might prefer other options.

You can use "**Custom Settings**" if you have specific requirements for the alerts, or you can use the common "**Global Messaging Preferences**" which are used for all other alerts.

Our recommended settings for the Global preferences are:

- Audible - Voice (text to speech)
- Visual - Pop-up window: 15 seconds

You may, of course, configure the alert preferences any way you prefer.

## Other Tabs

The other tabs of the "**Format Indicator:**" window can be left in their default settings, unless you have particular preferences. You might prefer different colors for stop dots. Refer to page 8 for setting these colors.

## Using the optional "un-stop" indicator

During the course of developing, coding and using this indicator it was discovered that for each bar on the chart there are always two calculations made -- an upper and a lower value. These values are not symmetrical in relation to their bar on the chart.

An experiment was done by plotting both values on the chart to see if the "un-stop" (opposite) value offered any useful information.

Surprisingly, it was discovered that very often this opposite value was close to, and many times almost exactly, the first resistance level encountered in the desired trend direction. Thus, this value offered an initial target for profit-taking or at least a warning of a possible consolidation area.

Now, I always use it on my charts and have provided a way for other users to turn on this option if they desire to use it. As described in the Format / Input section, on page 5, it is simple to do by changing the "no" value to "yes" for the **Show\_both\_stops** input value. [Quote marks are required for both the "no" and "yes" values.]

An example chart is shown below, where the arrows point to "un-stop" levels that are close to -- and sometimes almost exactly -- reversal levels in the desired trend. This is just one more tool in the toolbox; one that is not found anywhere else! (until they start copying my discovery).



The "un-stop" dots are always shown smaller than the Vol Stop dots.

## Scanning with the w2jc\_Volatility\_Stop Indicator

**Note: Setting up and using the scanner in TradeStation is a somewhat advanced skill; if you are not familiar with setting up scans, please review the TradeStation tutorials.**

The **w2jc\_Volatility\_Stop Indicator** can be used in the TradeStation scanner just like any other indicator.

There is one 'flag' built into the code for this indicator, which will allow you to easily scan for 'flips' from one trend to the other. This flag is called "flip" and is +1 when the stop flips from short to long, and is -1 when the stop flips from long to short trend.

### Scanning for trend 'flips'

A scan can be set up to find all stocks where the volatility has 'flipped' to the opposite side.

If the criteria is set to find 'flip <> 0' then the result table will show stocks where the 'flip' flag is equal to  $\pm 1$  ... you can then sort that column by double-clicking on the column header, which will group all of each type together. Have a chart open in the same workspace, with the [S] button at the top right of the chart and the scanner windows the same color, and you will be able to click on the Scanner Results tickers and see each chart.

Shown below is the Format / Scan setup ... note the top line, where flip <> 0. In addition, and **very important**, is the setting for **"Load additional data" which MUST be set to 200**.

The last two lines are optional, and create filters for stock price range and minimum volume.

Format Scan

Name | Symbol Universe | Scan Criteria | Schedule | Results | Notification

Select the criteria to use in the scan:

	Field	Operator	Field/Value
<input checked="" type="checkbox"/>	w2jc_Volatility_Stop	flip	<> 0

Input/Setting Name	Value
use_co_name	"yes" (yes/no)
ATR_Length	10
ATR_Multiple	3.0
Style	"close" (close or HighLow)
stop_dot_size	5
Show_both_stops	"no" (yes/no)
unstop_dot_size	1
Interval	Daily
The MaxBarsBack setting you have chosen may b	Auto-detect
Load additional data	200
Currency based on	Account
Sort key	<none>

☐ Ignore this scan criteria for symbols that do not have a valid value

<input checked="" type="checkbox"/>	Close	Between	1	200
<input checked="" type="checkbox"/>	Vol Avg (10 day)	>=	500000	
<Select Criteria>				

## Setting up the Format / Scan window

Setting up the criteria:

1. With the TradeStation Scanner window open, click the Insert button at lower left.
2. Enter a **Name** for your scan in the top text window. In bottom selection window, use the drop-down menu to select the category for your scan, or use the **[Add Folder]** button to create a new category. Then click the **[Next >]** button at lower right to continue.
3. Using the drop-down menu at the top, select the **Symbol Universe** you want to scan. Then click the **[Next >]** button at lower right to continue.
4. In the **Scan Criteria** window, use the drop-down menu and select **Indicator**; the Select Indicator window should open.
5. Scan to the bottom of the list and select "**w2jc\_Volatility\_Stop Indicator**" by left clicking on the name; then click the **[OK]** button at upper right.
6. At the top left corner of the Scan Criteria window, be sure there is a green check mark in the first box; then click the + in the box to the right of the check mark to expand the **Input/Settings** table.
7. On the line labeled "Load additional data" change the value to 200 [two hundred].
8. Use the drop-down menu just above the Value column to select "**flip**" as the value for which the scanner will search.
9. In the "**Operator**" column, use the drop-down menu to select the "<>" value. (6th one down)
10. Left click twice in the **Field/Value** box and type the search value of 0 [zero].
11. If you want to limit the range of stock price for the scan, then double-click on the bottom line labeled **<Select Criteria>** to get a drop-down menu.
12. In the drop-down menu, click the **[+]** at left of **Price** to see another menu.
13. Click the **[+]** at the left of **Close** to see yet another menu!
14. Now select the **Close** entry by clicking once on it.
15. The open menus will now collapse; click the small down-arrow in the **Operator** column and choose the criteria you want -- in the example shown above, "**Between**" was selected & then a lower and upper number value were selected in the **Field/Value** columns.
16. If you want to limit the scan to stocks with more than a certain volume, repeat steps 11 to 15 and enter the **Operator** and minimum volume **value** as desired.
17. If you want to run the scan right away, click the **[Run]** button at the lower right; otherwise, click the **[Finish]** button to the left of the **[Run]** button.
18. If you receive an error message saying "The Operand requires more settings" then review all of the above steps to be sure they have been done correctly.

**Note:** When the Scanner gets to 99% on the "Calculating Easy Language" bar, it may stay at 99% for what seems like a long time -- don't panic!! Wait for the processing to finish, after which the result table will appear.

## Scanning Results

When the result table appears, the list can be sorted by "type of flip" by double-clicking the right-most column (which contains plus and minus one values).

An example of the scan results table and the chart of one of the 'hits' for Long-to-Short transition is shown below:



Notice that all the -1 hits are grouped at the top; all the +1 hits are below them.

## Version Updates

If design or coding updates are issued and you install the new version in place of the older version with the same indicator name, the Version ID in the status line at the top of the chart will automatically update.

Updates to this indicator will be emailed to those who have purchased the indicator in the past.

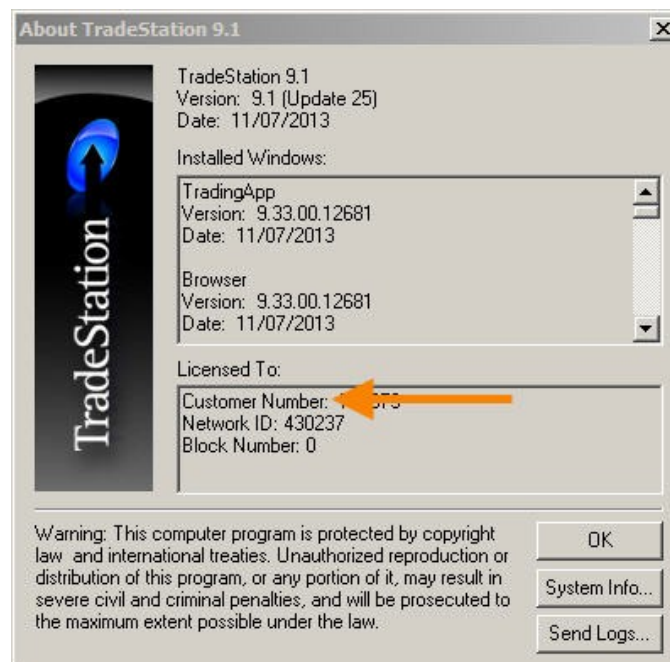
Please review and become familiar with the Tradestation procedure for installing .ELD indicator files over existing indicators with the same name.

# Purchasing the w2jc\_Volatility\_Stop Indicator

At the present time, this indicator is available only from the author. It is more of a hobby than a business - but I decided that since I had done the development work and many enhancements, others might want to benefit from my ideas and work.

If you have not obtained indicators from Jim Cooper in the past, you will need to furnish your **Tradestation Customer ID number** (this is NOT your account number, and it will not allow access to any of your Tradestation accounts or information). This is used so that you can use this indicator on any computer in the world, as long as you are logged into one of your Tradestation accounts associated with that Customer ID number.

To find your Customer ID number while logged into Tradestation, simply click the **Help** tab at the right end of the top row of the Tradestation window. Then click the "**About Tradestation**" selection at the bottom of the drop-down menu. A pop-up window will appear and just below the center you will see your "Customer Number" -- this is the number that will be needed with your order.



The **w2jc\_Volatility\_Stop Indicator** can be purchased directly from our website at

<http://TSindicators.info>

Payment can be made via credit card using PayPal. List price is \$98.

Support, if needed, can be obtained using the same email address above -- or via Skype at "jim-w2jc" ...