

## VSA Teacher Volume V4

The VSA Teacher Volume v4 indicator was created to help those new to Volume Spread Analysis better grasp some of the concepts used in analyzing volume when trading. It is intended to be used as a learning tool by people new to VSA, incorporating the teachings of Tom Williams in his book Master the Markets.

The indicator is very basic but allows for a wide range of user selectable options, including the option to save and apply custom settings across numerous charts.

The VSAT indicator focuses on volume and its relationship to past volume in an attempt to provide some frame of reference when trying to determine whether or not current volume is high, low or normal volume. This is accomplished by utilizing a larger sample size to find a median average of past volume, then apply the concepts of standard deviation, creating volume “Zones” for reference. Fib numbers were used to derive the different zones as they are very close to standard deviations and require minimal computer resources.

### Zones:

The volume zones are divided into 6 categories:

- Very Low volume
- Low volume
- Normal volume
- High volume
- Very High volume
- Ultra High (Climax) volume

The default settings for the zones are for a sample size of 1000 bars, showing the last 200 bars. On a 5 minute chart, 200 bars is equal to 8.3 hours, 1000 bars is equal to 3.4 days. The zones will be recalculated and updated periodically; (every  $\#shown\_bars/2$ , or every 100 bars (4.15 hours) in this example). They are also recalculated each time the Metatrader platform is started up, and each time the indicator properties are changed.

It is possible to see at a glance how the current volume bar compares to the past volume, before making any trading decision. These zones also help teach each trader to use their own discretion when analyzing the volume they are seeing.

Keep in mind that Price attracts volume, and the volume seen is there for a reason; price, interest, time of day, impending news, etc.. Just because the current bar has reached the High Volume zone doesn't necessarily mean it is truly high volume, it might just be “high normal” volume for that time of day. Why is that volume where and what it is?

## Volume:

The volume bars are shown in different colors corresponding to one of 5 conditions:

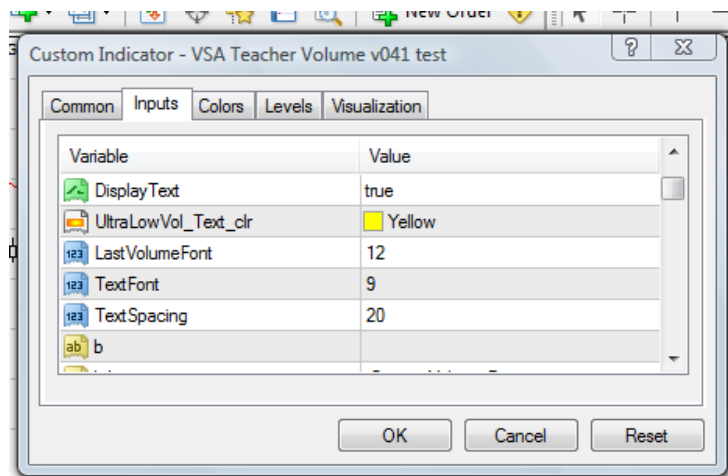
- Volume is very low
- Volume is less than the previous 2 bars
- Volume is greater than the previous 2 bars
- Volume is neither of the above, “normal”
- Volume is Ultra High (Climax) volume

## Text:

Text is displayed on the right side of the window, in the same color as the bar it corresponds to, explaining the 5 conditions outlined above. A maximum of 30 messages, corresponding to the last 30 bars are stored by the indicator.

Last bar volume is also displayed in the upper right corner of the indicator window, and it is color coded to the last bars condition.

## Text Properties:



The text and the last bar volume may be toggled on and off in the Indicator Properties window by selecting either “true” or “false” in the Display\_Text box.

Due to the fact that yellow does not show up on a white background, the text color for Very Low volume is changeable in the “UltraLowVol\_text\_clr” box. This will NOT change if the “very low volume” bar color is changed. It is highly recommended that the text color be **Red**, as it is intended to serve as a visual warning of the extremely low volume being seen.

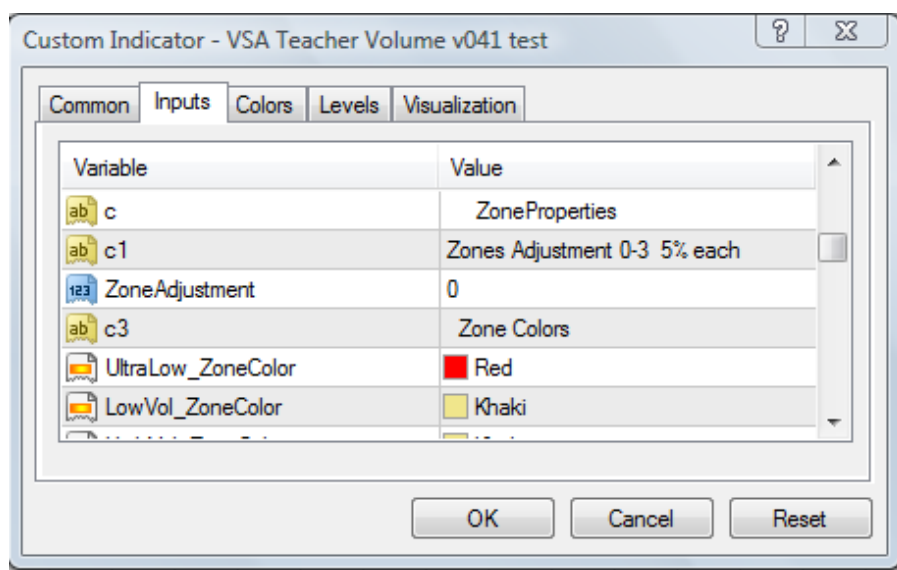
Font size for the last bar’s volume may also be increased or decreased by changing the value in the “LastVolumeFont” box.

Text font size can be changed by selecting “TextFont” and entering a new value. Text spacing may also be changed by selecting “TextSpacing” and entering a new value. NOTE: by entering smaller values for the both the text font and spacing, more messages will be displayed. To see even more, increase the size vertically, of the indicator window.

### Current Volume:

Volume of the current bar is displayed in real time. The volume shown will change colors, corresponding to each of the 5 conditions as it builds. The current volume is displayed when text is set to off.

Font size for the current volume can be changed by selecting “CurrVolumeFont” in the Indicator Properties window and entering a new value.



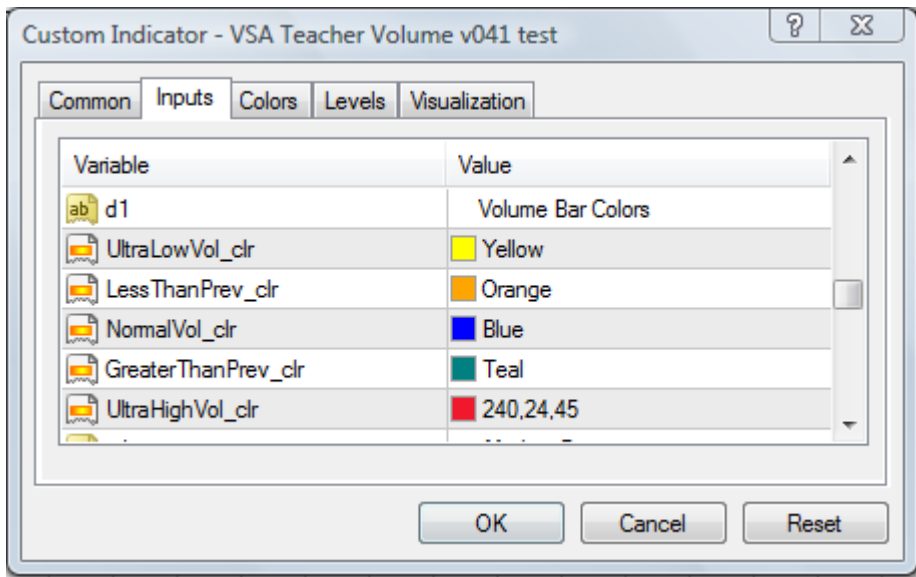
### Zone Properties:

#### Zone Adjustment;

There are times when adjusting the zones may be needed, therefore, a provision has been made to either expand or contract the zones at the discretion of the user. Selecting the “ZoneAdjustment” property and entering a value between 1 and 4, or a negative value between -1 and -4 (zero being no adjustment) will expand or contract the zones by a factor of 5% each. ex; a value of 3 will expand the zones by 15%.

#### Zone Colors;

Each of the zone’s colors may be independently set by selecting the appropriate color, also custom colors may be selected by clicking on the Custom Color button at the bottom of the color selection window.



## Volume Properties:

### Volume Bar Colors;

Volume bar colors may be changed by the user in the Indicator Properties window, to suit their own individual style. Each color is labeled by the condition that it represents;

UltraLowVol\_clr  
 LowVol\_clr  
 HighVol\_clr  
 VeryHighVol\_clr  
 UltraHighVol\_clr

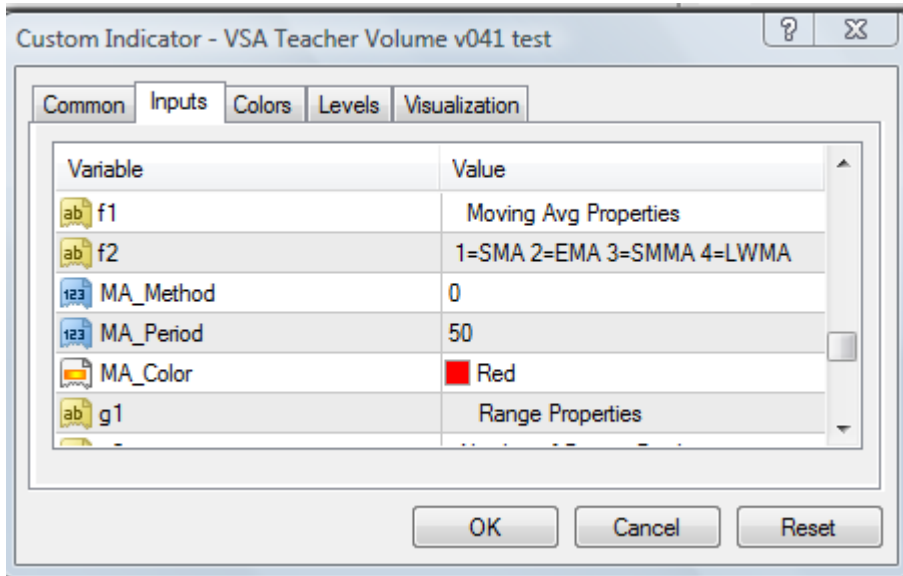
Each of the 5 different types of volume bars' colors may be changed by selecting the color and opening the color selection box.

The **UltraLowVol\_clr** is independent of the text color. It is **STRONGLY** recommended to leave this set to the default color - Yellow.

Median:

The median average line may be displayed or toggled off by selecting the “DisplayMedian” box and selecting either true or false.

Median color may be changed by selecting the “Median\_Color” box and opening the color selection box.



Moving Averages:

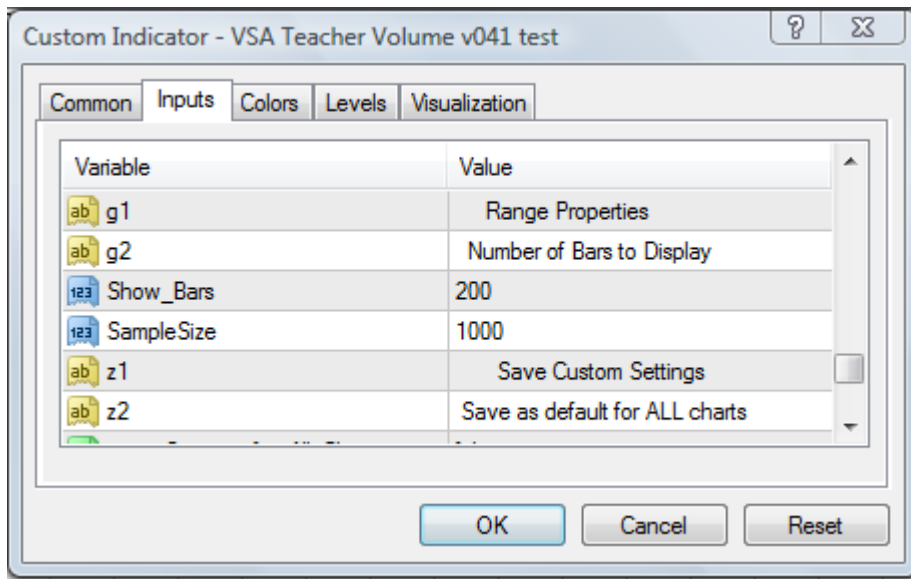
Four standard moving averages have been included for use as one’s understanding of VSA increases. They are Simple Moving Average, SMA, Exponential Moving Average, EMA, Smoothed Moving Average, SMMA, and Linear Weighted Moving Average, LWMA.

Each is selectable by choosing the MA\_Method and entering the corresponding values;

- = Sma
- = Ema
- = Smma
- = Lwma

Zero equal “no moving average”.

Enter the period for the moving average in the “MA\_Period” box. The MA line color may be changed via the “MA\_Color” box.



#### Range Properties:

SampleSize is the length of time, or the number of bars used to find the median average. The default is 1000 bars. As stated above, on a 5 min chart this equates to 4.3 days. This value can be changed by selecting the “SampleSize” box and entering a new value. The sample size must be greater than 99.

The number of bars displayed with zones is governed by the “Show\_Bars” variable which may be changed by selecting the “Show\_Bars” box and entering a new value. Note: This must be equal to or less than SampleSize.

Reducing the sample size will provide a view of more recent conditions, which may be helpful when the volatility changes.

#### Save Settings:

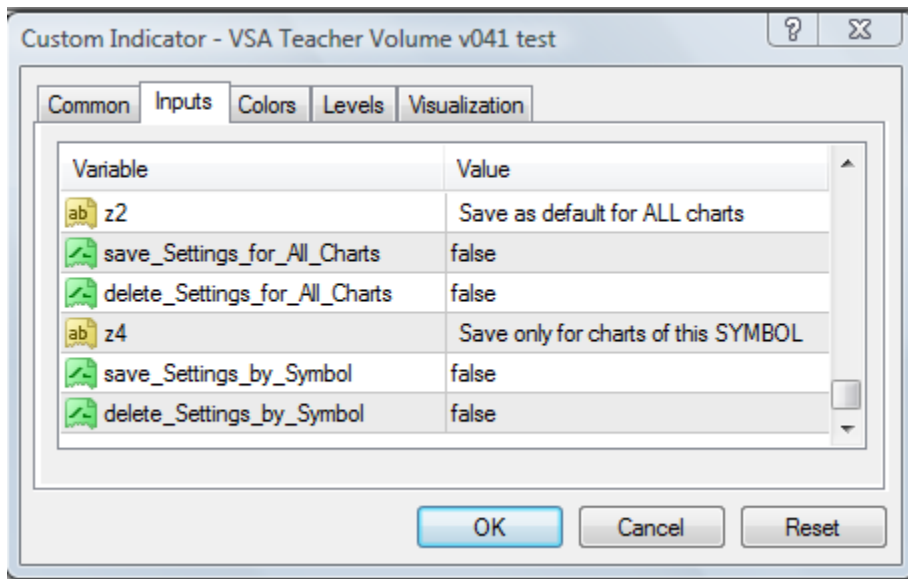
All of the settings above may be saved to a file and used on other charts, rather than re-creating the settings each time the indicator is applied to another chart. There are two ways to save the properties settings;

Save the settings to apply to all charts, as a default much like a template

Save the settings by currency, which will be applied only to charts of the same currency, ie. USDJPY charts only. This is not affected by timeframe, only by the currency symbol.

To save settings which apply to all charts select “save\_Settings\_for\_All\_Charts” and select true.

To save currency specific settings select “save\_Settings\_by\_Symbol” and select true. A file for the current symbol only will be saved.



Start by choosing a chart then experiment with the different settings, when satisfied, open the Indicator Properties window,

Make certain the “Use\_Custom\_Settings” box is toggled to “false”  
 scroll down to the “Save Custom Settings”  
 Choose either “save\_Settings\_for\_All\_Charts” or “save\_Settings\_by\_Symbol”  
 Click on the selected box and toggle to “true”  
 Click on the “OK” button, the window closes and your settings have been saved.

Open the Indicator Properties window again  
 Click the “Reset” button, this ensures that all save\_Settings properties are “false”  
 Select the “Use\_Custom\_Settings” box, toggle it to “true”  
 Click “OK” button, the custom settings will now be loaded and used.

When loading the indicator on a new chart, or reloading after custom settings have been saved -

Open the Indicator Properties window  
 Select the “Use\_Custom\_Settings” box  
 Toggle the box to “true”  
 Click “OK”, your settings will be loaded and applied to your chart.

**Note:** the custom settings will **NOT** be shown in the properties window.

**NOTE:** Mql4 does not allow the default properties to be changed. It is a good idea to save a file, then bring the properties window back up, click on the Reset button to set the save\_Settings selections back to false. This will avoid **overwriting** a file that has just been saved. Then select the Use\_Custom\_Settings option to load the file to be used.

Delete Saved Settings;

Each of the two options also have a delete file option as well. This should not be used except to permanently delete any saved settings, such as when the indicator is being permanently removed and won't be used again, or the default settings that came with the indicator are preferred. Any time custom settings are saved, the old file is automatically deleted and replaced with a new file containing the new settings, so use of the delete\_Saved\_Settings options should be limited, otherwise a settings file may be accidentally deleted.

**NOTE:** whenever using any of the save\_Settings or delete\_Settings properties it is a very good habit to open the Indicator Properties window and click the "Reset" button on the properties window immediately after using either of these two settings. This will insure the settings are not lost accidentally.

"Use\_Custom\_Settings";

When "Use\_Custom\_Settings" is selected as true, the indicator will search for a file matching the current symbol. If a matching file is found it is loaded and the settings in the file are applied to the indicator.

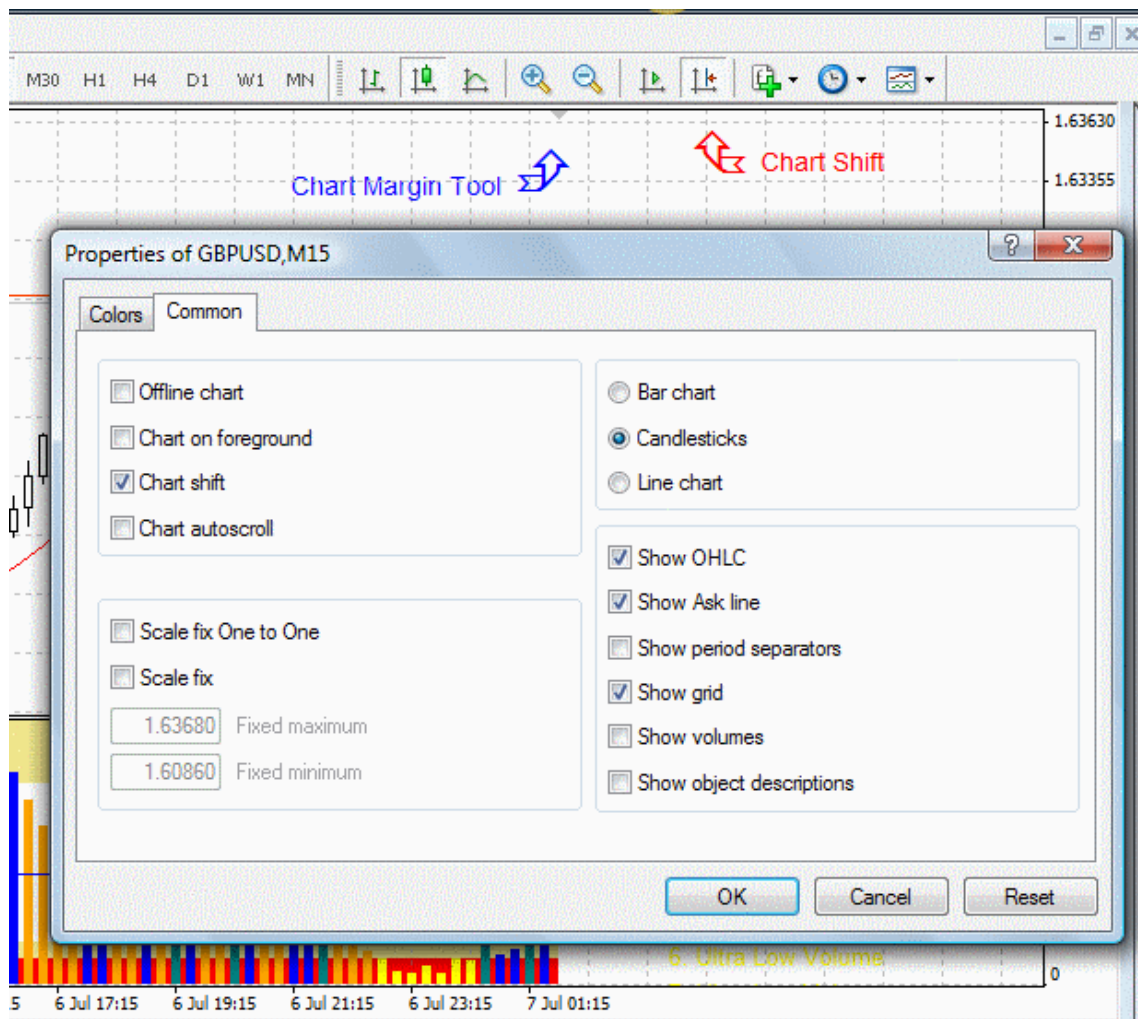
If a symbol file is not found the indicator then looks for a default file for All\_Charts. If this file is found, those settings are load and used.

If no custom settings are found, an alert is displayed.

#### Input Errors:

The indicator checks for input errors on all the values entered when the properties window is closed. If the error is significant, an alert is displayed informing the user of what the error is. The selected item is set to a default value or the operation is aborted, especially in the save\_Settings selections. To correct the input the properties window must be opened and the incorrect selection changed.





### Chart Setup:

For the indicator to show properly on the chart the “Chart Shift” must be active. This may be selected either on the toolbar via the “Chart Shift” button, or in the “Chart Properties” window. Other window tools, the “Navigator” window, “Market Watch” and “Data Window” should be closed for best display.

