



***VPC Levels***  
***Indicator User Manual NT 8***  
***Volume Profile Confluence***

## *Software User Agreement & Product Disclaimer*

**IMPORTANT: PLEASE READ THIS AGREEMENT CAREFULLY BEFORE CONTINUING WITH THE INSTALLATION PROCESS OF THE SOFTWARE ("THE SOFTWARE"). BY INSTALLING THE SOFTWARE, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, DO NOT INSTALL THE SOFTWARE.**

1. License. If you have purchased a license to the Software, ARC-AI grants you a non-exclusive right and license to use the Software and the related documentation (the "Documentation") as set forth in this Agreement. You may use the Software on a single computer. You may also use the Software on a second (portable or home) computer so long as only one copy is used at a time. You may make a single copy of the Software for backup and archival purposes only provided that any copy must contain all proprietary notices included in the original. You may use the Documentation to assist in your use of the Software. If you download the Software without physical delivery of Documentation, you may review the Documentation online, but you may not make further copies of the Documentation. You own the media on which the Software is recorded, but not the Software itself or any copy of it. This license is not a sale of the original or any copy of the Software.
2. Copying, Transferring or Modifying Software. The Software contains copyrighted material, trade secrets and other proprietary intellectual property. You may not permit concurrent use of the Software unless each user has an applicable license. You may not permit other individuals to use the Software except under the terms listed above. For the purposes of protecting ARC-AI trade secrets, you may not decompile, disassemble, reverse-engineer or otherwise display the Software in human-readable form. You may not modify, translate, rent, lease, distribute or lend the Software, and you may not sell to others the right to use the Software on your computer. You may not remove any proprietary notices or labels on the Software. You may not copy, transfer, transmit, sublicense or assign this license or the Software except as expressly permitted in this Agreement.
3. Term. If you have purchased a license to the Software, this Agreement and license are effective from the time you accept the terms of this Agreement until this Agreement is terminated. You may terminate this Agreement at any time by destroying all copies of the Software. This Agreement will terminate immediately and without further notice if you fail to comply with any provision of this Agreement. All obligations of confidentiality and restrictions on use, and all other provisions that may reasonably be interpreted to survive termination of this Agreement, will survive termination of this Agreement for any reason. Upon termination, you agree to destroy all copies of the Software. If you have obtained an evaluation copy of the Software, and have not purchased a license to the Software, this Agreement and license are effective for a period of thirty (30) days from the date of installation of the Software.

4. Warranty Disclaimers. THE SOFTWARE AND THE DOCUMENTATION ARE PROVIDED "AS IS" AND WITHOUT WARRANTIES OF ANY KIND, EXPRESS, STATUTORY OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE SOFTWARE AND THE DOCUMENTATION IS WITH YOU. SHOULD THE SOFTWARE OR THE DOCUMENTATION PROVE DEFECTIVE, YOU (AND NOT ARC-AI)

ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING OR REPAIR. ARC-AI DOES NOT WARRANT THAT THE FUNCTIONS CONTAINED IN THE SOFTWARE WILL MEET YOUR REQUIREMENTS OR OPERATE IN THE COMBINATION THAT YOU MAY SELECT FOR USE, THAT THE OPERATION OF THE SOFTWARE WILL BE UNINTERRUPTED OR ERROR FREE, OR THAT DEFECTS IN THE SOFTWARE WILL BE CORRECTED. NO ORAL OR WRITTEN STATEMENT BY ARC-AI OR BY A REPRESENTATIVE OF ARC-AI SHALL CREATE A WARRANTY OR INCREASE THE SCOPE OF THIS WARRANTY. Notwithstanding the above, you may have certain warranty rights which vary from state to state and which cannot be disclaimed by contract. Any warranties that by law survive the foregoing disclaimers shall terminate ninety (90) days from the date you received the Software as shown by your receipt. Some states do not allow limitations on how long an implied warranty lasts, so the foregoing limitation may not apply to you if prohibited by law.

5. Limitation of Liability. YOUR SOLE REMEDIES AND ARC-AI' ENTIRE LIABILITY ARE SET FORTH ABOVE. IN NO EVENT WILL ARC-AI BE LIABLE FOR DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE SOFTWARE, THE INABILITY TO USE THE SOFTWARE, OR ANY DEFECT IN THE SOFTWARE, INCLUDING ANY LOST PROFITS, EVEN IF THEY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. IN NO EVENT WILL ARC-AI' TOTAL LIABILITY TO YOU FOR ALL DAMAGES, LOSSES, AND CAUSES OF ACTION (WHETHER IN CONTRACT, TORT, INCLUDING NEGLIGENCE, OR OTHERWISE) EXCEED THE AMOUNT YOU PAID FOR THIS PRODUCT. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF RELIEF, INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. You agree that ARC-AI will not be liable for defense or indemnity with respect to any claim against you by any third party arising from your possession or use of the Software or the Documentation.
6. Export Control Laws. You agree to comply with all laws, rules and regulations applicable to the export of the Software or the Documentation. Specifically, you shall not export, re-export or transship the Software or the Documentation, or the direct product thereof, in violation of any United States laws and regulations which may from time to time be applicable. None of the Software or underlying information or technology may be downloaded or otherwise exported or re-exported (i) into any country to which the U.S. has embargoed goods; or (ii) to anyone on the U.S. Treasury Department's list of Specially Designated Nationals or the U.S. Commerce Department's Table of Denial Order. By downloading or using the Software, you are agreeing to the foregoing and you are representing and warranting that you are not located in, under the control of, or a national or resident of any such country or on any such list.
7. Government Restricted Rights. The Software has been developed at private expense and is "commercial computer software" or "restricted computer software" within the meaning of the

FARs, the DFARs, and any other similar regulations relating to government acquisition of computer software. Nothing contained herein will be deemed to grant any government agency any license or other rights greater than are mandated by statute or regulation for commercial computer software developed entirely at private expense.

8. Entire Agreement. This Agreement is the complete agreement between ARC-AI and you and supersedes all prior agreements, oral or written, with respect to the subject matter hereof. If you have any questions concerning this Agreement, you may write to ARC-AI, Customer Service, at [support@architectsai.com](mailto:support@architectsai.com).

**U.S. Government Required Disclaimer** - Forex, futures, stock, and options trading is not appropriate for everyone. There is a substantial risk of loss associated with trading these markets. Losses can and will occur. No system or methodology has ever been developed that can guarantee profits or ensure freedom from losses. No representation or implication is being made that using this methodology or system or the information in this letter will generate profits or ensure freedom from losses.

**CFTC RULE 4.41** - HYPOTHETICAL OR SIMULATED PERFORMANCE RESULTS HAVE CERTAIN LIMITATIONS. UNLIKE AN ACTUAL PERFORMANCE RECORD, SIMULATED RESULTS DO NOT REPRESENT ACTUAL TRADING. ALSO, SINCE THE TRADES HAVE NOT BEEN EXECUTED, THE RESULTS MAY HAVE UNDER-OR-OVER COMPENSATED FOR THE IMPACT, IF ANY, OF CERTAIN MARKET FACTORS, SUCH AS LACK OF LIQUIDITY. SIMULATED TRADING PROGRAMS IN GENERAL ARE ALSO SUBJECT TO THE FACT THAT THEY ARE DESIGNED WITH THE BENEFIT OF HINDSIGHT. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFIT OR LOSSES SIMILAR TO THOSE SHOWN.

GOVERNMENT REGULATIONS REQUIRE DISCLOSURE OF THE FACT THAT WHILE THESE METHODS MAY HAVE WORKED IN THE PAST, PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. WHILE THERE IS A POTENTIAL FOR PROFITS THERE IS ALSO A RISK OF LOSS. A LOSS INCURRED IN CONNECTION WITH TRADING FUTURES, STOCKS, FOREX, OPTIONS OR ANY KIND OF OTHER TRADING PRODUCTS CAN BE SIGNIFICANT. YOU SHOULD THEREFORE CAREFULLY CONSIDER WHETHER SUCH TRADING IS SUITABLE FOR YOU IN LIGHT OF YOUR FINANCIAL CONDITION SINCE ALL SPECULATIVE TRADING IS INHERENTLY RISKY AND SHOULD ONLY BE UNDERTAKEN BY INDIVIDUALS WITH ADEQUATE RISK CAPITAL.

# User Guide VPCLevels

<b>1. Quick Start Guide</b> .....	<b>6</b>
a. Data Requirement .....	6
b. Default Settings of the Indicator .....	7
c. Description of Parameters.....	8
<b>2. The VPCLevels Indicator Explained</b> .....	<b>10</b>
a. ZigZags .....	11
b. Volume Profile .....	13
c. Confluence Explained .....	14
d. Confluence: Standard mode.....	15
e. Confluence: Differentiate mode.....	16
f. From Standard to Differentiate mode.....	17
<b>3. Settings for the Indicator</b> .....	<b>19</b>
a. Extend Levels and SR ATR Filter .....	19
b. Total Look Back (Days).....	19
c. Bar Period For Swing Bars (minutes).....	19
d. Swing Timeframe.....	19
e. Threshold for Confluence lines.....	20
f. Differentiate Levels .....	20
g. Volume Weight.....	20
h. Calculate on Bar Close .....	20
i. Auto scale .....	20
j. Plots .....	20

# 1. Quick Start Guide

## a. Data Requirement

The VPCLevels indicator uses a preloading feature of minute and second data to load historical data for calculating swings and Volume Profiles. The indicator can be used with as little as 1 day of chart look-back while still processing up to 300 days of data internally. This is a very powerful component because we can leverage the power of large Volume Profile sequences using Multiple Timeframes, while using small charts for trading.

## Futures

For futures it is necessary to use merged contracts. The gap that occurs during rollover should be eliminated, because it can otherwise distort the swing sizes which are used to calculate the Volume Profiles. It is recommended to use back adjusted futures. NinjaTrader will automatically merge and back adjust your contracts, if you set the merge policy to Merge Back Adjusted under -> Tools -> Options -> Data -> Merge Policy. The rollover dates used for merging the contracts are downloaded from NinjaTrader servers. For financial futures the rollover dates are correctly preset, for agricultural, energy, metals and softs it is recommended to check all rollover dates, as some of the default settings cannot be used. NinjaTrader will either download the offsets from NinjaTrader servers or calculate them from the close values of your daily data prior to rollover date. The back adjusted contracts can be used for periods up to about 2 years. If 2 years are exceeded the skew may become important and falsify results.

## Equities and FOREX

The data does not pose any problems here.

## b. Default Settings of the Indicator

It is recommended to first use the indicator with the default settings.

▼ Levels Parameters	
Extend Levels	<input checked="" type="checkbox"/>
SR ATR Break Filter	1
Extended Line width	2
Extended Line Opacity (%)	100
▼ MTF Parameters	
Total lookback (days)	300
Bar period for Swing bars (minutes)	3
Swing Timeframe	Small ▼
Threshold for confluence lines	100
▼ Plots Colors	
Resistance lines	Maroon ▼
Support lines	Blue ▼
POC lines	Yellow ▼
VWAP lines	Cyan ▼
VAH lines	Magenta ▼
VAL lines	Lime ▼
▼ Plots Settings	
Differentiate levels	<input type="checkbox"/>
Show POC levels	<input checked="" type="checkbox"/>
Show VWAP levels	<input checked="" type="checkbox"/>
Show VAH levels	<input checked="" type="checkbox"/>
Show VAL levels	<input checked="" type="checkbox"/>
Line width	2
Plot style	Line ▼
Dash style	Solid ▼
▼ Volume Weight	
POC specific Weight	100
VWAP specific Weight	90
VAH specific Weight	70
VAL specific Weight	70
▼ Data Series	
Input series	CL 09-16 (FullRange 4 Tick)
▼ Set up	
Calculate	On bar close ▼
Label	VPCLevels
Maximum bars look back	256 ▼
▶ Visual	

### c. Description of Parameters

Below is a description of parameters of the VPCLevels indicator that can be accessed via the indicator dialogue box. Although the default settings are recommended, adjustments may be necessary for individual preferences.

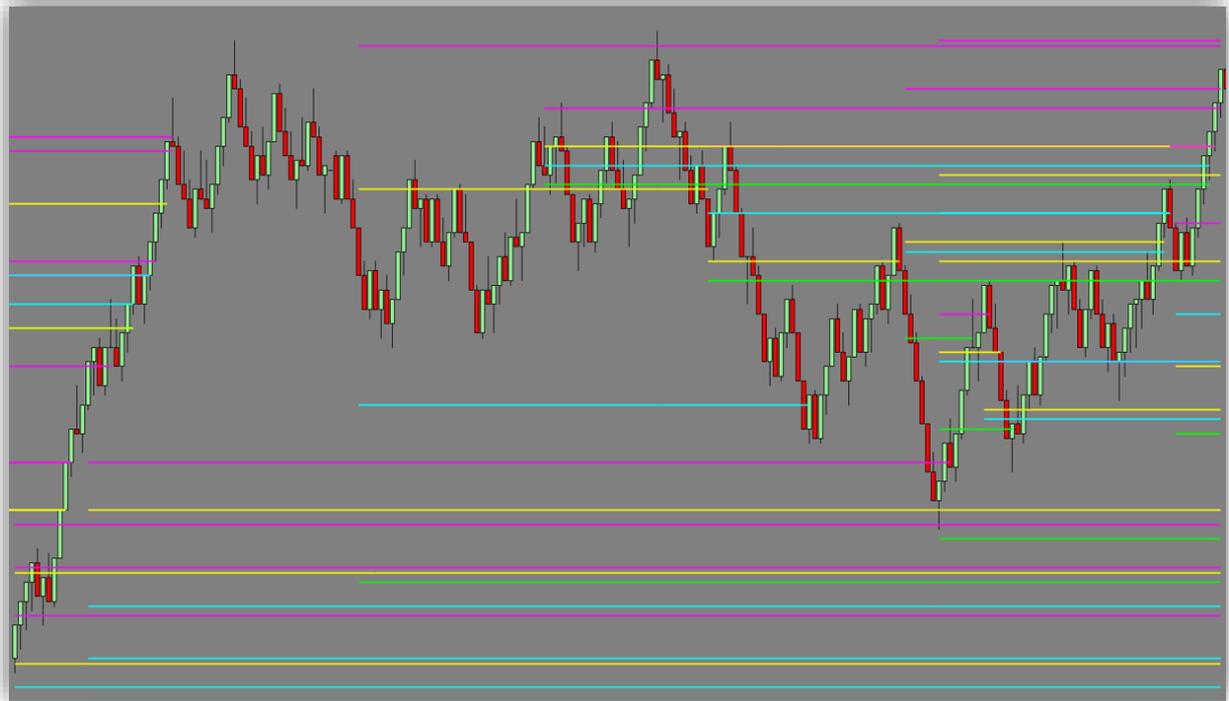
Changing the “Bar period for Swing bars” & “Swing Timeframe” will result in swings being used to calculate the confluence. Changing the “Swing Timeframe” from {Smallest} to {Largest} will result in populating less or more confluence levels on the chart. We recommend leaving the “Threshold” set to {100}. It is strongly recommended to leave the “Dash Style” set to {Solid} as this will increase computer performance while using the indicator.

Group	Parameters	Allowable Values	Description
<b>Levels Parameters</b>	<b>Extend Levels</b>	True/False Default = True	Choose to extend or not the levels to the current bar or until there are broken.
	<b>SR ATR Break Filter</b>	Double > 0 Default = 1	Multiple of ATR to consider extended levels as broken.
	<b>Extended Line width</b>	Integer >= 1 Default = 2	Sets the line width for extended levels.
	<b>Extended Line Opacity (%)</b>	Double [0;100] Default = 50	The Opacity of extended levels in %.
<b>MTF Parameters</b>	<b>Total Look-Back (Days)</b>	Integer > 0 Default = 300	This sets the number of days for pre-loading data to calculate the Confluence.
	<b>Bar Period For Swing Bars (minutes)</b>	Integer > 0 Default = 3	This is the minute bar used for calculating the swings.  Ex: If set to 3, the indicator will use 3 minute bars for calculating the swings despite the default chart you are using.
	<b>Swing Timeframe</b>	Smallest, Small, Default, Increased, Large Largest  Default = Small	Shifts the timeframes used to calculate the confluence levels, this increases or reduces the number of lines displayed
	<b>Threshold for Confluence Lines</b>	Integer > 0 Default = 100	Sets the minimum threshold required for major lines. <b>We recommend not changing this number.</b>
<b>Plots Settings</b>	<b>Differentiate levels</b>	True/False Default = False	When set to false, Confluences are processed on POC, VWAP, VAH and VAL. If set to true, Confluences are processed on same kind of level only.
	<b>Show POC Levels</b>	True/False Default = True	When “Differentiate” is set to true, you can display or hide POC Confluences.

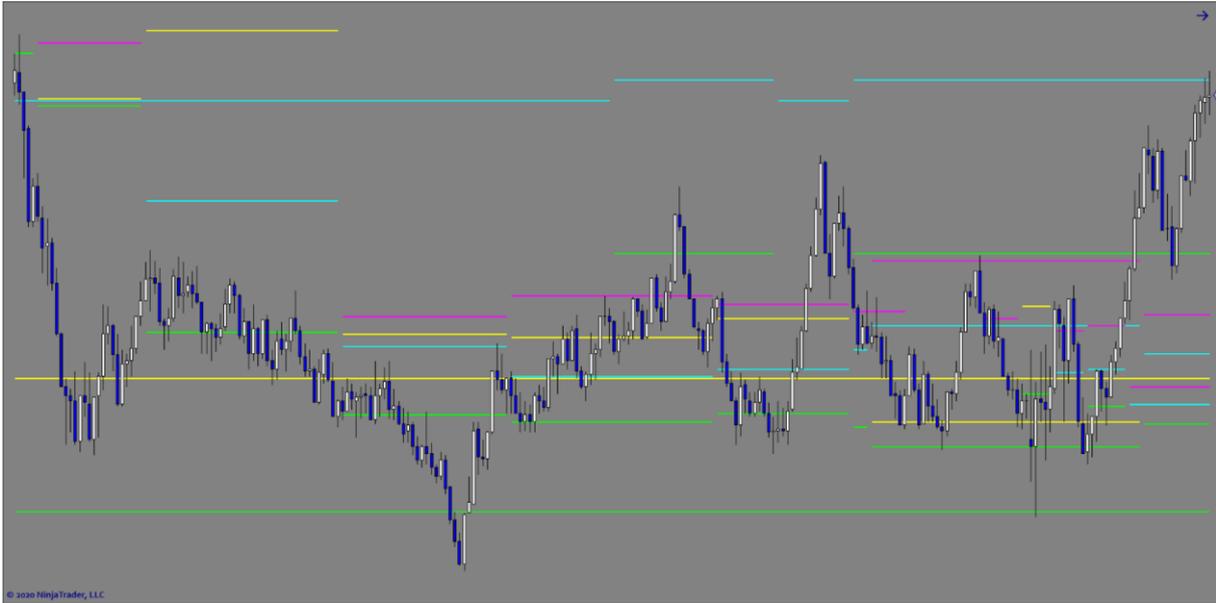
	<b>Show VWAP Levels</b>	True/False Default = True	When "Differentiate" is set to true, you can display or hide VWAP Confluences.
	<b>Show VAH Levels</b>	True/False Default = True	When "Differentiate" is set to true, you can display or hide VAH Confluences.
	<b>Show VAL Levels</b>	True/False Default = True	When "Differentiate" is set to true, you can display or hide VAL Confluences.
	<b>Line width</b>	Integer >= 1 Default = 2	Sets the line width for confluence lines
	<b>Plot style</b>	Default = Line	Sets the plot style for confluence lines
	<b>Dash style</b>	Solid, Dash, Dot, DashDot, DashDotDot Default = Solid	Sets the dash style for confluence lines
<b>Volume Weight</b>	<b>POC Weight</b>	Integer > 0 Default = 100	Weight set to POC levels in Confluences' Calculation.
	<b>VWAP Weight</b>	Integer > 0 Default = 90	Weight set to VWAP levels in Confluences' Calculation.
	<b>VAH Weight</b>	Integer > 0 Default = 70	Weight set to VAH levels in Confluences' Calculation.
	<b>VAL Weight</b>	Integer > 0 Default = 70	Weight set to VAL levels in Confluences' Calculation.
<b>Data</b>	<b>Calculate</b>	OnBarClose / OnEachTick / OnPriceChange Default = OnBarClose	When set to OnBarClose, indicator recalculates at bar close only. This reduces the processing load and give you best performance. For best results the indicator should remain on Calculate = OnBarClose.
<b>Plots Color</b>	<b>Resistance Lines</b>	Color Default = Maroon	Sets the color for resistance lines when Differentiate is False.
	<b>Support Lines</b>	Color Default = Blue	Sets the color for support lines when Differentiate is False.
	<b>POC Lines</b>	Color Default = Yellow	Sets the color for POC lines when Differentiate is True.
	<b>VWAP Lines</b>	Color Default = Cyan	Sets the color for VWAP lines when Differentiate is True.
	<b>VAH Lines</b>	Color Default = Fuchsia	Sets the color for VAH lines when Differentiate is True.
	<b>VAL Lines</b>	Color Default = Lime	Sets the color for VAL lines when Differentiate is True.

## 2. The VPCLevels Indicator Explained

The VPCLevels indicator identifies high probability confluence lines where price action is likely to pause or to reverse. To find these lines the indicator identifies swings by using different timeframes and then calculates up to 40 support and resistance lines based on the Volume Profile of each swing. Below you can see a 3 min chart for with all these lines plotted:



Below is the same chart with Differentiate mode **ON**. This helps to know on what kind of Volume Profile level (POC, VWAP, VAH, VAL) the confluence is based on:



**a. ZigZags**



In a first step the indicator creates 10 different zigzags, each of them representing a different timeframe. The minimum deviations of the zigzags auto adjust to the volatility of the instrument via the average true range over the data period. This has the advantage that the indicator can be used for different instruments, timeframes and chart types with the same default settings. The default settings are well adapted for standard fixed period charts such as shown above.

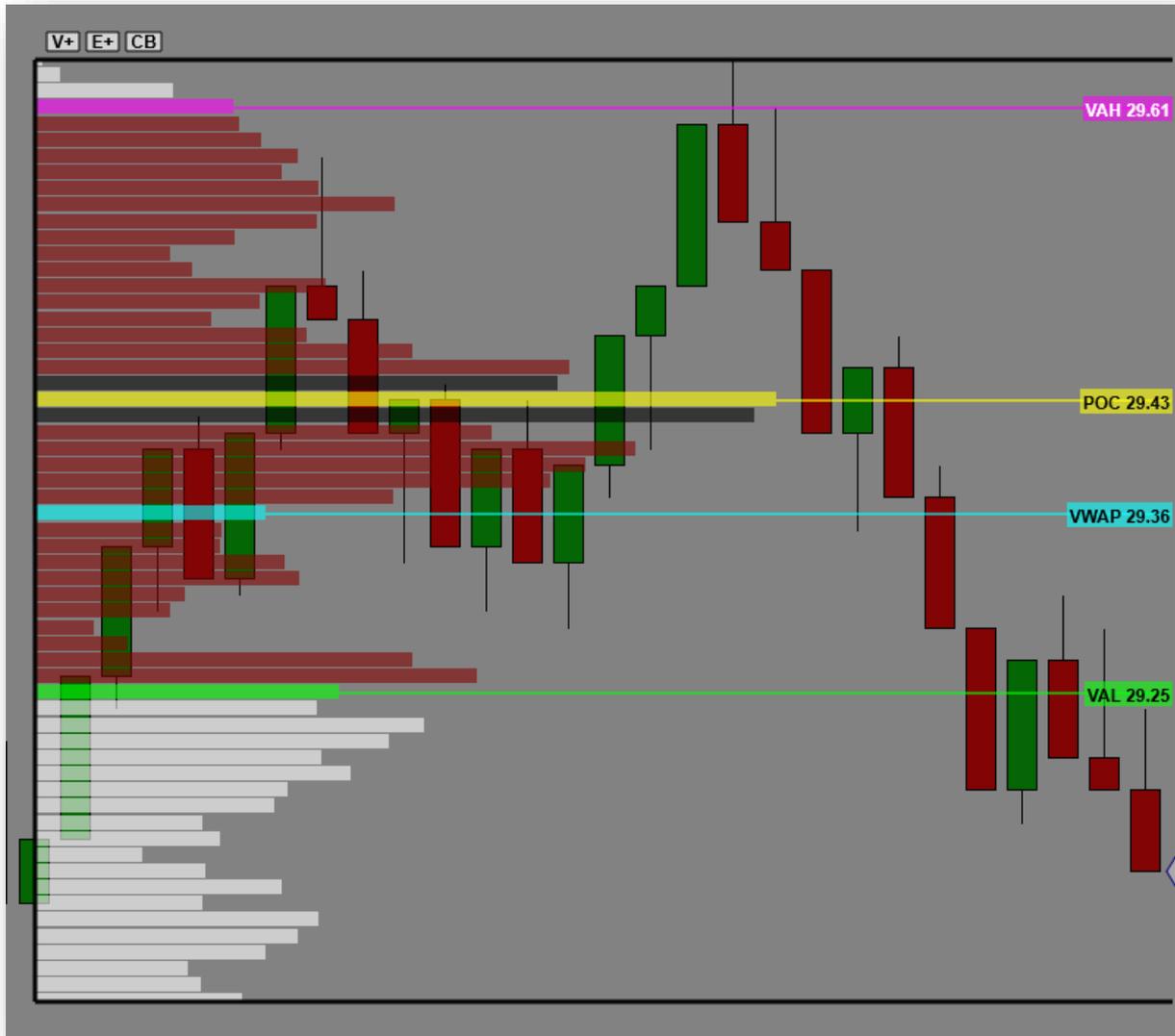
Fine-tuning of the adjustment of the zigzags to volatility can be done via the **Swing Timeframe** option. This effectively changes the minimum deviation of the zigzags. On narrow range days the Swing Timeframe can be reduced to adjust to low volatility, on wide ranging and trending days it is possible to select a higher Swing Timeframe to avoid displaying too many lines. It is important not to display too many lines, but only leave the strong support and resistance lines on your chart. The timeframes selected should also depend on the time horizon of your trade. The distance between two confluence zones and the profit target for your trade should have the same magnitude.

The indicator determines support and resistance by using zigzags' Volume Profile. These are not only determined for the current swing, but the indicator has a memory and remembers prior swings as well.

## b. Volume Profile

Volume Profile helps you analyze volume versus price on a vertical scale. The Volume Profile information is very critical because it gives you a deeper look to what is going on onto the market by looking at volume instead of only price.

It is possible to create Volume Profiles based on a time period (30Minutes, 60 Minutes etc.), swings or even a single bar.



We can see that 4 specific levels are highlighted:

- **POC (Point of Control):** This is the level with the highest traded volume over the profile period.
- **VWAP (Volume Weighted Average Price):** It is the average price weighted against its traded volume.
- **VAH (Value Area High):** This is the high bound of 70% of the Profile's total volume.
- **VAL (Value Area Low):** This is the low bound of 70% of the Profile's total volume.

There are various ways to use these 4 levels when looking at Volume Profile, but one thing that there is in common is the fact that these levels are strong levels of support or resistance because there are based on volume and not on an arbitrary price based formula

### c. Confluence Explained

Let us summarize at this point, what the indicator does. It identifies support and resistance by using Volume Profile calculation. By using a zigzag function, swings are identified for different timeframes. From these swings the indicator identifies

- The swing's POC
- The swing's VWAP
- The swing's VAH
- The swing's VAL

In total the indicator may identify up to 40 Volume Profile lines on any chart, if the lookback period is large enough. Not all these lines are of equal importance, but some are higher probability lines and others are lower probability lines. To determine the conditional probabilities that price reverses, when hitting a line, statistical distributions of the relative swing sizes have been studied for several instruments and various timeframes. As a result of this analysis each of the 40 Volume Profile lines is attributed a statistical weight which depends on timeframe and Volume Profile level. The indicator also remembers the preceding generation of Volume Profile lines generated via the same zigzag function and includes them by using a reduced weighting factor.

Below, is an example of what the indicator does on 10 timeframes. It is on purpose made simple to understand the overall concept:



*Manual Profiles above are drawn thanks to the Print Profiler indicator. (sold Separately)*

#### d. Confluence: Standard mode

The Standard mode displays Volume Profile confluences of all kind of levels together.

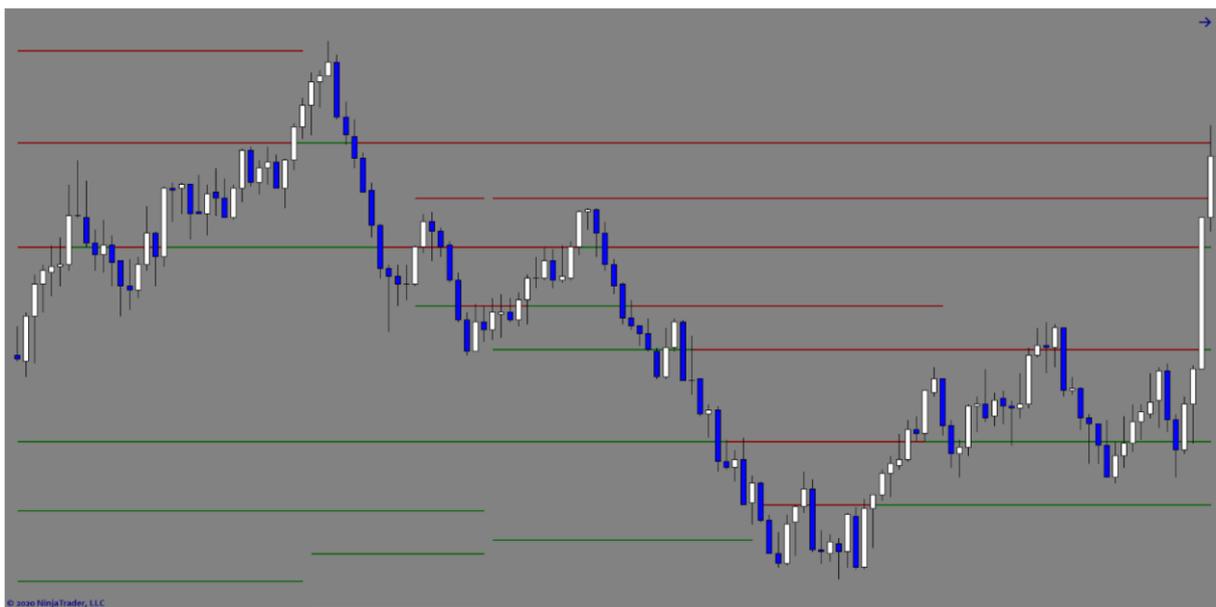
After setting the significance of each line, by changing the weight parameters, the whole price range of the chart is scanned with a confluence window, which has a fixed size depending on the average true range over the entire chart period.

This confluence window has two possible settings - a wide or a narrower window can be chosen. The wide window will show fewer, but more important confluence zones, which is the default setting for the indicator.

The indicator then adds up the weights of all the lines within the confluence window, and if a threshold value is reached detects a confluence area.

The confluence area becomes a confluence zone, if it prevails over the neighboring confluence areas. The indicator displays the strongest Volume Profile line within the confluence zone, which is not necessarily the midrange of the confluence zone, but the highest probability area for a reversal. Please keep in mind that the line displayed stands for a confluence area, which could also be displayed.

The chart below shows the VPCLevels on standard mode:



### e. Confluence: Differentiate mode

The Differentiate mode displays Volume Profile confluences of all kind of levels **individually**. This means that the lines you'll see on the chart are POC confluences, VWAP Confluences, VAH Confluences, VAL Confluences.

This mode is useful to analyze in detail what kind of Volume Profile level drives the confluence. For example, a confluence line made by POC confluence and VWAP confluence may have more impact and a higher probability of being a working support or resistance.

The chart below shows the VPCLevels on differentiate mode:



You can choose to alter the weighting of each line to put a heavier emphasis on your preferred Volume Levels. EXAMPLE...

You want your confluence lines to be more weight to the VAH/VAL instead of the POC/VWAP, then you can adjust these settings to alter the levels and it will show in the differentiation settings. Details to this are below in the setting section.

## From Standard to Differentiate mode

The settings for standard mode and differentiate mode are not the same.

### Standard Mode:

To use standard mode (by default), you need to set Differentiate levels to **OFF**.

Then you can adjust the weights of each levels independently to give them importance comparatively to others. By default, POC is 100 and VWAP gets 90 to give it less importance than POC. VAH and VAL are obviously the same importance and set to 70.

*Notice: you should not change these settings unless you are experimented with Volume Profile.*

Finally, you can set the color for support and resistance lines only.

The screenshot shows the settings for Volume Profile, categorized into several sections. A red box highlights the 'Plots Colors' section, which includes color selection for Resistance lines (Maroon), Support lines (Blue), POC lines (Yellow), VWAP lines (Cyan), VAH lines (Magenta), and VAL lines (Lime). Another red box highlights the 'Plots Settings' section, where 'Differentiate levels' is set to OFF, and other options like 'Show POC levels', 'Show VWAP levels', 'Show VAH levels', and 'Show VAL levels' are checked. A third red box highlights the 'Volume Weight' section, showing POC specific Weight at 100, VWAP specific Weight at 90, VAH specific Weight at 70, and VAL specific Weight at 70. Red arrows point from the text 'Standard Mode Settings' to the 'Differentiate levels' checkbox and the 'Volume Weight' section.

Section	Parameter	Value
Levels Parameters	Extend Levels	<input checked="" type="checkbox"/>
	SR ATR Break Filter	1
	Extended Line width	2
	Extended Line Opacity (%)	100
MTF Parameters	Total lookback (days)	300
	Bar period for Swing bars (minutes)	3
	Swing Timeframe	Small
	Threshold for confluence lines	100
Plots Colors	Resistance lines	Maroon
	Support lines	Blue
	POC lines	Yellow
	VWAP lines	Cyan
	VAH lines	Magenta
	VAL lines	Lime
Plots Settings	Differentiate levels	<input type="checkbox"/>
	Show POC levels	<input checked="" type="checkbox"/>
	Show VWAP levels	<input checked="" type="checkbox"/>
	Show VAH levels	<input checked="" type="checkbox"/>
	Show VAL levels	<input checked="" type="checkbox"/>
	Line width	2
	Dash style	Solid
Volume Weight	POC specific Weight	100
	VWAP specific Weight	90
	VAH specific Weight	70
	VAL specific Weight	70
Data Series	Input series	CL 09-16 (FullRange 4 Tick)
Set up	Calculate	On bar close
	Label	VPCLlevels
	Maximum bars look back	256
	Visual	

## Differentiate Mode:

To use differentiate mode, you need to set Differentiate levels to **ON**.

Then you can choose to hide or display each kind of level individually.

Changing the weight won't affect the result because the indicator is looking at each kind of confluence separately. They are not competing together anymore.

Finally, you can set the color of each kind of level. Support and resistance colors won't be considered.

Levels Parameters	
Extend Levels	<input checked="" type="checkbox"/>
SR ATR Break Filter	1
Extended Line width	2
Extended Line Opacity (%)	100
MTF Parameters	
Total lookback (days)	300
Bar period for Swing bars (minutes)	3
Swing Timeframe	Small
Threshold for confluence lines	100
Plots Colors	
Resistance lines	Maroon
Support lines	Blue
POC lines	Yellow
VWAP lines	Cyan
VAH lines	Magenta
VAL lines	Lime
Plots Settings	
Differentiate levels	<input checked="" type="checkbox"/>
Show POC levels	<input checked="" type="checkbox"/>
Show VWAP levels	<input checked="" type="checkbox"/>
Show VAH levels	<input checked="" type="checkbox"/>
Show VAL levels	<input checked="" type="checkbox"/>
Line width	2
Plot style	Line
Dash style	Solid
Volume Weight	
POC specific Weight	100
VWAP specific Weight	90
VAH specific Weight	70
VAL specific Weight	70
Data Series	
Input series	CL 09-16 (FullRange 4 Tick)
Set up	
Calculate	On bar close
Label	VPCLevels
Maximum bars look back	256
Visual	

### 3. Settings for the Indicator

Below is a description of all selectable parameters of the VPCLevels indicator which appear in the indicator dialogue box. Although the default settings are recommended, adjustments may be necessary.

#### a. Extend Levels and SR ATR Filter

When a level is considered not relevant anymore by the algorithm, it is hidden from the chart. With the "Extend Levels" setting, you can choose to display and extend them until there are broken by prices or to the right-hand side of the chart (current bar).

In order to filter false breakout, when levels are extended, there are considered as broken by price if the penetration of the level is above a multiple of the current ATR. This multiple can be set by the "SR ATR Filter" parameter.

To visualize extended levels more easily, you can also change their opacity and thickness.

#### b. Total Look Back (Days)

This sets the number of days for pre-loading data to calculate the Volume Profile Confluences. This number can be changed however it's not recommended because the larger this number the stronger the levels will be for confirmed trading setups. **Because it operates on an internal pre-loading feature, we have set this to 300 days as a default because this is just shy of 1 year and is ample for loading data for intraday trading.**

#### c. Bar Period for Swing Bars (minutes)

The indicator uses pre-loading of minute data to calculate the swings and profile Confluence levels. This is important because some traders will use very small look-back period for intraday trading but still require the levels from large data periods.

This setting can be changed to any numerical value (1, 2, 3, 4, 5, 15, 30, 60 minutes etc.) The variable used will be how the indicator calculates the swings. Despite using any other bar types, values or lookback periods, the indicator allows for calculating the Confluence from Higher timeframes despite the chart you are trading on.

#### d. Swing Timeframe

The only parameter that needs to be adjusted to use the indicator with different types of charts, instruments and timeframes is the **Swing Timeframe**. There are 6 different settings. If the indicator plots too many lines, change the setting to **Small or Default**, if it does not plot a enough lines, you can increase the number of lines by selecting a **Smallest** timeframe.

#### e. Threshold for Confluence lines

The Volume Profile confluence zones displayed by the indicator are calculated from a combined statistical weight of the individual lines. If the combined statistical weight is below the threshold value, no confluence zone will be displayed. The default value for the **Threshold** is 100. This is a low value and virtually no confluence zones will be filtered away. You may increase this value, which will reduce the number of confluence zones. **We recommend not changing this number!**

#### f. Differentiate Levels

This setting allows you to calculate confluences of POC, VWAP, VAH, VAL all together (if set to false), or only POC Confluences, VWAP Confluences, VAH Confluences, VAL Confluences and display each kind of confluence independently.

For example, you can choose to hide VWAP and VAL/VAH Confluences and display on POC Confluences to trade only with POC levels.

#### g. Volume Weight

A confluence is based on a cumulated weight at a certain price level. You can choose to give importance to each kind of level independently by changing this weight.

In our default settings, we give more importance to the POC so its weight is the biggest. VWAP is also important compared to VAH/VAL so it is set with a big value too.

**Unless you are very experienced in Volume Profile analysis, we recommend you not changing this numbers.**

#### h. Calculate on Bar Close

It is suggested to set this option to true, otherwise the indicator will recalculate the levels with every incoming tick, which is not necessary, as the levels barely change unless there is a substantial change in market structure during the day.

#### i. Auto scale

The indicator will reset itself to Auto Scale = false, as this feature is not required.

#### j. Plots

Dash style, plot style, strength and colors of the confluence zones can be selected for combined and individual confluence zones. **WE STRONGLY RECOMMEND LEAVING THE DASH STYLE – SET TO SOLID, AND THE PLOT STYLE – SET TO LINE... THIS IS TO IMPROVE PC PERFORMANCE WHILE USING THE TOOL!**

#### **Conclusion:**

If you need assistance or have questions, please email [support@architectsai.com](mailto:support@architectsai.com)