

# SMART CENTER PRO

## Operational Manual

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# The purpose of this document

SMART Center PRO (hereafter SCP) is an optional add-on to TradeGuider VSA Add-Ins Release 4.5 (hereafter - VSA Add-In) software. SCP independently scans multiple number of trading instruments (up to 25 with maximum 10 timeframes each) at the same time. The tool provides visual as well as audio alerts in an event of Trend Alignment on predefined number of Instrument's Timeframes and/or when VSA Principle is identified on any of the analyzed Timeframes in the trend or in selected by User direction.

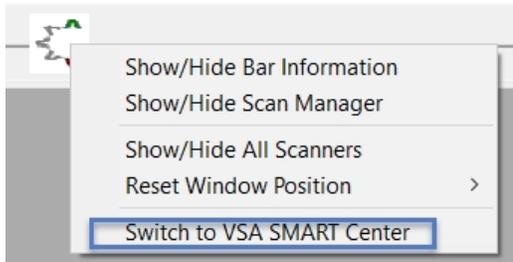
This document provides necessary information about SCP functional capabilities, interfaces, as well as detail description of its setup parameters.

# Getting Started

SMART Center PRO works alongside other TradeGuider VSA Software 4.5 components. To use SCP, VSA Add-Ins for corresponding Trading Platform must be **authorized** and required Instruments need to be loaded into VSA Scanners. The type of Instruments for the analysis depends on the Broker that the Trading Platform is connected to and its number is limited by the maximum number of VSA Scanners in TradeGuider45 Software. Currently the limitation is 25 concurrent scanners (with up to 10 Timeframes each).

After receiving confirmation from TradeGuider Ltd that SCP functionality is active, Trading Platform has to be restarted.

Successful loading of SCP module will be indicated by the presence in VSA Floating Context Menu an item “**Switch to VSA SMART Center**” (click right mouse button inside VSA Floating Menu Icon to get Context Menu).



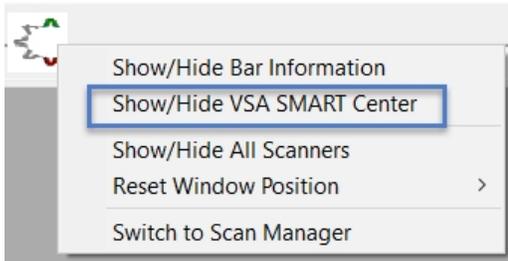
**Note 1:** If, after Trading Platform restarts, this menu item is not presented, please contact TradeGuider Technical Support on [www.tradeguider.com](http://www.tradeguider.com) web site.

At each point of time, either VSA Scanner Manager or VSA SMART Center PRO might be in use. If not configured otherwise, VSA Scanner Manager will become active after each restart of Trading Platform (see description of SCP parameter “*Show SMART Center after Startup*” in Section “*SMART Center PRO Setup Parameters*”).

**Note 2:** When VSA Scanner Manager is active, VSA SMART Center PRO does not provide any alerts.

**Note 3:** VSA Floating Context Menu is automatically updated based on the tool (VSA Scanner Manager or VSA SMART Center PRO) in use.

To activate VSA SMART Center PRO, click left mouse button on the item “**Switch to VSA SMART Center**” (see picture above). After SCP is in use, you can show or hide VSA SMART Center PRO window at any time by selecting “Show/Hide VSA SMART Center”.



In some circumstances, you may need to switch back to VSA Scanner Manager. To do this left click the mouse button on the item “**Switch to Scan Manager**” (see picture above) to activate it.

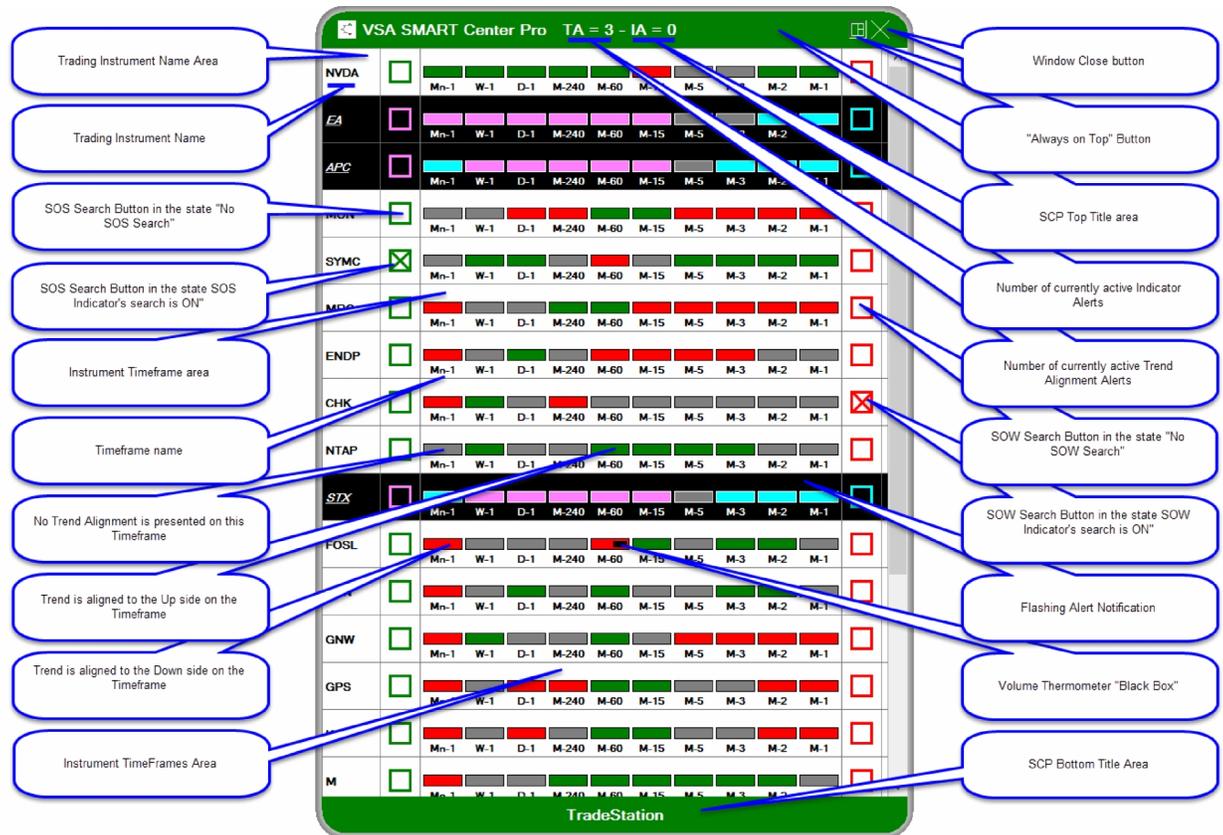
**Note 4:** When VSA SMART Center PRO is in use, it is running in the background even if its window is not shown up on the monitors. In the event of the alert, SCP window will pop up.

**Note 5:** Switch from VSA Scanner Manager to SCP causes full recalculation of SCP.

# Elements of SMART Center PRO

## Visual elements of SCP

Visual Elements of the SCP are presented on the picture below. Please note that the colors on the picture and in this document correspond to the default settings.



## Top Title Area



Top Title Area consists of the following elements:

1. The Name of the currently running tool.

In case the color settings are similar, for differentiation between VSA Scanner Manager and SCP, the name of the currently running tool is provided in the Top Title Area and can be either "Scanner Manager" or "VSA SMART Center Pro".

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## 2. Active Alerts Information

As of now, VSA SMART Center PRO provides two types of Alerts:

- Trend Alignment Alerts
- VSA Principle (Indicator) Alert

When an Alert is triggered, SCP pops up its window and automatically aligns alerted Instrument in a way it will become visible on the screen. At the same time, several Alerts can arrive simultaneously and some of them, due to the window size, might not be in the displayed area of the SCP window. Active Alert Information SCP element provides the number of currently active alerts not confirmed by the User. “TA” (Trend Alert) shows the number of currently active (not yet confirmed) Alerts for the Trend Alignment. “IA” (Indicator Alert) informs about the number of active (not yet confirmed) Alerts of the found VSA Principles.

Whenever the User confirms an Alert by clicking left mouse button in the Instrument Area, corresponding count in “TA” or “IA” part is decreasing. In case all Alerts are confirmed by the User or no alert conditions are found, Active Alert Information will not be displayed.

## 3. “Always on Top” button

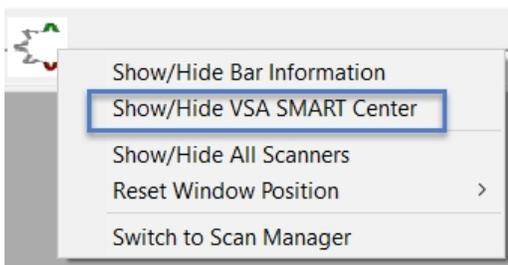
Users may want to keep SCP window open all the time. If this button is pushed (see picture above), SCP will not disappear from the screen in case other application will become active. This mode is useful in multi-monitor environment.

When “Always on Top” button is un-pushed (default state), switch between different running applications will case SCP to hide its window and re-open it when Trading Platform will be activated again.

The state of this button is saved and will be reproduced by SCP after Trading Platform restart.

## 4. “Close window” button

Clicking on “Close window” button will hide SCP from the screen. You can also close SCP window from VSA Floating Menu by selecting “Show/Hide VSA SMART Center”.



While hidden, the SCP will still perform an analysis of all instruments and will pop up in the event of alert.

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## Bottom Title Area

Apart of the Platform or Broker name (depending on the used VSA Add-In), SCP Bottom Title does not contain any other information

## Instrument Name Area

The Name of each analyzed Instrument can be seen in the Instrument Name Area. The font style, representing Instrument Name depends on the scanning status of the Instrument and can be one of the following:

1. Awaiting for Trend Alignment (Normal, Bold Style):



2. Awaiting User confirmation of Trend Alignment Alert, Indicator Alert or confirmation of Indicator's Alert (Bold, Italic, Underlined Style):



3. Instrument is excluded from analysis (Bold, Italic, Underlined Style with Instrument Name Area crossed by line):



To open VSA Scanner for the particular instrument, double click the left mouse button in the Instrument Name Area.

## SOS and SOW Search buttons

GBPUSD	<input type="checkbox"/>	<input type="checkbox"/>
EA	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NVDA	<input type="checkbox"/>	<input type="checkbox"/>
APC	<input type="checkbox"/>	<input checked="" type="checkbox"/>

When SOS (green boxes) or SOW (red boxes) Search buttons are crossed on the Instrument, it indicates to the User that SCP is currently looking for the predefined VSA Principles on all the Timeframes of that particular Instrument. In case of crossed SOS button, SCP will be searching for the Sign of Strength and in case of SOW button crossed - for the Sign of Weakness on all Timeframes of the Instrument.

Those buttons can either be set automatically by SCP (when User confirms Trend Alignment Alert or Trend Alignment Alert is skipped) or manually (at any time) by clicking left mouse button in the green or red square area.

**Note 6:** Only one button can be active. SCP does not permit to search VSA Principles in both directions at the same time.

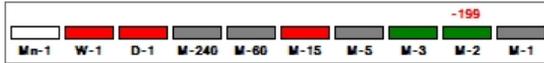
**Note 7:** VSA Principles will be scanned in the direction of the Trend only in case the search was set automatically.

When a VSA Principle is found, SCP will show the number of that VSA Principle on top of the Timeframe it has been identified on, then will inform the User by pre-configured audio sound as well as will start blinking the area of the Instrument in SCP window.

**Note 8:** After the Indicator Alert is confirmed (by clicking left mouse button in the Timeframe Area of the Instrument), the Instrument will automatically be excluded from the further analysis until the User manually restores it to the analyzing state (by clicking left mouse button in the Instrument Timeframe Area again or by selecting an item “**Restore Instrument for Scanning**” in the SCP Context Menu).

## Instrument Timeframe Area

Instrument Timeframe Area contains information about each Timeframe in analysis. There are a maximum of 10 Timeframes that can be loaded. Each box (colored rectangle) represents Trend status of the Timeframe and can be in four different states (see section “Trend Alignment in SCP” for further details):



1. Trend of the Timeframe is undefined (not enough bars for the analysis) or not in use. Rectangle representing Timeframe is filled by white color.
2. Trend of the Timeframe is “Long” (to the up side). Rectangle representing Timeframe is filled by green color.
3. Trend of the Timeframe is “Flat”. Rectangle representing Timeframe is filled by gray color.
4. Trend of the Timeframe is “Short” (to the down side). Rectangle representing Timeframe is filled by red color.

Under each box, the “Name” of the Timeframe is provided. First part of the “Name” describes the type of the Timeframe. It could be one of the following:

- Y – Yearly Chart
- Q – Quarterly Chart
- Mn – Monthly Chart
- W – Weekly Chart
- D – Daily Chart
- H – Hourly Chart
- M – Minute Chart
- S – Seconds Chart
- T – Tick Chart
- Ren – Renco chart
- DVC – Delta Volume Chart
- PCC – Price Change Chart
- ReC – Reversal Bar Chart
- KgC – Kagi Chart
- P&F – Point and Figure Chart

Second part of the “Name” represents Timeframe interval. For example, “**W – 1**” tells that SCP analyses the Chart (Timeframe) where each price bar accumulating the quotes of one week.

**Note 9:** SCP does not create the Charts and analyses only price quotes provided by the Trading Platform. The “Name” of the Timeframes depends on the Trading Platform and Broker that Trading Platform is connected to.

Instrument Timeframe Area is also used for the confirmation of active Alerts. Whenever Trend Alignment Alert or Indicator Alert are triggered, all areas related to that particular instrument start to flicker. The User may cancel such blinking by clicking the left mouse button anywhere inside Instrument Timeframe Area. This will bring SCP to the next analyzing state on this particular Instrument.

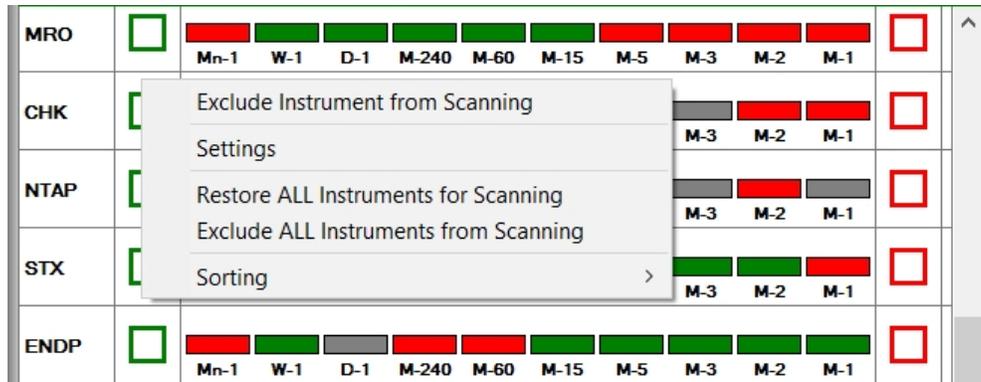
**Note 10:** In the current version of SCP User may also confirm an Alert by clicking left mouse button in the area of SOS or SOW Search buttons.

Whenever Indicator Alert is triggered on the Timeframe, SCP will display found VSA Principle (green colored positive number in case of Sign Of Strength and red colored negative number in case of Sign Of Weakness) on top of the box (rectangle), representing that Timeframe.

**Note 11:** Only one (first found) VSA Principle will be displayed in the Instrument Timeframe Area (see picture above). After Indicator Alert is triggered on the Instrument, SCP will stop searching for any further Principles on that particular Instrument until User will manually set it to the corresponding state.

# Context Menu of SMART Center PRO

The User can access SCP Context Menu by clicking right mouse button inside SCP window.



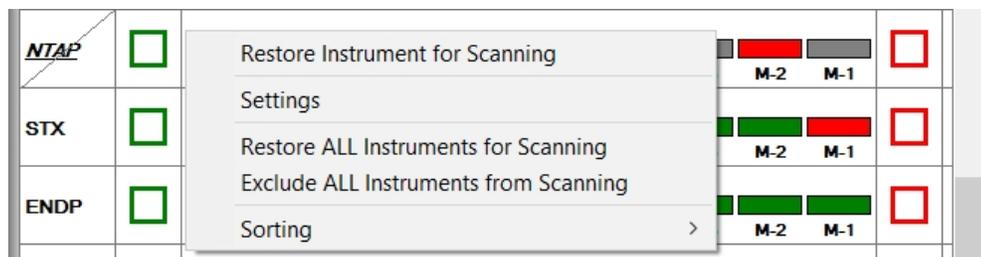
SCP Context Menu consists of the following items:

1. Exclude Instrument from Scanning.

Under some circumstances, the User may want to exclude particular Instrument from the scanning. This is useful, for example, if one is not willing to receive Trend Alignment Alerts on Instrument due to trades already taken or because the conditions of the Market are not fulfill his/her requirements.

Opening Context Menu from the Instrument Timeframe Area with following selection of this item will inform SCP to bypass that Instrument during its analysis.

After this item is selected, SCP Context Menu for that particular Instrument will be updated and an item “Restore Instrument for Scanning” will be shown instead.



Selecting “Restore Instrument for Scanning” will bring Instrument back to the normal analysis and an Alert will be generated whenever the Trend of the Instrument will become aligned.

2. Exclude Instrument from Scanning.

Selecting this SCP Context Menu Item will open SCP Settings Dialog Box. For more details, see the Section “*SMART Center PRO Setup Parameters*”

3. Exclude ALL Instruments for Scanning

Selecting this SCP Context Menu Item will exclude all Instruments loaded into SCP from further analysis. Irrespectively of the Instrument's status, no Alert will be generated.

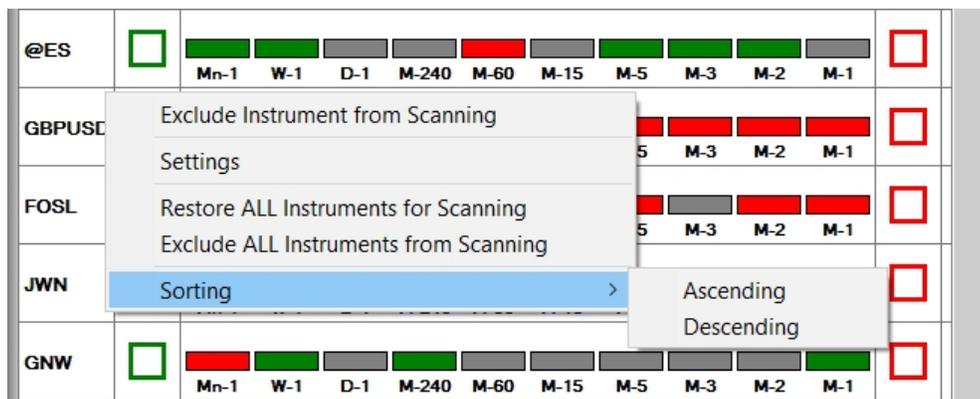
4. Restore ALL Instruments for Scanning

Selecting this SCP Context Menu Item will restore all Instruments loaded into SCP to the initial analysis conditions. Alerts will be generated as soon as Trend Alignment will be recognized on the Instruments.

5. Sorting

Different Trading Platforms load Price Charts in different orders. Because of this, sometimes it is difficult to find a required Instrument in SCP window especially when the number of analyzed Instruments is becoming close to 20 – 25.

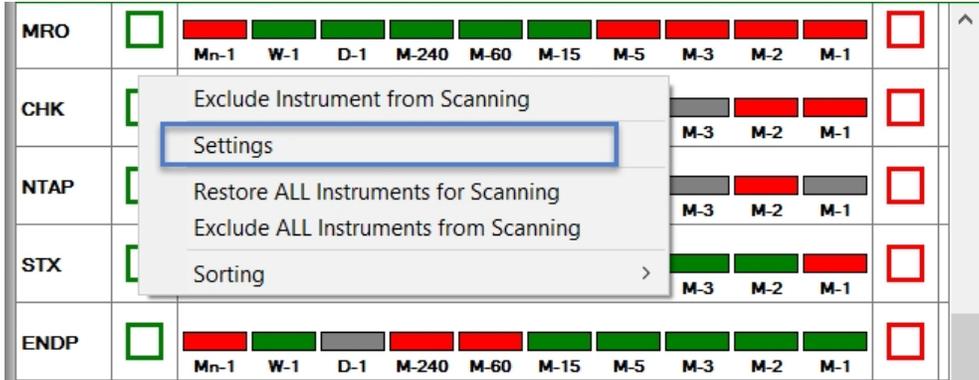
To simplify the search, sorting option has been introduced.



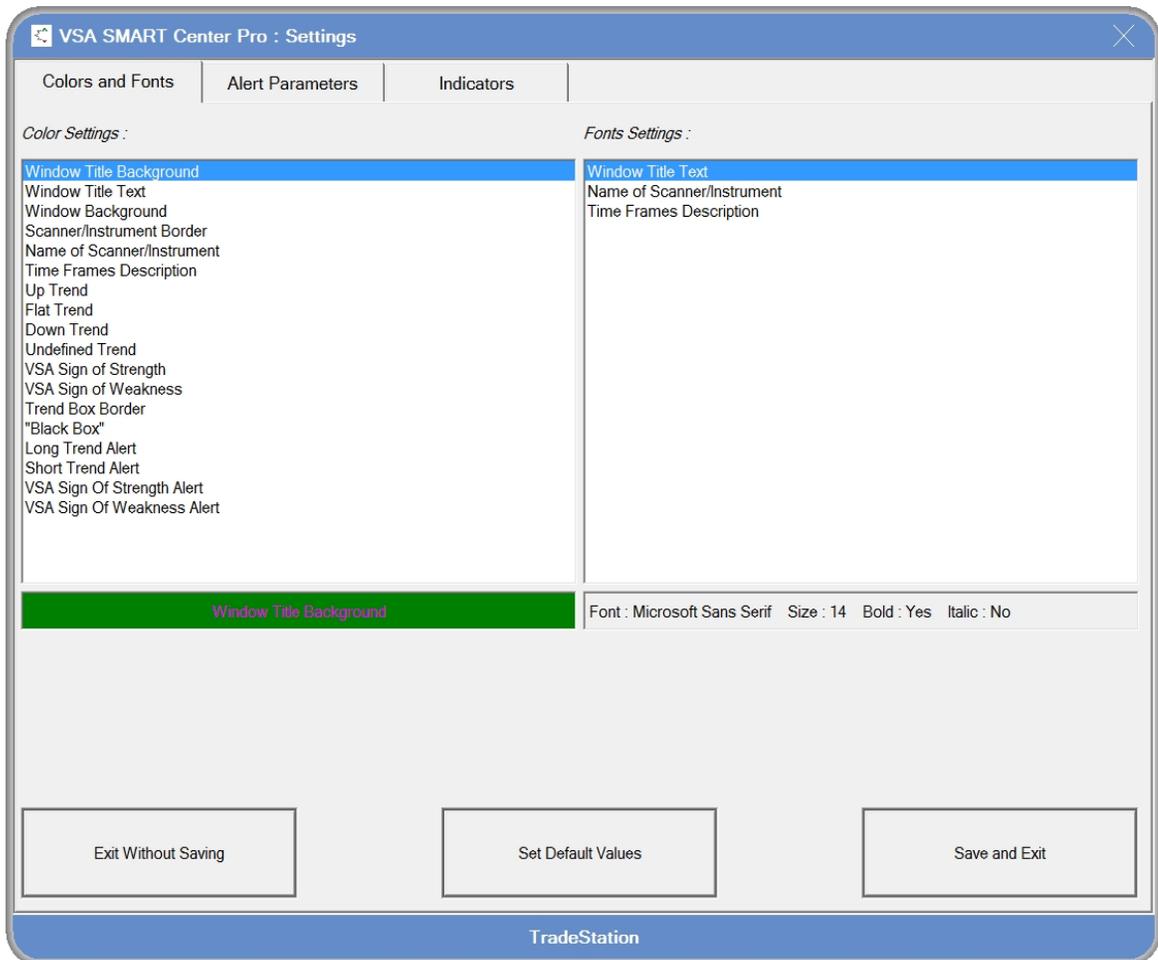
Instruments are sorted based on its Names and depending on the selected type of Sorting might be allocated either in alphabetical order from A to Z (Ascending), or in alphabetical order from Z to A (Descending).

# SMART Center PRO Setup Parameters

The User can access SCP Settings by clicking right mouse button inside SCP window and by selecting in the open SCP Context Menu an item “Settings”.



The following dialog box will appear on the screen.



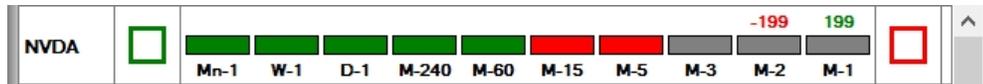
## Settings Dialog Box Description

Settings Dialog Box cost of three tabs:

### 1. Colors and Fonts (see picture above).

In this tab the User will be able to set the fonts and colors for each element of SCP window. To modify Colors, select in the “Color Settings” window required parameter and click on the colored button below that window. Windows built-in color selection Dialog Box will appear. To modify Fonts, select in the “Fonts Settings” window required parameter and click on the button with current font settings below that window. Windows built-in Font selection Dialog Box will appear.

**Note 12:** While Settings dialog box is open, SCP will not perform any analysis. Moreover, to provide the User the possibility to modify the colors and fonts of major elements, Sign Of Strength 199 and Sign Of Weakness -199 will be artificially added above the first and second Timeframes correspondingly. After Settings dialog box will be closed, all the Instruments will be reset back for the scanning of Trend Alignment.



Due to Note 12 above, it is recommended to only modify SCP parameters when the Markets are either closed or moving slowly.

## 2. Alert Parameters

In this tab the User will be able to set Alert parameters, sound files as well as parameters of SCP Trend definition.

The screenshot shows the 'Alert Parameters' tab of the 'VSA SMART Center Pro : Settings' dialog box. It is divided into three sections: 'Alert Sound Files', 'Trend Definition', and a bottom section with three buttons.

**Alert Sound Files :**

- Skip alert on Trend Alignment
- Up Trend:  ▶
- Down Trend:  ▶
- VSA Sign of Strength:  ▶
- VSA Sign of Weakness:  ▶

**Trend Definition :**

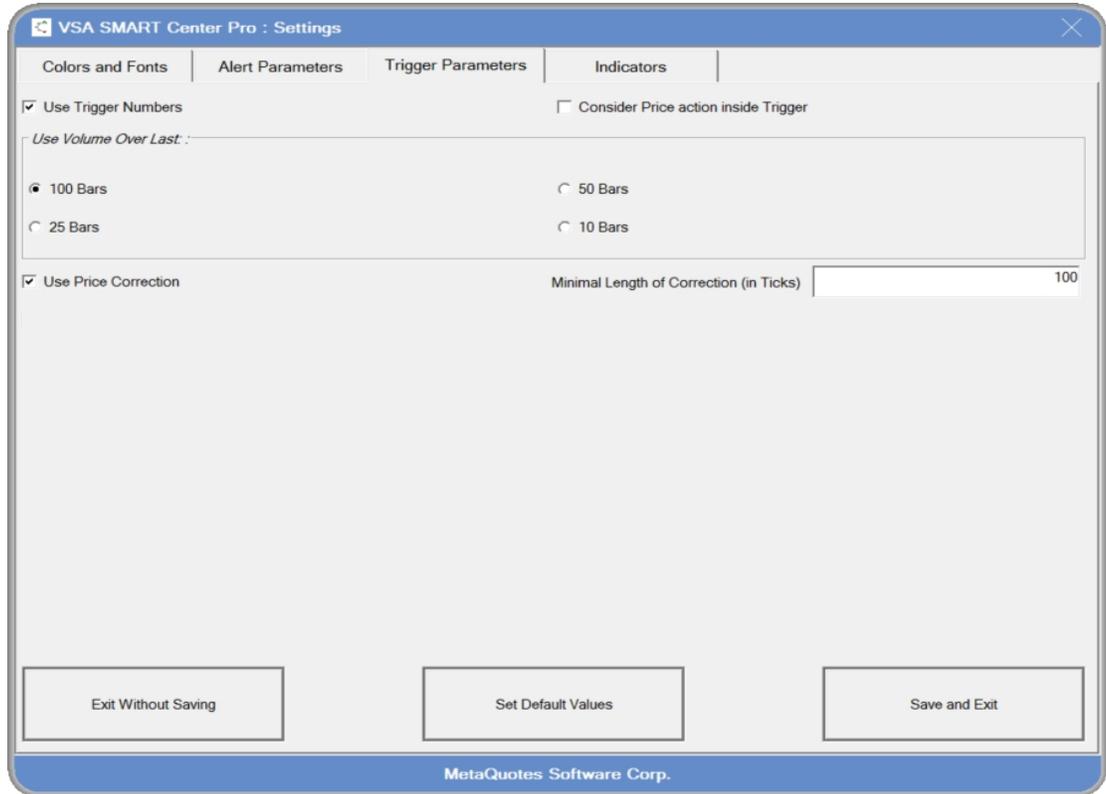
- Percent of Aligned Time Frames:
- Number of Bars to identify the Trend:
- Use Short Term Trend
- Use Middle Term Trend
- Use Volume Thermometer
- Accept one not aligned Time Frame
- Accept one Time Frame with opposite Trend
- Return to Scan on Trend Disalign
- Show "Black Box"
- Number of Bars to look for "Black Box":
- Show SMART Center after Startup

Buttons at the bottom: Exit Without Saving, Set Default Values, Save and Exit.

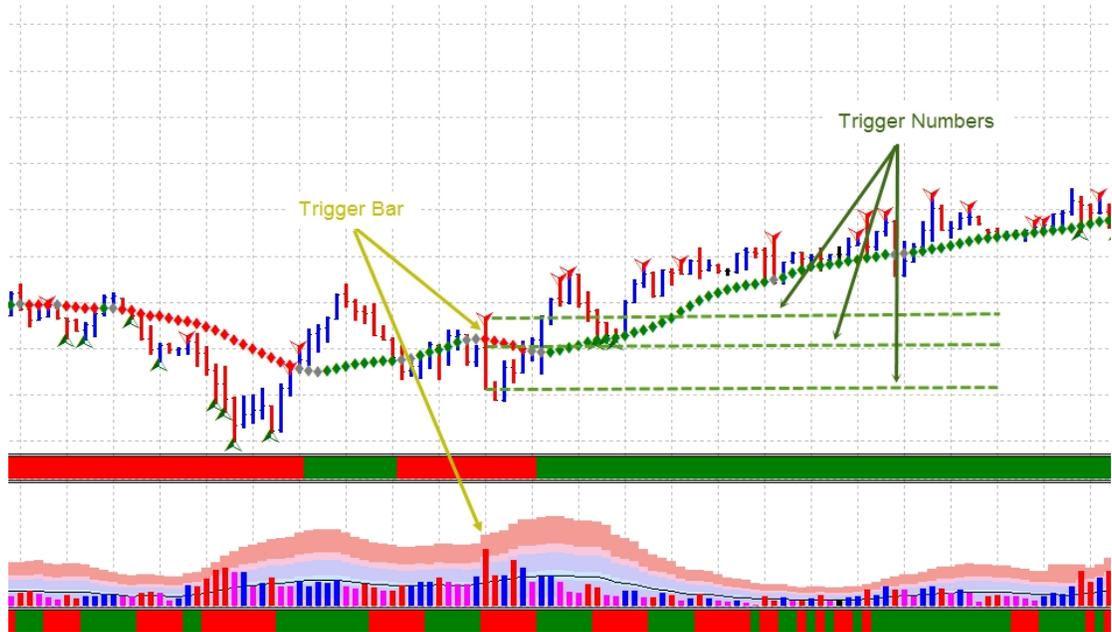
TradeStation

### 3. Trigger Parameters (optional feature)

Trigger Bars is an optional feature of SMART Center Pro and has to be ordered separately! After this feature is purchased and configured by TradeGuider, the Trading platform has to be restarted to make it active. An additional tab “Trigger Parameters” will appear in the Setting dialog box of SMART Center Pro.



In VSA Methodology, Price Bars with Ultra-High volume have a very important role. We call these bars “Trigger Bars”. Top (High), Bottom (Low) and Close Prices of this bar are very strong levels of Support and Resistance (Trigger Numbers). In many cases, Markets respect those levels. Price is chopping around and, finally, jumps out to one or other direction.



On the picture above, the Market has broken a Trigger Bar to the Up side, than the price has returned to the Trigger Number (Close price), and, after a successful Test, has continued it's up move.

Trigger Numbers become significantly stronger when the trend of an Instrument is aligned. In such situations, after the break of the Trigger Number, corresponding retracement, the Test Principle found around Top (for the Long trend) or No Demand Principle found around Bottom (for the Short Trend) of the Trigger Bar, are additional confirmations for the continuation of move in the direction of the Trend.

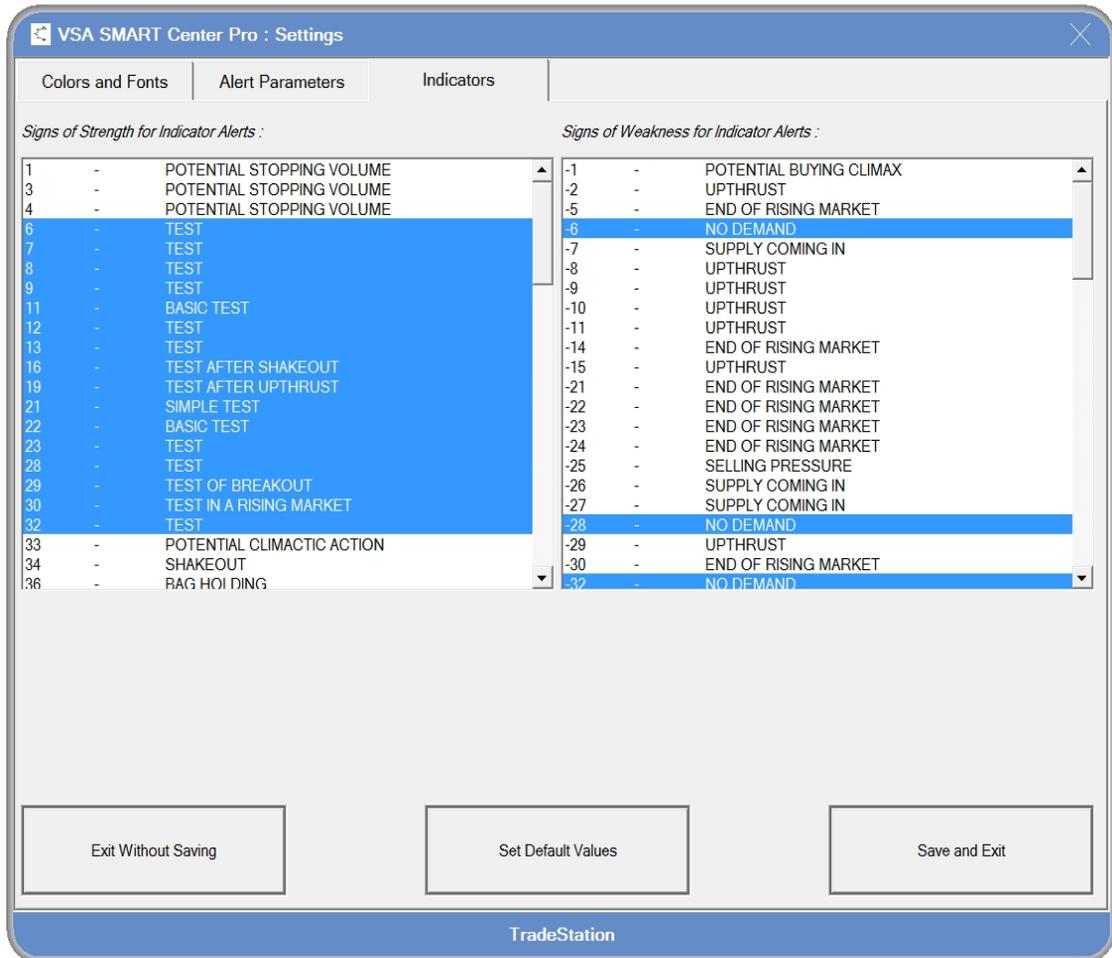
For the filtering of potential trade alerts, Trigger Numbers are now implemented in SMART Center Pro. If that feature is switched on, whenever Trend Alignment is found on the Instrument and confirmed by the User, the Software performs the following actions:

1. On each monitored Time Frame, it searches for the Trigger Bar, located within a preset number of Bars of background (see parameter “Use Volume Over Last...”).
2. Defines corresponding Trigger Numbers  
Please note that SMART Center Pro does not draw the lines on the Charts.
3. Waits for the break of the Top (in case of Long Trend Alignment) or Bottom (in case of Short Trend Alignment) of Trigger Bar and price movement in the Trend Direction.
4. Waits for the retracement of Price for preset number of Ticks (see parameter “Minimal Length of correction (in Ticks)”) )
5. Searches for the corresponding VSA Principle with the bar Close price above or on Top (in case of Long Trend Alignment) or below or on the Bottom (in case of Short Trend Alignment) of Trigger Bar.

6. Alerts the User with Potential Trade Indicator if all above conditions are fulfilled.

#### 4. Indicators

In this tab the User will be able to set Signs Of Strength and Signs Of Weakness VSA principles to be alerted. Click of left mouse button on the corresponding name of the VSA Principle will either select (highlighted by blue color background) or deselect it (white colored background). Only the selected VSA Principles will be alerted on their arrival.



On each tab, tree buttons “*Exit Without Saving*”, “*Set Default Values*” and “*Save and Exit*” are present.

Click on “*Exit Without Saving*” button will close Settings dialog box and will remove all modifications performed on any of the tabs. SCP will be restarted for normal analysis with the parameters set prior to the opening Settings.

Click on “*Save and Exit*” button will close Settings dialog box. SCP will be restarted for normal analysis with the parameters set by the User.

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Click on “***Set Default Values***” button will cause SCP to load parameters in ALL tabs to the default pre-set values. Settings dialog box will not be closed. SCP window will be put on top instead to show the User applied settings. To exit from Settings, the User will either need to click on “***Exit Without Saving***” or on “***Save and Exit***” buttons. In first case, default values will not be saved, but in the second, parameters will be saved and SCP will restart using default setup parameters.

# Parameters Description

## Parameters of Color and Font tab

### Color Settings

Parameter Name	Description
Window Title Background	Sets the background color of Top and Bottom Titles of SCP Window.
Window Title Text	Sets the color of text in Top and Bottom Titles of SCP Window.
Window Background	Sets the background color of SCP Window
Scanner/Instrument Border	Sets the color of border around all Instrument elements.
Name of Scanner/Instrument	Sets the color of Instrument Name in Instrument Name Area
Time Frames Description	Sets the color of Timeframe “Name” in Instrument Timeframe Area
Up Trend	Sets the color of Trend Box in Instrument Timeframe Area for all Timeframes with “Long” Trend direction
Flat Trend	Sets the color of Trend Box in Instrument Timeframe Area for all Timeframes with “Flat” Trend
Down Trend	Sets the color of Trend Box in Instrument Timeframe Area for all Timeframes with “Short” Trend direction
Undefined Trend	Sets the color of Trend Box in Instrument Timeframe Area for which the price quotes are either not provided or the number of provided price bars is not enough for appropriate VSA calculations
VSA Sign of Strength	Sets the color of <ol style="list-style-type: none"> <li>SOS VSA Principle displayed on top of Trend Box in Instrument Timeframe Area and</li> <li>SOS Search button</li> </ol>
VSA Sign of Weakness	Sets the color of <ol style="list-style-type: none"> <li>SOW VSA Principle displayed on top of Trend Box in Instrument Timeframe Area and</li> <li>SOW Search button</li> </ol>
Trend Box Border	Sets the border line color of all Trend Boxes in Instrument Timeframe Area
“Black Box”	Sets the color of the “Black Box” rectangle displayed in the right side of the Trend Box.
Long Trend Alert	Sets the background color of the all Instrument Area in case “Long” Trend Alert will arrive.  Please note that while blinking, the second color will be inversed Long Trend Alert color.
Short Trend Alert	Sets the background color of the all Instrument Area in case “Short” Trend Alert will arrive.

	Please note that while blinking, the second color will be inversed Short Trend Alert color.
VSA Sign Of Strength Alert	<p>Sets the background color of the all Instrument Areas in case Indicator Alert for the VSA Sign Of Strength Alert will arrive.</p> <p>Please note that while blinking, the second color will be inversed VSA Sign Of Strength Alert color.</p>
VSA Sign Of Weakness Alert	<p>Sets the background color of the all Instrument Areas in case Indicator Alert for the VSA Sign Of Weakness Alert will arrive.</p> <p>Please note that while blinking, the second color will be inversed VSA Sign Of Weakness Alert color.</p>

### Fonts Settings

Parameter Name	Description
Window Title Text	Sets the name, size and other font attributes of the SCP Top and Bottom Title text
Name of Scanner/Instrument	Sets the name, size and other font attributes of the Instrument Name in the Instrument Name Area
Time Frames Description	Sets the name, size and other font attributes of the Timeframe "Name" in the Instrument Timeframe Area

## Parameters of Alert Parameters tab

### Alert Sound Files

Parameter Name	Description
Skip alert on Trend Alignment	If this parameter is set (box is checked), Trend Alignment Alert <b>WILL NOT BE</b> generated. After Trend Alignment on the Instrument is identified, SOS or SOW Search will be automatically initiated and corresponding to the Trend Direction SOS or SOW Search button will be marked as “checked” (crossed inside the button). In this case, Alert will only be generated when VSA principle is found.
Up Trend	<p>This parameter provides the possibility to select a sound file for Trend Alignment Alert to the “Long” direction. All sound files <b>must</b> be located in the “Sounds” subdirectory of the main directory of TradeGuider Software (default directory is C:\TradeGuider45\Sounds). The only supported file format is “<b>wav</b>” files.</p> <p>Click left mouse button on the file name. Built-in Windows File Dialog Box will appear. Select required file name and close Dialog by left mouse button click on “Open” button. You can play the selected file by clicking left mouse button on the green triangle on a right side of the sound file name</p>
Down Trend	<p>This parameter provides the possibility to select sound file for Trend Alignment Alert to the “Short” direction. All sound files <b>must</b> be located in the “Sounds” subdirectory of the main directory of TradeGuider Software (default directory is C:\TradeGuider45\Sounds). The only supported file format is “<b>wav</b>” files.</p> <p>Click left mouse button on the file name. Built-in Windows File Dialog Box will appear. Select required file name and close Dialog by left mouse button click on “Open” button. You can play selected file by clicking left mouse button on the green triangle on a right side of the sound file name</p>
VSA Sign of Strength	<p>This parameter provides the possibility to select sound file for Indicator Alert of found VSA Sign Of Strength. All sound files <b>must</b> be located in the “Sounds” subdirectory of the main directory of TradeGuider Software (default directory is C:\TradeGuider45\Sounds). The only supported file format is “<b>wav</b>” files.</p> <p>Click left mouse button on the file name. Built-in Windows File Dialog Box will appear. Select required file name and close Dialog by left mouse button click on “Open” button. You can play selected file by clicking left mouse button on the green triangle on a right side of the sound file name</p>
VSA Sign of Weakness	<p>This parameter provides the possibility to select sound file for Indicator Alert of found VSA Sign Of Weakness. All sound files <b>must</b> be located in the “Sounds” subdirectory of the main directory of TradeGuider Software (default directory is C:\TradeGuider45\Sounds). The only supported file format is “<b>wav</b>” files.</p> <p>Click left mouse button on the file name. Built-in Windows File Dialog Box will appear. Select required file name and close Dialog by left mouse button click on “Open” button. You can play selected file by clicking left mouse button on the green triangle on a right side of the sound file name</p>

## Trend Definition

Parameter Name	Description
Percent of Aligned Time Frames	Defines percent of “Higher” Timeframes (from left to right side of SCP window) to be analyzed for the Instrument Trend Alignment. This parameter applies for all Instruments loaded into SCP. See Section “ <i>Trend Alignment in SMART Center PRO</i> ” for more details.
Number of Bars to identify the Trend	Defines the number of last closed Prices Bars (from right to left side of the Price Chart) where the Trend of the Timeframe will be identified. This parameter applies to all timeframes of all Instruments loaded into SCP. See Section “ <i>Trend Alignment in SMART Center PRO</i> ” for more details.
Use Short Term Trend	If this parameter is set (box is checked), the values of Short Term (Diamond) Trend Indicator within the number of bars defined by the parameter “ <i>Number of Bars to identify the Trend</i> ” will be considered during determining the Trend direction of the Timeframe. This parameter applies to all timeframes of all Instruments loaded into SCP. See Section “ <i>Trend Alignment in SMART Center PRO</i> ” for more details.
Use Middle Term Trend	If this parameter is set (box is checked), the values of Middle Term Trend Indicator within the number of bars defined by the parameter “ <i>Number of Bars to identify the Trend</i> ” will be considered during determining the Trend direction of the Timeframe. This parameter applies to all timeframes of all Instruments loaded into SCP. See Section “ <i>Trend Alignment in SMART Center PRO</i> ” for more details.
Use Volume Thermometer	If this parameter is set (box is checked), the values of VSA Volume Thermometer Indicator within the number of bars defined by the parameter “ <i>Number of Bars to identify the Trend</i> ” will be considered during determining the Trend direction of the Timeframe. This parameter applies to all timeframes of all Instruments loaded into SCP. See Section “ <i>Trend Alignment in SMART Center PRO</i> ” for more details.
Accept one not aligned Time Frame	If this parameter is set (box is checked), SCP will still consider the Trend of the Instrument as aligned in case the Trend on any one (but on only one) from the analyzed Timeframes, excluding far right one, will be “FLAT”. This parameter applies to all timeframes of all Instruments loaded into SCP. See Section “ <i>Trend Alignment in SMART Center PRO</i> ” for more details.
Accept one Time Frame with opposite Trend	If this parameter is set (box is checked), SCP will still consider the Trend of the Instrument as aligned when the Trend on any one (but on only one) from analyzed Timeframes, excluding far right one, will be either “FLAT” or “UP” in case of “Short” Trend or “Down” in case of “Long” Trend. This parameter applies to all timeframes of all Instruments loaded into SCP. See Section “ <i>Trend Alignment in SMART Center PRO</i> ” for more details.
Return to Scan on Trend Disalign	<p>If this parameter is set (box is checked), and Trend Alignment Alert is active (Instrument is blinking), an Alert will automatically be cancelled when Trend Alignment will disappear. In such situation, SCP will start look for the Trend Alignment on that particular instrument again.</p> <p>If this parameter is not set, Instrument Area will be blinking until the User will confirm it by click left mouse button inside Instrument Timeframe Area of SCP</p>

## Other parameters

Parameter Name	Description
Show "Black Box"	<p>If this parameter is set (box is checked), Volume Thermometer "Black Box" will be shown up in the right part of the Timeframe Trend rectangle. As soon as "Black Box" will disappear from the range set by the parameter "<i>Number of Bars to look for "Black Box"</i>", it will not be displayed.</p> <p>This parameter applies to all timeframes of all Instruments loaded into SCP.</p>
Number of Bars to look for "Black Box"	<p>If "<i>Show "Black Box"</i>" is set and "Black Box" has appeared on the Volume Thermometer Indicator, this parameter defines the number of Price Bars on the Chart (from right to left) where Volume Thermometer "Black Box" will be shown up in Timeframe Trend rectangle.</p> <p>This parameter applies to all timeframes of all Instruments loaded into SCP.</p>
Show SMART Center after Startup	<p>If this parameter is set (box is checked), SCP window will automatically be open on the startup of Trading Platform.</p>

## Parameters of Indicators tab

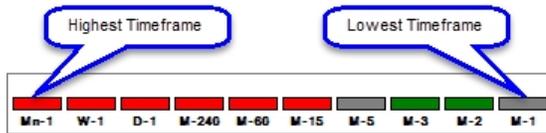
Parameter Name	Description
Signs of Strength for Indicator Alerts	<p>This group of parameters contains the list of VSA SOS Principles to be alerted. Only selected Principles will be alerted. The User may highlight any number of Principles from the list.</p> <p>This parameter applies to all timeframes of all Instruments loaded into SCP.</p>
Signs of Weakness for Indicator Alerts	<p>This group of parameters contains the list of VSA SOW Principles to be alerted. Only selected Principles will be alerted. The User may highlight any number of Principles from the list.</p> <p>This parameter applies to all timeframes of all Instruments loaded into SCP.</p>

## Parameters of Trigger Parameters tab (optional)

Parameter Name	Description
Use Trigger Numbers	Switches On (Check Box is ticked) or off usage of Trigger Bars for the potential trade alerts.
Consider Price action inside Trigger	<p>This Parameter allows User to look for the price action inside the body of Trigger Bar. Usually the trades, taken in the body of Trigger Bar, require lower stop loss level and can provide bigger profit, but have much lower success rate, comparing to ones taken outside of the Trigger Bar.</p> <p>If parameter is checked, SMART Center Pro will consider price action inside Trigger Bar (as well as outside) and will alert the User whenever corresponding VSA Principle is found in the direction of Trend.</p>
Use Volume Over Last	This parameter provides the User with possibility to limit search of Trigger Bars in a certain range of preceding bars and can be set to 100, 50, 25 or 10 bars of the background.
Use Price Correction	<p>If this option is checked, SMART Center Pro will be waiting for the correctional move defined by the “ Minimal Length of Correction” parameter and will start search for the VSA Principles in a direction of trend only when such correction has taken place.</p> <p>It has to be noted that alerts will be triggered when the Close Price of the bar with found VSA Principle is below (in case of the Long Trend) or above (in case of the Short Trend) preset number of retracement ticks.</p>
Minimal Length of Correction (in Ticks)	<p>Number of the ticks for the retracement of price in the opposite to the Trend of the Instrument direction.</p> <p>It has to be noted that the value of this parameter depends on the Market scanned and can vary depending on the number of digits identifying the price of the Instrument.</p>

# Trend Alignment in SMART Center PRO

If not configured or set otherwise, after resetting the analysis process SCP starts to check “Higher” Timeframes of the Instruments for the Trend Alignment. Timeframes are identified as “Higher” or “Lower” based on its position in the Instrument Timeframe Area from left to right irrespectively of the Timeframe type and its interval (see picture below).



**Note 14:** It is very important to allocate Timeframes in a right order with enough price data in the background. See VSA Scanner Operational Manual for more information about Timeframes configuration.

Trend Alignment is identified in two consecutive phases:

1. **Defining the direction of the Trend on each Timeframe of the Instrument.**

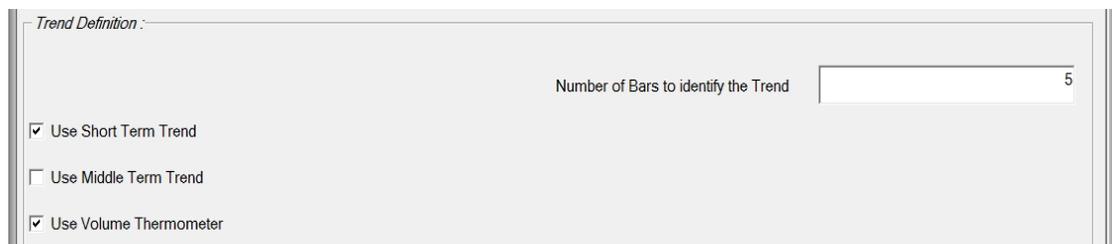
Trend of the Timeframe (Price Chart) is identified based on the state of VSA Trend Indicators on the pre-set number of last closed Price Bars (see SCP Setup Parameter “*Number of Bars to identify the Trend*”). There are three types of VSA Trend Indicators available in TradeGuider Software Release 4.5:

- a. Short Term (Diamond) Trend
- b. Middle Term Trend
- c. VSA Volume Thermometer

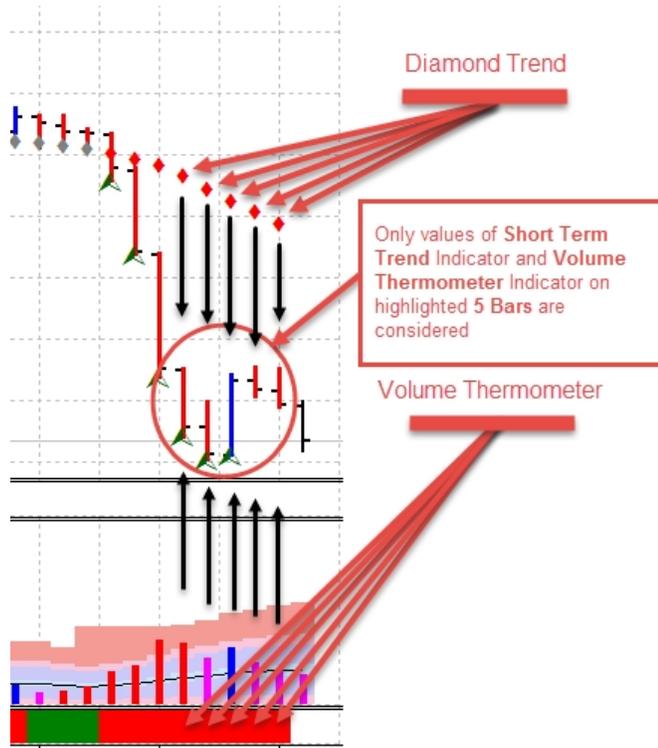
In SCP Settings (see Section “*SMART Center PRO Setup Parameters*”), The User may choose any combination of above Trend types.

The Trend of the Timeframe will be considered as “Aligned” only in case all chosen Trend Types are identified in the same direction.

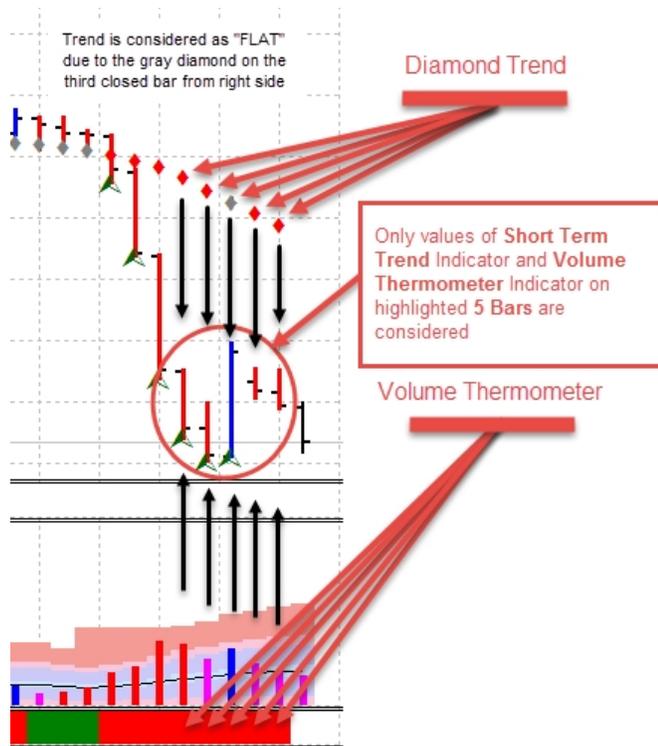
**Example 1:** The User has selected Short Term Trend and Volume Thermometer over five last bars to identify the Trend. Corresponding settings of SCP are presented on the picture below:



In this example (see picture below), Trend will be considered as “Short” (to the down side) because Short Term (Diamond) Trend and Volume Thermometer are showing the same “Short” direction on last 5 closed Price Bars (very last right Bar is not yet closed).



**Note 15:** In case the direction of any from chosen Trend Indicators on ANY number of Price Bars will be different from others, the Trend of the Timeframe will be considered as “Flat”.



On the picture above, in spite of the fact that the Short Term Trend Indicator and Volume Thermometer Indicator are showing Down Trend direction on majority of the Price Bars,

because of the “Flat” Short Trend direction identified on the 3<sup>rd</sup> closed Bar from the right side of the Chart, the Trend of all Timeframe will be considered as “Flat”.

## 2. Comparing direction of the Trend as pre-set by the User number of “Higher” Timeframes.

After the Trend of each Timeframe of the Instrument has been identified, SCP checks for the alignment of Trends on the “Higher” Timeframes. The number of considered Timeframes is calculated based on the value of the “*Percent of Aligned Time Frames*” parameter from SCP settings. Default value of this parameter is 60%.

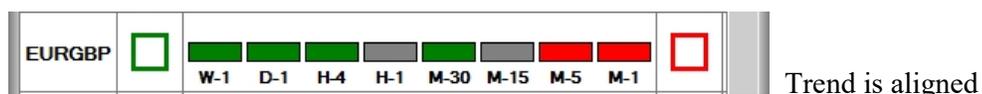
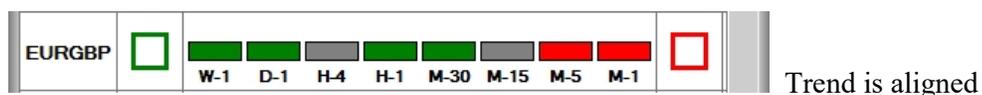
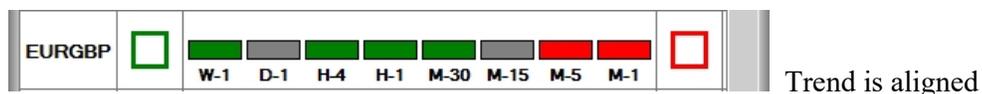
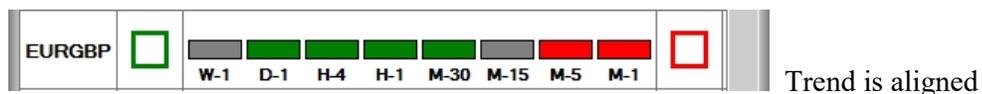
**Example 2:** On the picture below, an Instrument EURGBP has eight Timeframes. At first, SCP calculates the number of the Timeframes to be analyzed for the Trend direction. Sixty percent out of eight will be five, so SCP will look at only last five Timeframes from left to right. The Trend on M-15, M-5 and M-1 will not be checked. Bars representing W-1 (One Week), D-1 (One Day), H-4 (Four Hours) and M-30 (Thirty Minutes) Charts are all green (“Long Trend”). Therefore, an Alert for the Trend Alignment to the “Long” side will be generated.



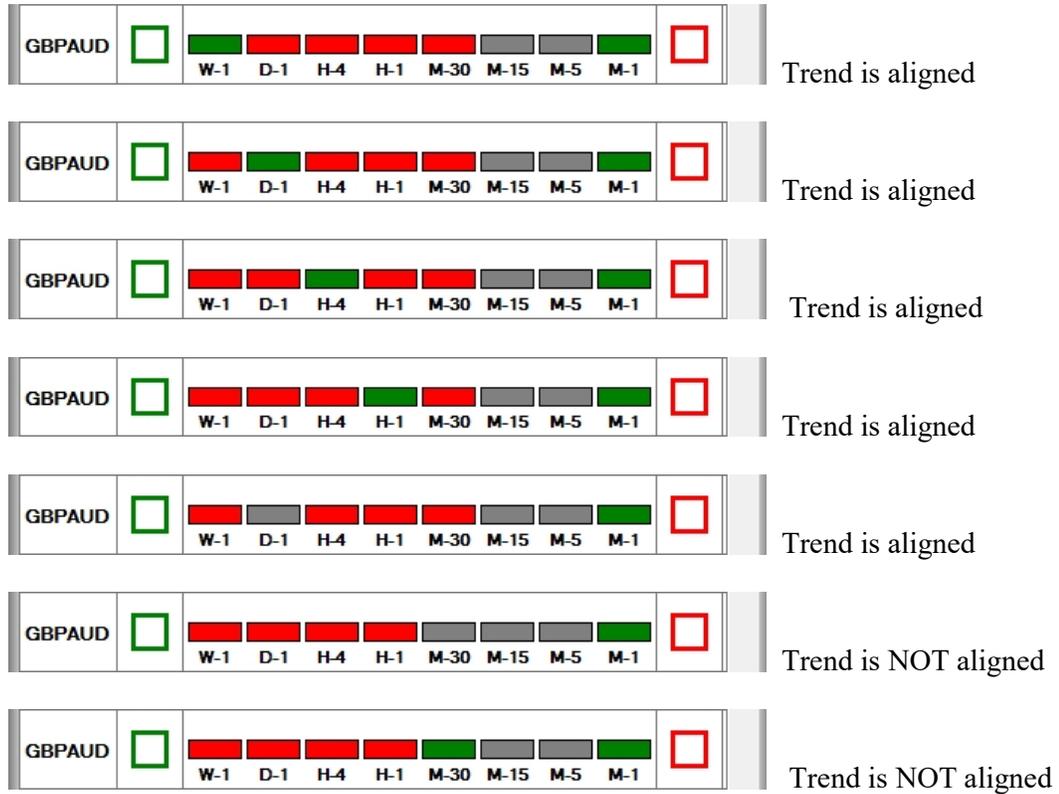
There are two more parameters what can affect an Alert on Trend Alignment:

- a. “*Accept one not aligned Timeframe*” and
- b. “*Accept one Timeframe with opposite Trend*”

If the first parameter “*Accept one not aligned Timeframe*” is set, SCP will consider the Trend of the Instrument as aligned in case the Trend on only one from analyzed Timeframes, excluding far right one, differs from other and will be “Flat”.



When both “*Accept one not aligned Timeframe*” and “*Accept one Timeframe with opposite Trend*” SCP parameters are set, SCP will consider the Trend of the Instrument as aligned in case the Trend on any, but only one from analyzed Timeframes, excluding far right one, will be either “Flat” or in opposite direction.



**Note 16:** To perform all necessary calculations, an Instrument MUST have a minimum of three (3) Timeframes configured. If the number of the Timeframes is less than three, the Trend of the Instrument will be considered as “UNKNOWN”.

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# Document revision history

<i>Date</i>	<i>Revision</i>	<i>Edited by</i>	<i>Status</i>
25.09.2016	0.1	Grigory Margolin	Draft
01.09.2016	0.2	Grigory Margolin	Updated
15.09.2016	0.3	Richard Bednall	Updated
04.10.2016	1.0	Arthur Robinson	Updated
07.11.2016	2.0	Grigory Margolin	Updated
21.12.2016	3.0	Grigory Margolin	Updated
23.12.2016	3.1	Richard Bednall	Updated