

Designed for the Institutional Trader

# DIVERGENCE DETECTOR





## CONTENT

1. INS	STALLATION	.3
2. CO	NTENT AND FEATURES	.4
3. SE	TTINGS	.5
4. HOW TO USE		.8
4.1.	SET UP THE DIVERGENCE DETECTOR IN YOUR CHART	.8
4.2.	SET UP A REALTIME SCANNE FOR DIVERGENCE SIGNALS	.9







#### Dear customer!

We would like to thank you for your purchase of the DivergenceDetector.

This top-quality product can generate highly potential trading signals for you and has the ability to improve your trading with AgenaTrader considerably.

The DivergenceDetector is easy to use while offering a huge amount of individually configurable settings, with which the signals as well as the divergence-algorithm can be aligned exactly to your preferences and needs. To achieve this, some user-knowledge is necessary, which will be provided to you with this documentation.

If you have some questions, suggestions or wishes for this or any other product from AlgoQuantics, feel free to drop us a message by simply using our <u>contact-form</u> on our website.

You can watch the product-video for the DivergenceDetector here: LINK



We wish you joy and success with the AlgoQuantics DivergenceDetector!





#### 1. INSTALLATION

- a) After your purchase you will receive your download-link for the AQDivergenceDetector.atpack file by mail as well as in the user area of the TradersYard Shop. In case you are using the Internet-Explorer or Microsoft-Edge, it can happen that the downloaded .atpack file is automatically renamed into a .zip file. If this happens, you need rename the AQDivergenceDetector.zip file to back to AQDivergenceDetector.atpack.
- b) Save the .atpack file on your PC.
- c) Now you need to enter your license key for the package in AgenaTrader. Open the "License" menu in AgenaTrader and choose "Enter activation key". Navigate to the AQConditionFilter entry, paste the license key and press "Activate". There should appear a message, that the license activation was successful, after which you can close this window.
- d) Open Tools -> Packages -> Import Package, read the backup-notice and in case you have already backed up your files press "OK". In the next window navigate to the place where you saved the AQDivergenceDetector.atpack file, click on it and press "Open". Confirm the subsequent restart-request from AgenaTrader with "OK".
- e) After the restart establish the connection to your datafeed.
- f) When the data-connection is active, you are ready to use the AQDivergenceDetector.

A detailed documentation with screenshots for the package import in AgenaTrader can also be found in the online-help by following this <u>LINK</u>.





### 2. CONTENT AND FEATURES

With the AlgoQuantics DivergenceDetector you can detect divergences in the markets in a highly comfortable way. By using the realtime-scanning of AgenaTrader you are able to calculate the algorithm on hundreds and even thousands of markets synchronously and receive alerts if a signal occurs.

A divergence is a deviation between the movement of the price and the behavior of an indicator (RSI, MACD, Momentum, Stochastics, etc.). Based on this logic, a new higher high in the price chart should be confirmed by a new higher high of the indicator. If this condition is not given, a divergence (= reversal signal) between the price chart and the indicator is given, what is exactly the scenario the DivergenceDetector is screening for.

Highly efficient divergence trading has not been possible in AgenaTrader yet, as nobody is capable of scanning a big number of charts for divergences manually. Either you would have to limit your trading to a few selected markets or only trade the very long-term timeframes to have enough time for detecting divergences with your eyes.

Consistency and the execution of each trading signal which is generated by one's strategy is enormously important to produce and maintain a statistical edge in your trading. If you have found a strategy which you trust 100%, its commonly known for advanced traders that you definitely need to constantly follow you trading rules and trade each signal that occurs. Without any technical support from high-end trading software you will not be able to realize this plan.

This is where AgenaTrader comes into play – in combination with the AlgoQuantics AddOns for the optimal assistance for your trading. With the DivergenceDetector you get a product on your hands, which has realized one of the most supreme disciplines of algorithmic trading – the realtime-detection and trading of divergences in the markets.

By eye everybody can spot divergences in the markets after a little training. But to train a computer program to "see" the same things that the human eye can detect in a chart is a quite challenging and complex task. Clear rules have to be found, which can globally be applied to all different markets. Additionally, the algorithm has to find signals in realtime, and not only spot the great trading chances of the history.

Due to the above-mentioned difficulties, the realization of a fully automatic divergence detection is everything but easy. AlgoQuantics faced this challenge – you can evaluate the result now on your own in your AgenaTrader.





#### 3. SETTINGS

With the DivergenceDetector AddOn you get the ScriptedCondition "AQDivergenceDetector", which is responsible for the detection of the divergences while additionally painting the divergence-lines directly to the price- and indicator panel by using the common known illustration of diverging lines.

Of course, you can use the AQDivergenceDetector in the AnalyzerEscort for performing realtime scans for the desired divergence signals.

The following settings are available for the DivergenceDetector:

#### INPUT PARAMETERS:

• CalculationSeries:

Here you can decide, which indicator should be used for the detection of divergences, which is the most essential setting for the calculation. The four available indicators are standard-indicators, which can be used for the generation of the signals:

- o RSI
- o MACD
- o Momentum
- o Stochastics

You can configure each indicator-parameter which will be explained in the following enumerations.

- Divergence Direction:
  - Long: only bullish divergences will be detected (long signals)
  - Short: only short divergences will be detected (short signals)
  - o Both: long and short divergences will be detected





#### • Period 1:

This value is used as the first input period for the RSI, Momentum, MACD (PeriodFast) and Stochastics (PeriodD).

#### • Period 2:

This value is used as the second input period for MACD (PeriodSlow) and Stochastics (PeriodK).

#### • Swing Strength:

The detection of new high/lows in the price chart is done with the swing-indicator, which is available as standard indicator in AgenaTrader. Via this indicator, you can set if already small high/lows in the chat should be used as calculation basis (low swing-strength value) or only very big high/lows should be considered (high swing-strength value).

#### MISC:

#### • Mark New Highs & Lows

If "True" -> Display of the local highs/lows directly in the chart.

#### Show Arrows

If "True" -> Display of the signal arrows in the chart.

#### • Show Dots on Lines

If "True" -> Paint dots at start and end of each divergence line.

#### • Show Lines in indicator-panel

If "True" -> Display the divergence-lines in the indicator panel.





#### • Show Lines in price-chart

If "True" -> Display the divergence-lines in the price-chart.

#### VISUAL:

#### • Bearish Line Color

Choose the line color for painting bearish divergences (short signals).

#### • Bullish Line Color

Choose the line color for painting bullish divergences (long signals).

#### • Mark Highs Color

Choose the color for displaying the local highs in the chart.

#### Mark Lows Color

Choose the color for displaying the local highs in the chart.

#### • Line Width

Choose the width of the divergence lines.





#### 4. HOW TO USE

## 4.1.SET UP THE DIVERGENCE DETECTOR IN YOUR CHART

1. Add the DivergenceDetector to the chart – you will find it in the indicator window -> "Scripted Conditions" -> "AlgoQuantics DivergenceDetector". Configure the settings to your needs and press "OK".



2. The DivergenceDetector will be added to your chart – following you can see a sample screenshot of the divergence lines of the divergence detector.







## 4.2. SET UP A REALTIME SCANNE FOR DIVERGENCE SIGNALS



1. Add a new AnalyzerSession, e.g. with the name "Divergence"





2. Activate the DivergenceDetector for the newly created "Divergence" session:



3. Add a new AnalyzerEscort column to your LCG and assign the "Divergence" Session to it. Confirm with "OK" and the scanner is already fully set-up and ready for screening.



GRAB THE NEW ALGOQUANTICS STARTERKIT WITH LOTS OF NEW FEATURES FOR YOUR OPTIMAL WORKFLOW IN AGENATRADER FOR FREE(!). START THE FREE DOWNLOAD HERE: https://www.algoguantics.com/free-addon/

