



Version 4.8 Installation & Operation Manual

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**Build-a-Signal**™  
software  
by **Marko Nikolic**

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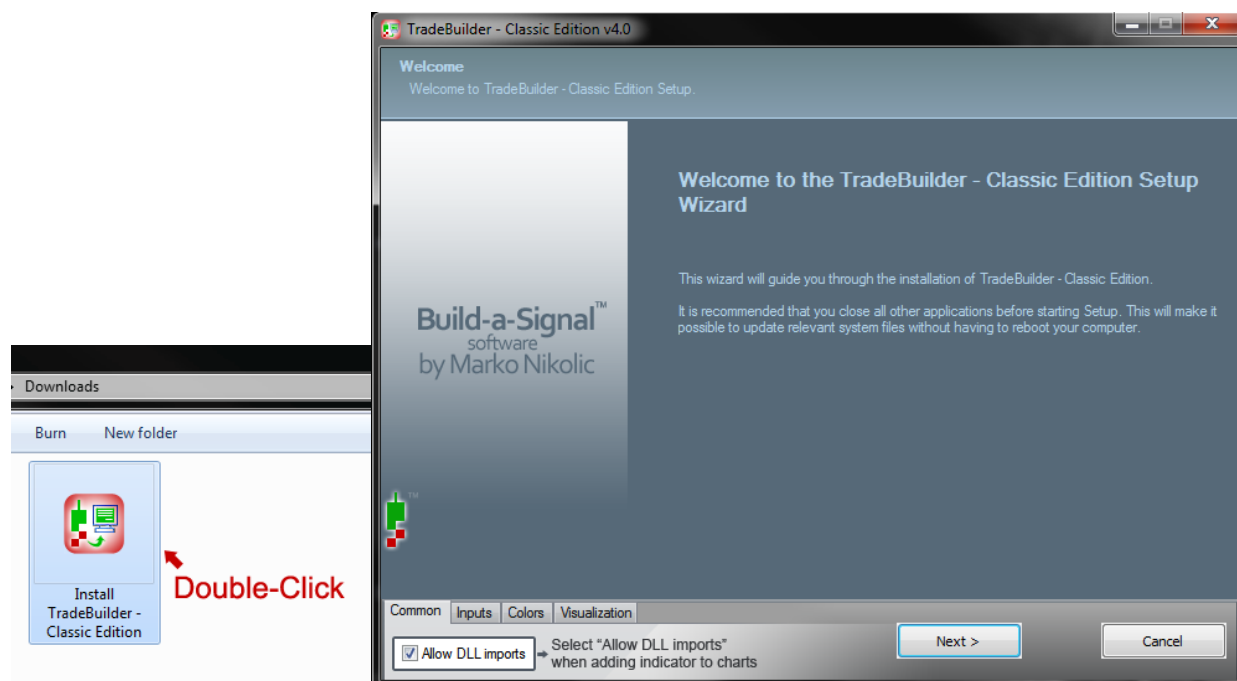
## 1.0 INTRODUCTION

Thank you for purchasing TradeBuilder – Classic Edition. You have taken the first, big step towards building your unique, personalized trading strategy – one capable of identifying market opportunities that established and automated systems cannot detect.

This manual will describe, in-depth, the installation and operation of the plug-in, as well as elaborate on perks and benefits that come with the license that you just purchased.

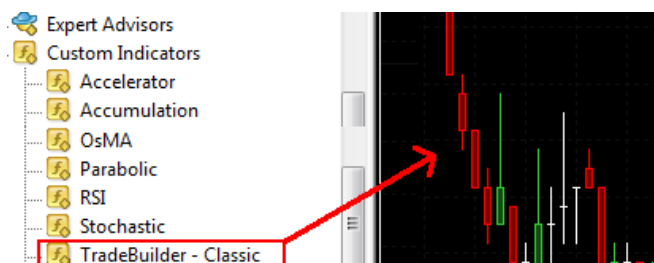
## 2.0 INSTALLATION

This will take under a minute, and just several clicks of your mouse. TradeBuilder Classic has an installation wizard built-in, which will automatically detect your Metatrader platform and install all required components without any effort on your part. All you have to do is double click on the *Install TradeBuilder – Classic Edition* package that you downloaded, and keep clicking Next until the installation is complete. All suggested, default settings will be preselected for you, but you will have a chance to customize the installation process if you so desire.

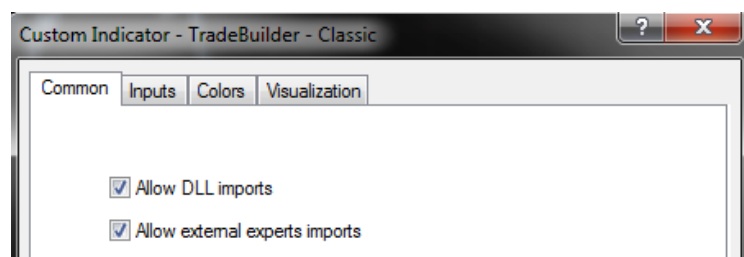


### 3.0 RUNNING

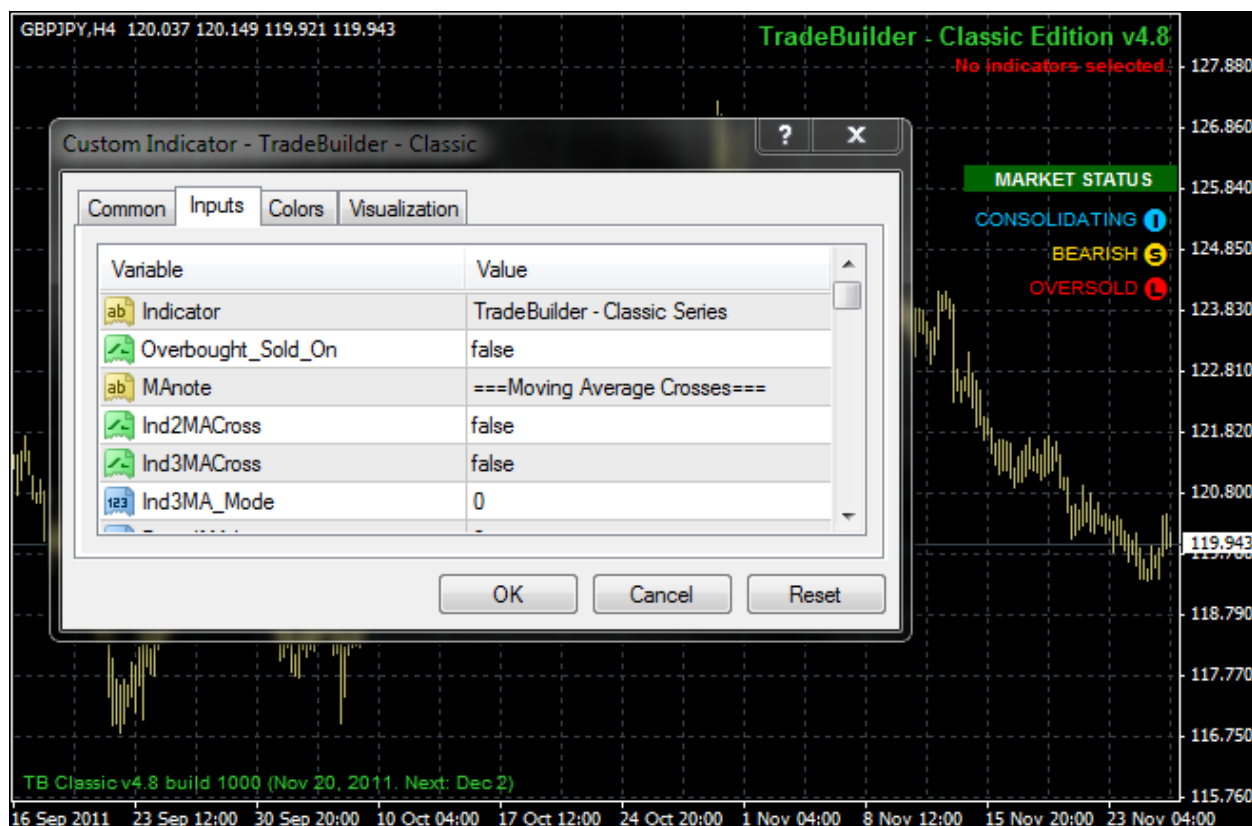
Launch Metatrader 4, open Navigator window (Ctrl-N), expand Custom Indicators tab, and simply click and drag TradeBuilder – Classic Edition indicator onto the main price chart.



Once you add the indicator, click on the *Common* tab and check *Allow DLL Imports*



You are now ready to start building your strategy. Click on the *Inputs* tab and configure desired integrated indicators. The green *Trade Builder Classic* label will automatically attach itself to the chart, letting you know that the plug-in is functioning properly.



## 4.0 STRATEGY BUILDING

Strategies are built from building blocks known as integrated indicators. You can combine any number of them, and effectively compound their functions. Each integrated indicator also has a number of options, giving you the ability to further customize each block. As of this writing there are 16 integrated indicators and 94 options altogether, which translates to thousands of possible combinations.

### 4.1 ACTIVATING INTEGRATED INDICATORS

By default, when you first load TradeBuilder, all of the integrated indicators will be deselected, and hence you will have no signals/arrows on the chart. To activate an indicator, simply change its setting from **false** to **true**.

#### 4.1.1 VISUAL DASHBOARD

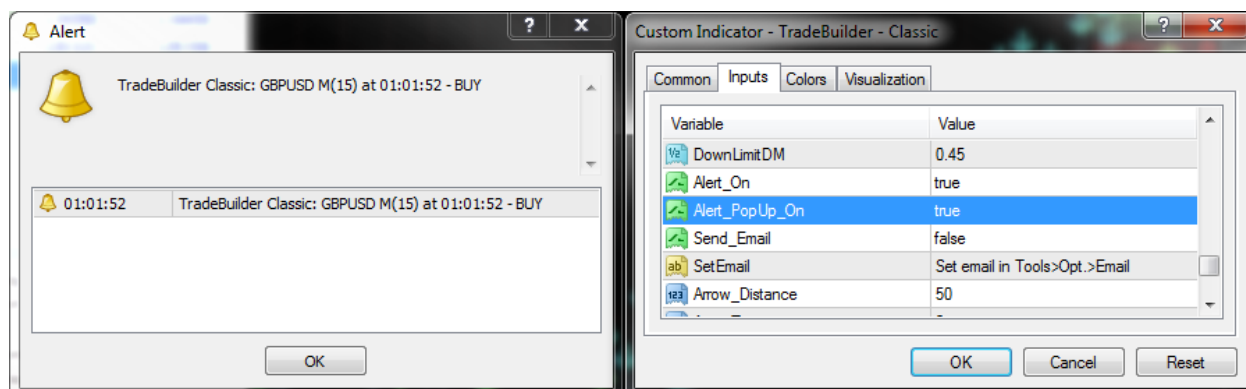
As you activate indicators, their names will appear on the main chart to help you keep track of your strategy input. Names in orange are filter indicators, explained throughout section 4.3.



## 4.2 SIGNALS, ALERTS, EMAIL NOTIFICATIONS

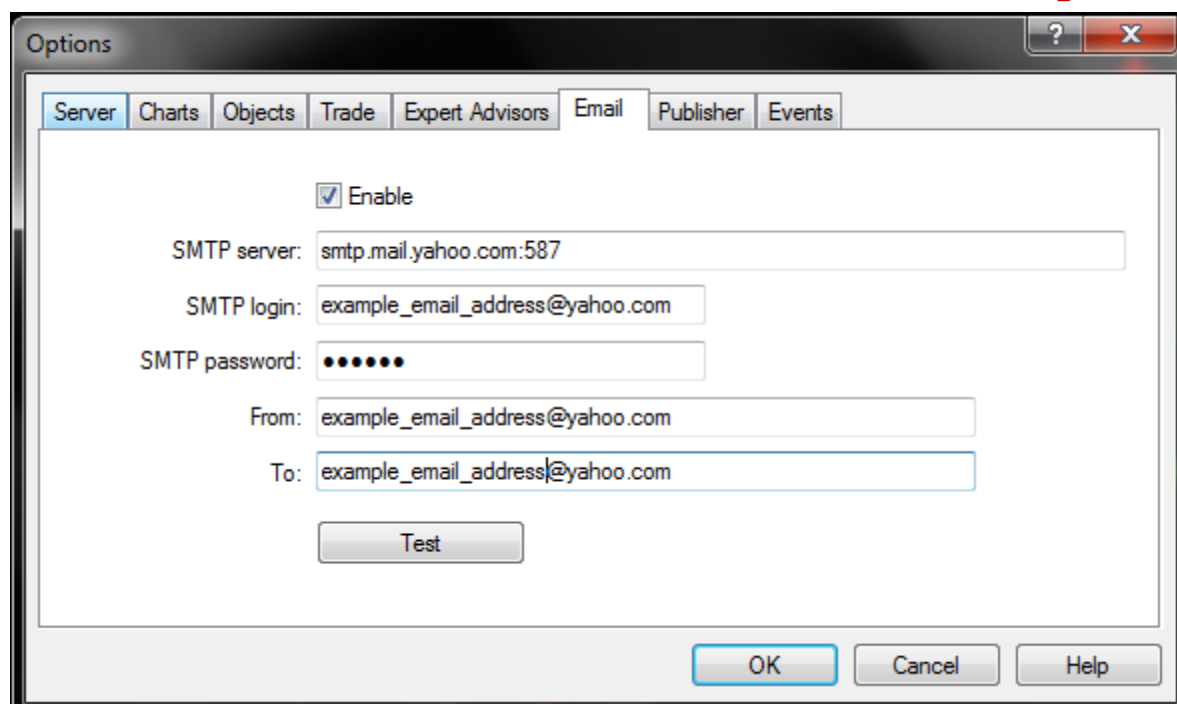
When your strategy conditions (indicators, options) are met, TradeBuilder will issue a signal. At bare minimum that signal will come in form of an arrow (up for BUY, down for SELL). You may also activate alerts. There are three types: pop-up message, sound, and email.

Pop-ups are optional and separate from audio alerts. To activate/deactivate, simply set *Alert\_PopUp\_On* to TRUE/FALSE.



Audio alerts, activated via *Alert\_On* parameter now also include options to assign a specific sound to each, Long (Buy) and Short(Sell) signal. Locate **Buy\_Sound** and **Sell\_Sound** parameters and change their values to 0-13, with 0 being default. The installer also adds 2 additional sound samples to your Metatrader platform - voice-overs announcing "Buy" and "Sell" conditions (both of which are defaults for their respective signals).

Email notification is activated by setting *Send\_Email* option to **true**. However, you also have to configure your email address and settings in Metatrader 4 options. To do that, go to TOOLS>>OPTIONS>>EMAIL, and enter all the required fields. If you're unsure of settings contact your email provider. The trickiest of all is SMTP (outgoing mail server), as some providers don't allow external access to it. If that is an issue for you, worry not, as I'm in process of setting up mnikolic.com's own email server which you'll be able to use within TradeBuilder.



## 4.3 INTEGRATED INDICATORS & OPTIONS

The following is the list and description of each Integrated Indicator (and related options) bundled with TradeBuilder – Classic Edition version 4.0.

### 4.3.1 COMMON PARAMETERS

Some indicators share common parameters in their calculations. These and their options are listed below.


**PERIOD:** Also known as time interval, it is a number of historical bars considered for indicator calculation. The higher the value, the smoother/cleaner the result, but also the slower the signal. All integrated indicators come set with default values. You are encouraged to experiment with them, however, try to maintain a balance between smoothness and speed.

**PRICE TYPE:** Determines which type of price is applied toward calculation of an indicator. Options are 0 - Close, 1 - Open, 2 - High, 3 - Low, 4 - Median  $((High + Low)/2)$ , 5 - Typical  $((High + Low + Close)/3)$ , 6 - Weighted  $((High + Low + Close + Close)/4)$ .

**MA TYPE:** Moving average method applied toward calculation of an indicator. Options: 0 - Simple, 1 - Exponential, 2 - Smoothed, 3 - Linear Weighted. 3 is the fastest moving average, while 2 the slowest.

**(OB/OS) - refers to indicator's ability to run in Overbought/Oversold Mode (see 4.3.1.1)**

#### 4.3.1.1 OVERBOUGHT/OVERSOLD STRATEGY (OB/OS)

 OverBought\_Sold\_Strategy    true

One of the most popular trading strategies is trading oscillators when its values are at extremes. A trader would typically go long(buy) when the oscillator value drops very low, and enters oversold territory, and go short (sell) when the oscillator skyrockets to the upper extreme (overbought territory). Not only can you accomplish this with TradeBuilder - Classic, but you can compound multiple oscillators to this effect!

To activate the strategy, set **Overbought\_Sold\_Strategy** parameter to **TRUE**. This mode affects **RSI**, **CCI**, **Stochastic Oscillator**., and **Williams %R**. Use **UpLimit** to define an oversold level, and one where you would like a BUY arrow to appear, and **DownLimit** for overbought, and the SELL arrow.

##### Sample strategy in action: Stochastic Oscillator in Overbought/Oversold Mode

When mode is selected, the indicator will issue a BUY signal when %K crosses %D from BELOW while UNDER the specified UpLimit (oversold) limit. Similarly a SELL signal will be issued when %K crosses %D from ABOVE while OVER the specified UpLimit (Buy) limit.



For example, a popular Stochastics overbought/sold strategy is to sell when lines cross above 80 level, and buy when they cross under 20. To accomplish this, just set *Overbought\_Sold\_Strategy* to *true*, *UpLimit* to 20 and *DownLimit* to 80. That's it.

Try combining this strategy with *ADX\_Strength* (see *ADX* section). It can effectively filter out weaker signals.

#### 4.3.1.2 MARKET STATUS MONITOR (previously Extended Market Bias Monitor)

By default, this feature is always on. Instead of issuing signals like other indicators, it continually scans and displays market conditions right on the screen. A lot of time was spent on the Market Bias Monitor, as I wanted to ensure the algorithm behind it was both smart, and adaptive to all time frames and markets.



The original Market Bias Monitor had only a single, general market gauge. The new, Market Status Monitor is comprised of three sub-indicators. Top sub-indicator, labeled as “I” gauges *Immediate* market conditions, those that are likely to impact price action over the next few bars. Similarly, “S” represents the *Short-term* market bias, while “L” gauges *Long-term*. The short and long term sub-indicators each output 4 possible conditions:

**BULLISH** – Detects an underlying bull market. BUY signals issued during this period have the highest probability of succeeding.

**BEARISH** – Detects an underlying bear market. SELL signals issued during this period have the highest probability of succeeding

**OVERSOLD** - warns of market condition being oversold. Selling is not recommended.

**OVERBOUGHT** - warns of market condition being overbought. Buying is not recommended.

Immediate term sub-indicator only indicates *Overbought* and *Oversold* market conditions, in addition to *Consolidating* (i.e. noisy, undefined). Trying to determine whether the immediate trend is *Bullish* or *Bearish* would be nonsensical, because of sub-indicator’s extremely short-term nature (it only considers 1-5 upcoming bars).

\*new\* Market Status monitor’s background now paints red during extremely overbought or oversold market conditions. Think of it as a committee of the 3 sub-monitors: if at least 2 of them agree on Overbought or Oversold conditions, the background will change from green to red, indicating caution against trend-based trades.

So how do we use market bias with the other 20 integrated indicators? Simply ensure that the signals (e.g. arrows) issued by Classic conform to conditions displayed by the monitor. Therefore, long trades (buys) should be taken during neutral and oversold periods, and short (sells) during neutral and overbought. This, of course, does not guarantee every trade to be profitable, but it definitely increases the probability of success.

Below is an example of using Classic's compounded signals with the Market Bias Monitor. The first screenshot shows Classic issuing a buy signal based on the compounded input of Double MA cross, Williams %R, Parabolic SAR, Demarker, and Average Directional Index Strength filter. In the same time, MBM is indicating that the market is oversold, confirming Classic's BUY signal (LONG/BUY trades initiated during oversold conditions have a higher probability of success). Shortly after, the market, GBP/USD M5, rallies up 50 pips.









Remember, Indicators labeled with (OB/OS) can be used with the Overbought/Oversold Strategy – see 4.3.1.1

### 4.3.2 DOUBLE MOVING AVERAGE CROSS

NOTE: Double and triple moving average crosses are both located under *Moving Average Crosses* heading within TradeBuilder - Classic. I may well add more crosses in the future.

BUY signal issued when the faster moving average (MA1) crosses the slower moving average (MA2) from below. SELL signal issued when the faster moving average (MA1) crosses the slower moving average (MA2) from above.

 MA Note	===Moving Average Crosses===
 Ind2MACross	false
 Ind3MACross	false
 PeriodMA1	5
 PeriodMA2	8
 PeriodMA3	34

#### PARAMETERS:

Parameters ending in MA1, MA2 and MA3 refer to moving averages 1, 2, 3 (fastest, slower, slowest).

**Ind2MACross:** Activates double cross. True = on, False = off

**Period1, 2:** Period of fastest MA, period of slower MA

**Price TypeMA1, MA2:** Price types for MA1 and MA2.

**MATypeMA1, MA2:** Moving average types for MA1 and MA2.

**ShiftMA1, MA2:** Number of bars that you would like each moving average to shift.

### 4.3.3 TRIPLE MOVING AVERAGE CROSS

BUY signal issued when the fastest moving average (MA1) crosses the medium moving average (MA2), and medium (MA2) crosses the slowest moving average (MA3) from below.

SELL signal issued when the fastest moving average (MA1) crosses the medium moving average (MA2), and medium (MA2) crosses the slowest moving average (MA3) from above.

#### PARAMETERS:

Triple Moving average requires that you define all MA1 (fastest), and MA2 (medium) parameters (you may leave *Ind2MACross* set to false) in addition to following:

**Ind3MACross:** Activates triple cross. True = on, False = off

**Period3:** Period of slowest MA

**Price TypeMA3:** Price type of slowest MA.

**MATypeMA3:** Moving average type for slowest MA.







**ShiftMA3:** Number of bars that you would like MA3 to shift.

#### 4.3.4 BOLLINGER BANDS

Widely popular and a very effective indicator for trend-gauging, volatility, and overbought-oversold estimation. The indicator is comprised of a central moving average and an upper and lower band envelopes representing deviations.

TradeBuilder Classic offers two modes of Bollinger Bands usage: **regular**, and **tag-and-reverse**. The regular mode, also known as the trend-seeking mode, issues a BUY signal when the upper band is pierced (period closes above it) and similarly the SELL signal is issued upon piercing of the lower band. Default deviation (see below) for this mode is 2 or lower. Tag-and-reverse uses Bollinger Bands to detect overbought/oversold conditions. When price pierces the upper band, a SELL signal is issued, while piercing of the lower band issues a BUY signal. This mode typically uses a higher deviation value (2+).

**Note on deviation:** Deviation is a statistical term that measures the variation (or deviance) between a mean (average) of a period and the current value. Hence, the higher the deviation, the less of a statistical chance the value has of reaching it. That is precisely why such high values could be useful at detecting overbought/sold levels - because price never lasts that long above extreme deviation bands, and often turns around towards the period average.

 Bollinger	===Bollinger Bands===
 IndBollinger	true
 Tag_and_Reverse	false
 Period_Bollinger	20
 Deviation_Bollinger	2
 PriceType_Bollinger	0

**Period\_Bollinger:** Averaging period





**Deviation\_Bollinger:** Deviation levels from the average

**PriceType\_Bollinger:** Price type used for the calculation (close, high, low, open etc..)

#### 4.3.5 PARABOLIC SAR

SAR type indicators are excellent for trend-following setups as they work on the pure technical principle of support/resistance break. Parabolic SAR uses a parabolic algorithm which is more adaptive to market price action/acceleration, and hence often provides earlier signals of trend weakening than traditional linear S/R lines.

BUY signal is issued when price action breaks the Parabolic resistance line, while SELL signal is issued when price action breaks the Parabolic support line.

 PSAR	===Parabolic SAR===
 IndParabolicSAR	false
 Step_PSAR	0.02
 Max_PSAR	0.2

**IndParabolicSAR:** Activates Parabolic SAR. True = on, False = off

**Step\_PSAR:** acceleration factor which can be interpreted as sensitivity. The lower the value, the less sensitive the indicator, the more filtered the market is.

**Max\_PSAR:** Maximum step of each acceleration period. The lower the value, the less sensitive the indicator, the more filtered the market is.








#### 4.3.6 HEIKIN ASHI

Heikin Ashi is known as an averaging candlestick since it uses modified bar parameters in its calculations to detect trend in the market. BUY signal is produced when the indicator detects an uptrend , and SELL when it detects a downtrend.

Since the indicator is very strict in its calculation rules , only a single parameter exists for it, **IndHeikin**, which turns it on or off (true/false).

#### 4.3.7 HEIKIN ASHI SMOOTHED

Think of this as Heikin Ashi on steroids. You can change all calculation parameters of the original here. The higher the values, the smoother, but slower the signal issued becomes. I personally use either the original or smoothed Heikin in my trading - it is excellent at filtering choppy market conditions and thrusts.

 Heikin	===Heikin Ashi===
 IndHeikin	false
 HeikinS	===Heikin Ashi Smoothed===
 IndHeikinSmoothed	false
 Period1_Heikin	2
 Period2_Heikin	1
 ...	-

PARAMETERS:

**IndHeikinSmoothed:** Activates Heikin Ashi Smoothed. True = on, False = off

**Period1, 2:** Periods for the two Heikin components. Recommended to start with values 2,1

**MAType1, 2:** Moving average types for the two Heikin components. Recommended: 2,2.

#### 4.3.8 RELATIVE STRENGTH INDEX (RSI) (OB/OS)

RSI is a momentum oscillator that measures speed, and change of price movements. BUY signal issued when RSI line moves above *UpLimit* value, SELL signal issued when RSI line moves below *DownLimit* value. The higher the spread between *UpLimit* and *DownLimit*, the more filtered the market is. To see what these limits represent, add an RSI indicator to your chart and look at the vertical number scale on the right.

ab RSI	===RSI===
IndRSI	false
123 PeriodRSI	8
123 UpLimitRSI	55
123 DownLimitRSI	45
123 PriceTypeRSI	0

PARAMETERS:

**Period:** RSI Period

**UpLimit:** Level that RSI line needs to cross in order to qualify for a BUY signal. Range 0-100.

**DownLimit:** Level that RSI line needs to cross in order to qualify for a SELL signal. Range 0-100.

**Price Type:** Price type used in oscillator calculation.

NOTE: You may also use *UpLimit* and *DownLimit* values to set overbought and oversold levels. For example, typical overbought/sold levels for RSI are 70/30. To configure TradeBuilder to BUY on oversold and SELL on overbought just set *UpLimit* (BUY trigger) to 30, and *DownLimit* (SELL trigger) to 70.

#### 4.3.9 COMMODITY CHANNEL INDEX (CCI) (OB/OS)

CCI was designed to identify cyclical trends in a market. Similar to RSI, BUY signal is issued when CCI line moves above *UpLimit* value, while SELL signal is issued when CCI line moves below *DownLimit* value. The higher the spread between *UpLimit* and *DownLimit*, the more filtered the market is.

ab CCI	===CCI===
IndCCI	false
123 PeriodCCI	34
123 UpLimitCCI	25
123 DownLimitCCI	-25
123 PriceTypeCCI	0

PARAMETERS:

**Period:** CCI Period

**UpLimit:** Level that CCI line needs to cross in order to qualify for a BUY signal.







**DownLimit:** Level that CCI line needs to cross in order to qualify for a SELL signal.

**Price Type:** Price type used in oscillator calculation.

NOTE: You may also use *UpLimit* and *DownLimit* values to set overbought and oversold levels. For example, typical overbought/sold levels for CCI are -100/100. To configure TradeBuilder to BUY on oversold and SELL on overbought just set *UpLimit* (BUY trigger) to -100, and *DownLimit* (SELL trigger) to 100.

#### 4.3.10 STOCHASTIC OSCILLATOR (OB/OS)

A momentum oscillator that shows the location of the close (price) relative to the high-low range over a set number of periods. BUY signal issued when: faster (%K) line crosses the slower (%D) line from below AND when the oscillator is above *UpLimit* level. SELL signal issued when: faster (%K) line crosses the slower (%D) line from above AND when the oscillator is below *DownLimit* level. The higher the spread between *UpLimit* and *DownLimit*, the more filtered the market is.

 Stoch	===Stochastic Oscillator===
 IndStoch	false
 PeriodStochK	5
 PeriodStochD	3
 PeriodStochS	3
 UpLimitStoch	55

PARAMETERS:

**Period K, D, S:** %K fast line, %D slow line, S slowing value

**UpLimit:** Level that oscillator needs to cross in order to qualify for a BUY signal.

**DownLimit:** Level that oscillator line needs to cross in order to qualify for a SELL signal.

**PriceField:** Price field parameter. 0 - Low/High or 1 - Close/Close

**MAType:** Moving average type used in calculation.

**ModeStoch:** Indicator line index. 0 - Main, 1 - Signal. Default: 0.

#### 4.3.11 MOVING AVERAGE CONVERGENCE DIVERGENCE (MACD)

MACD is considered to be one of the most effective momentum indicators available. It turns two moving averages into a momentum oscillator by subtracting longer MA from shorter MA. The

result is used alongside third, signal line as trigger. BUY signal issued when: base line (histogram) is above signal line AND oscillator is above *UpLimit* AND distance between the base and signal passes set value. SELL signal issued when: base line (histogram) is below signal line AND oscillator is below *DownLimit* AND distance between the base and signal passes set value.

ab	MACD	===MACD===
IndMACD		false
123	PeriodMACDF	12
123	PeriodMACDS	26
123	PeriodMACDSignal	9
1/2	MACDLinesMinDist	0.0

#### PARAMETERS:

**Period F, S, Signal:** Periods of fast MA, slow MA, and signal line.

**MACDMinDist:** Introduced in v1.1, this is an excellent filter for choppy markets. It looks for specific distance (separation) between the signal and base lines before issuing a BUY or SELL signal. The higher the distance specified, the stronger the trend required. More in-depth information on this feature is available here: <http://mnikolic.com/general-discussion/version-1-1-released-new-filter-added-t-148.html>.

**UpLimit:** Level that oscillator needs to cross in order to qualify for a BUY signal.

**DownLimit:** Level that oscillator line needs to cross in order to qualify for a SELL signal.

**Price Type:** Price type used in oscillator calculation.

**Mode:** Indicator line index. 0 - Main, 1 - Signal. Default: 0.

#### 4.3.12 OSCILLATOR OF MOVING AVERAGE (OsMA)

OsMA is similar to MACD in a sense that it involves calculation of variance between 2 moving averages. BUY signal issued when oscillator moves above *UpLimit*. SELL signal issued when oscillator moves below *DownLimit*. A lot of traders just use 0 cross as a signal, but you can avoid a lot of false signals if you create some distance between BUY and SELL levels.

ab	OsMA	===OsMA===
IndOsMA		false
123	PeriodOsMAF	12
123	PeriodOsMAS	26
123	PeriodOsMAMACD	9
1/2	UpLimitOsMA	0.0

**Period F, S, MACD:** Periods of fast MA, slow MA, and MACD smoothing line.

**UpLimit:** Level that oscillator needs to cross in order to qualify for a BUY signal.



**DownLimit:** Level that oscillator line needs to cross in order to qualify for a SELL signal.

**Price Type:** Price type used in oscillator calculation.

### 4.3.12 MOMENTUM

Momentum measures changing velocity of market price over a set time interval. It is another one of my favorite indicators to compound in trading. BUY signal issued when oscillator moves above *UpLimit*. SELL signal issued when oscillator moves below *DownLimit*. A lot of traders just use 100 level cross as a signal, but you can avoid a lot of false signals if you create some distance between BUY and SELL levels.

ab	Momentum	===Momentum===
	IndMomentum	false
123	PeriodMomentum	14
1/2	UpLimitMomentum	100.0
1/2	DownLimitMomentum	100.0
123	PriceTypeMomentum	0

**Period:** Period of oscillator

**UpLimit:** Level that oscillator needs to cross in order to qualify for a BUY signal.

**DownLimit:** Level that oscillator line needs to cross in order to qualify for a SELL signal.

**Price Type:** Price type used in oscillator calculation.

### 4.3.13 AVERAGE DIRECTIONAL MOVEMENT INDEX (ADX)

ADX evaluates the strength of the current trend, either bullish or bearish. The integrated indicator takes both direction and strength into consideration, however, strength assessment is its biggest benefit. In combination with something like a moving average cross, it can be pretty effective. BUY signal is issued when the strength line is above *MinStrengthADX* value AND +DI is above -DI (automatically calculated). SELL signal is issued when the strength line is above *MinStrengthADX* value AND +DI is below -DI (automatically calculated).

	IndADX	false
123	PeriodADX	14
	ADX_Strength	false
123	MinStrengthADX	30
123	PriceTypeADX	0

**Period:** Time interval for strength calculation.

**ADX\_Strength:** transforms the indicator into a very effective filter that seeks directional (trend) strength before issuing a signal. Don't use on its own. It requires a trigger like MA, RSI etc.





**MinStrength:** Minimum market strength required for signal to be issued. Good at filtering

choppy market times.

**Price Type:** Price type used in oscillator calculation.

#### 4.3.14 AVERAGE TRUE RANGE (ATR) VOLATILITY FILTER

As you've noticed by now, a lot of integrated indicators have filters integrated within them for detecting and avoiding periods of consolidation or thrusts. ATR is an indicator entirely dedicated to that end, and is quite effective. The indicator measures market volatility, and as such, does not provide indication of price direction, and has to be used alongside a direction-seeking indicator such as MACD or moving average cross. Instead of issuing a signal on its own it strengthens the validity of a signal issued by direction-seeking indicators.







 <b>ATR</b>	===ATR:Volatility Filter===
 <b>IndATR</b>	false
 <b>PeriodATR</b>	14
 <b>MinStrengthATR</b>	0.001

**Period:** Time interval for strength calculation.

**MinStrength:** Minimum market strength required for signal to be issued. Good at filtering choppy market times.

#### 4.3.15 FORCE INDEX (OB/OS)

Force Index takes both price and volume into evaluation of market's trend strength. It is another filter, but one that also takes direction into account, and is hence capable of producing signals on its own. BUY signal issued when oscillator moves above *UpLimit*. SELL signal issued when oscillator moves below *DownLimit*. A lot of traders just use 0 cross as a signal, but you can avoid a lot of false signals if you create some distance between BUY and SELL levels.

 <b>Force</b>	===Force Index===
 <b>IndForce</b>	false
 <b>PeriodForce</b>	55
 <b>UpLimitForce</b>	0.01
 <b>DownLimitForce</b>	-0.01
 <b>PriceTypeForce</b>	0

**Period:** Period of oscillator.

**UpLimit:** Level that oscillator needs to cross in order to qualify for a BUY signal.

**DownLimit:** Level that oscillator line needs to cross in order to qualify for a SELL signal.

**Price Type:** Price type used in oscillator calculation.

**MAType:** Moving average method type.







*Note: Classic v4.0 introduced OB/OS mode to the Force Index. See release notes.*

#### 4.3.16 ALLIGATOR AND GATOR OSCILLATOR

NOTE: Since Alligator and Gator Oscillator indicators both utilize the same parameters (except **MinStrengthOscillator**), the parameter options are all grouped under Gator Oscillator heading. **IndGator** set to **true** activates Alligator, while **IndGatorOsc** set to **true** activates Gator Oscillator. You may use them independently or concurrently. As a matter of fact, using them together is essentially a popular practice, and you could try enhancing it by activating some of the other integrated indicators.

Alligator consists of 3 moving averages with set time intervals, price and MA types, and bar shifts. The indicator helps determine the presence and absence of a trend as well as its direction.

Gator Oscillator is an oscillator that maps the behavior of 3 Alligator averages in form of a histogram. It detects which of the 3 are diverging (signaling strong trend) or converging (signaling trend dry up).

 Alligator	===Alligator===
 IndGator	false
 GatorOsc	===Gator Oscillator===
 IndGatorOsc	false
 PeriodGatorJaw	13
 PeriodGatorTeeth	8

**Period Jaw, Teeth, Lips:** Periods of slowest, slower, and fastest alligator averages.

**Shift Jaw, Teeth, Lips:** Number of bars each of the averages is shifted back or forth.

**MinStrengthOscillator (Gator Oscillator ONLY):** This parameter only has effect while **IndGatorOsc** is set to **true**. It is a trend strength filter. The value you input is the minimum market strength required for signal to be issued.






**Price Type:** Price type used in oscillator calculation. Recommended: 4.

**MAType:** Moving average method type. Recommended : 2.

#### 4.3.17 WILLIAMS' PERCENT RANGE (%R) (OB/OS)

Williams' %R is one of the more reliable momentum indicators, and is typically used to gauge trend momentum as well as oversold/overbought conditions. Larry Williams himself often used it with double moving averages, but I recommend you try it triple, and definitely Heikin Ashi . .

BUY signal issued when %R moves above *UpLimit*. SELL signal issued when oscillator moves below *DownLimit*. A lot of traders just use -50 level cross as a signal, but you can avoid a lot of false signals if you create some distance between BUY and SELL levels.

 WPR	===Williams' %R===
 IndWPR	true
 PeriodWPR	28
 UpLimitWPR	-30
 DownLimitWPR	-70

**Period:** Period of oscillator.






**UpLimit:** Level that %R needs to cross in order to qualify for a BUY signal. Range: 0 to -100

**DownLimit:** Level that %R line needs to cross in order to qualify for a SELL signal.

NOTE: %R *UpLimit* and *DownLimit* values are effective gauges of trend strength, especially with periods set to greater than 14 (preferably 28). When the 28-period %R moves above -20 or below -80 it typically remains there for an extended period of time, at least until the trend strength weakens. With period set to less than 14, -20/-80 become overbought/oversold levels, and could potentially be used for some fast scalping.

#### 4.3.18 DEMARKER TECHNICAL INDICATOR (OB/OS)

Demarker Technical Indicator is an oscillator developed by Tom Demarker for identifying high-risk buying or selling areas in a given market. It is therefore an excellent tool for detecting periods of overbought/oversold market activity. BUY signal issued when %R moves above *UpLimit*. SELL signal issued when oscillator moves below *DownLimit*.

 DeMarker	===DeMarker===
 IndDM	false
 PeriodDM	21
 UpLimitDM	0.55
 DownLimitDM	0.45





**Period:** Period of oscillator.

**UpLimit:** Level that %R needs to cross in order to qualify for a BUY signal. Range: 0 to 1.0

**DownLimit:** Level that %R line needs to cross in order to qualify for a SELL signal.

In **OB/OS mode**, 0.3 is typically used for UpLimit (BUY signal) and 0.7 for DownLimit (SELL).

#### 4.3.19 OTHER SETTINGS

 Arrow_Distance	50
 ArrowType	0
 Dashboard_Comer	1
 CountBars	5000

**Display\_Market\_Status:** Turns Market Status module on/off.

**Display\_Build\_Info:** Turns build information (bottom-left corner) on/off.

**Arrow\_Distance:** The distance between arrows and price action.

**Arrow\_Type:** Customizes the appearance of your arrows: 0 - Thick, 1 - Thin, 2 - Hollow, 3 - Round, 4 - Fractal, 5 - Diagonal Thin, 6 - Diagonal Thick, 7 - Diagonal Hollow, 8 - Thumb, 9 - Finger.

**Arrow\_Size:** Controls the size of your chosen arrow type. Default is 2.

**BuyArrowColor:** Color selection for a *Buy* arrow. Default is *DeepBlueSky*.

**SellArrowColor:** Color selection for a *Sell* arrow. Default is *Yellow*.

**Dashboard\_Corner:** Places Visual Dashboard in one of four corners. Default is 1.

**Alert\_On:** Activates audio alerts. The following two parameters become active with *Alert\_On* set to TRUE (default).

**Buy\_Sound:** Available options 0-13, with 0 being the default. These are 14 available sound samples that you can use for audio alerts. The default sound is a voiceover announcing "Buy".

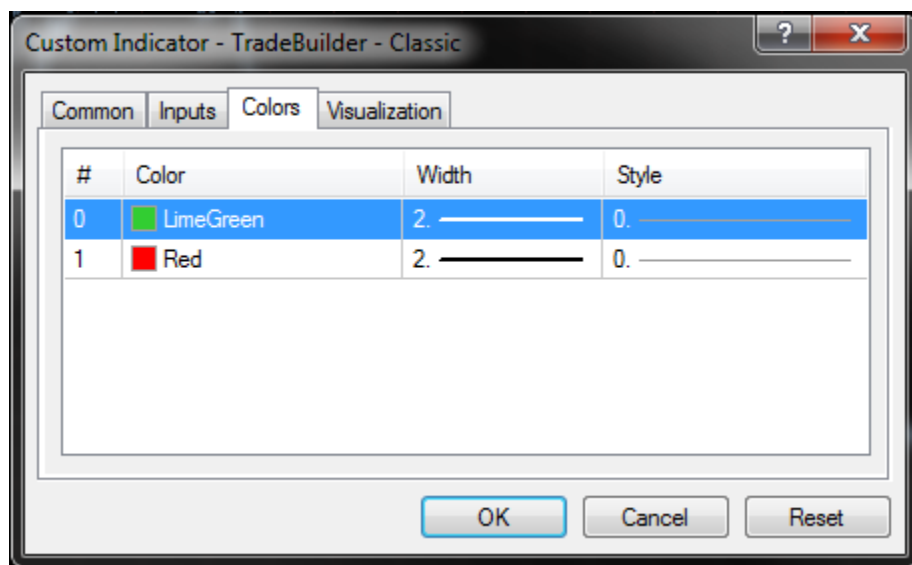
**Sell\_Sound:** Available options 0-13, with 0 being the default. These are 14 available sound samples that you can use for audio alerts. The default sound is a voiceover announcing "Sell".

**Alert\_PopUp\_On:** Issues pop-up alerts when set to TRUE.

**CountBars:** How far back, in terms of historic bars, TradeBuilder issues arrow signals. I recommend a value over 3000 for decent strategy back-testing. Setting this value to less than 5000 could improve performance on old computers. Whichever value you choose, Core will draw a vertical line over that bar, indicating it is only taking data from that point onward into its calculations. You will not see any signals (such as arrows) behind the line.



**Manually changing Arrow Size & Color:** If you don't want to use the *Arrow\_Size*, *BuyArrowColor*, and *SellArrowColor* options, you can also change the size and color of your arrow via *Colors* tab within the Indicator dialogue window. Double-click on color or width to change it. Option 0 alters the Buy arrow, while 1 alters Sell.



## 5.0 TRADEBUILDER CLASSIC PREMIUM CONTENT

Your purchase of TradeBuilder - Classic Edition also comes with full [TradeBuilder Forum](http://mnikolic.com/tradebuilder-f-69.html) membership, the official site for all discussions, strategies, and downloads pertaining to the plug-in. It is hosted on my trading forum at the following URL: <http://mnikolic.com/tradebuilder-f-69.html>. You will receive a separate document containing your username and password (both of which can be changed) and are encouraged to contribute any input, questions or suggestions you may have.

The forum also contains information on the most current release of TradeBuilder, as well as information pertaining upcoming upgrades. Although you will be notified of all upgrades, you may wish to check the [main page](#) from time to time and ensure the version you have is up to date.

## 6.0 FUTURE UPGRADES

Your purchase comes with a lifetime upgrade license for *TradeBuilder – Classic Edition v4.x*. In other words, all upgrades pertaining to this version (v4) are free. You will be notified of all updates via email.

Starting with v4.8, updates for Classic will be released on bi-weekly basis, so that its algorithm can take advantage of latest behavioral market definitions. To find out what definition build your copy of TradBuilder Classic is running, and when the next update is scheduled for, simply set the ***Display\_Build\_Info*** parameter to ***TRUE***.

NOTE: Free upgrades only pertain to the current version (v4 series) of the product. Any subsequent versions that may be released in the future are considered separate products.

## 6.1 DOWNLOADING THE LATEST VERSION

You will be notified via email when new versions of TradeBuilder - Classic become available. The most current version of the plug-in, along with other content such as templates, can be downloaded from the forum's [Downloads Section](#). MAKE SURE YOU ARE LOGGED IN WITH THE ACCOUNT INFORMATION YOU RECEIVED AFTER YOUR PURCHASE! Downloads are only accessible by license holders, and not general public or regular members.

## 7.0 TECHNICAL SUPPORT

If you, at any time, experience any technical difficulties with TradeBuilder, either visit the official [technical support forum](#), or email me at [build-a-signal@mnikolic.com](mailto:build-a-signal@mnikolic.com).

## 8.0 DISCOUNTS ON FUTURE PURCHASES

Your *TradeBuilder - Classic Edition* license entitles you to a discount of 20% on all other Build-A-Signal software. You may peruse the product catalog via official Marko Nikolic/Build-a-Signal store, found at the following URL: <http://mnikolic.com/store>

Discounts cannot be compounded or combined. For example, owning 2 licenses, each with a 20% discount privilege does NOT equate to a 40% discount.

## 9.0 DISCLAIMER

### DISCLAIMER

TradeBuilder - Classic Edition is a trading platform plug-in/indicator intended for analysis of markets. Its effectiveness is based on your input and experience, and as such, Build-A-Signal Software and Marko Nikolic are not responsible for any losses you may incur as result of using TradeBuilder - Classic Edition in your trading endeavors.

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Trading stocks involves the risk of loss. Please consider carefully whether stocks are appropriate to your financial situation. Only risk capital should be used when trading stocks.

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Thank you for giving small software companies, like Build-A-Signal, a chance to compete in the market run by giants.

I sincerely hope that you will find Classic Edition as satisfying and useful in your trading, as I have in mine.

- Marko Nikolic, Build-a-Signal Software