

|   |  |
|---|--|
| <b>1. General Settings</b><br>1.1 Magic Nummer<br>1.2 Order Comment   | <b>Default Settings</b><br>777<br>Set & forget |
| <b>2. General Trading Filters</b><br>2.1 Max Spread (for open a trade)<br>2.2 Max Spread (max Spread for closing Trade)<br>2.3 Pause EA after closing position                            | 20<br>20<br>True                               |
| <b>3. Money Management</b><br>3.1 Lots (for first Order)<br>3.2 Enable Monetary SL<br>3.3 Stop EA after monetary SL<br>3.4 Amount for monetary SL<br>3.5 Emergency SL in %                | 0,01<br>true<br>true<br>50<br>50               |
| <b>4. Gain/Loss Settings</b><br>4.1 Take Profit<br>4.2 Stop Loss<br>4.3 Enable ATR-SL<br>4.4 ATR SL bar-length<br>4.5 Enable TP Ratio<br>4.6 TP ratio                                     | 100<br>0<br>false<br>0<br>false<br>0           |
| <b>5. Grid Settings</b><br>5.1 Enable Grid<br>5.2 Enable Mid Band-Grid Mode<br>5.3 Lot Sizes (after first Order)<br>5.4 Distance Grid orders<br>5.5 Max buy orders<br>5.6 Max sell orders | True<br>True<br>0<br>100<br>50<br>50           |
| <b>6. ATR Settings</b><br>6.1 ATR Period<br>6.2 ATR-Timeframe   | 14<br>daily                                    |
| <b>7. Super Trend Filter Settings</b>   |  |

|  |                             |
|--|-----------------------------|
| 7.1 Enable Trendfilter                                       | True                        |
| 7.2 Timeframe  | Weekly                      |
| 7.3 Nbr_Periods  | 10                          |
| 7.4 Multiplier   | 3.0                         |
| <b>8. RSI Filter Settings</b>                                |                             |
| 8.1 Enable RSI Filter  | True                        |
| 8.2 TimeFrame  | Weekly                      |
| 8.3 Overbought Level   | 70                          |
| 8.4 Oversold Level   | 30                          |
| <b>9. Bollinger Band Settings</b>                            |                             |
| 9.1 Enable Bollinger Bands                                   | True                        |
| 9.2 Timeframe  | Daily                       |
| 9.3 Bollinger Bands Period                                   | 20                          |
| 9.4 Bollinger Bands Deviations                               | 2                           |
| 9.5 Offset   | 0                           |
| 9.6 Bollinger Bands price                                    | Close Price                 |
| 9.7 Add mid Band logic                                       | True                        |
| 9.8 validity Timeframe                                       | Daily                       |
| 9.9 amount of bars for valid signal                          | 1                           |
| <b>10. Divergence Multi-Oscillator Settings</b>              |                             |
| 10.1 Settings as in the EX4 file                             | Settings as in the EX4 file |
| (But what we need is also a Value until the Signal is valid) |                             |
| <b>11. Main Signal Settings</b>                              |                             |
| 11.1 main Signal Timeframe                                   | H1                          |
| 11.2 validity Timeframe                                      | H4                          |
| 11.3 amount of bars for valid signal                         | 1                           |

## Overview: Signal logic using the example of short (without mid band mode & RSI Filter)

### 1. Super Trend Filter

= Red = only Short Trades allowed

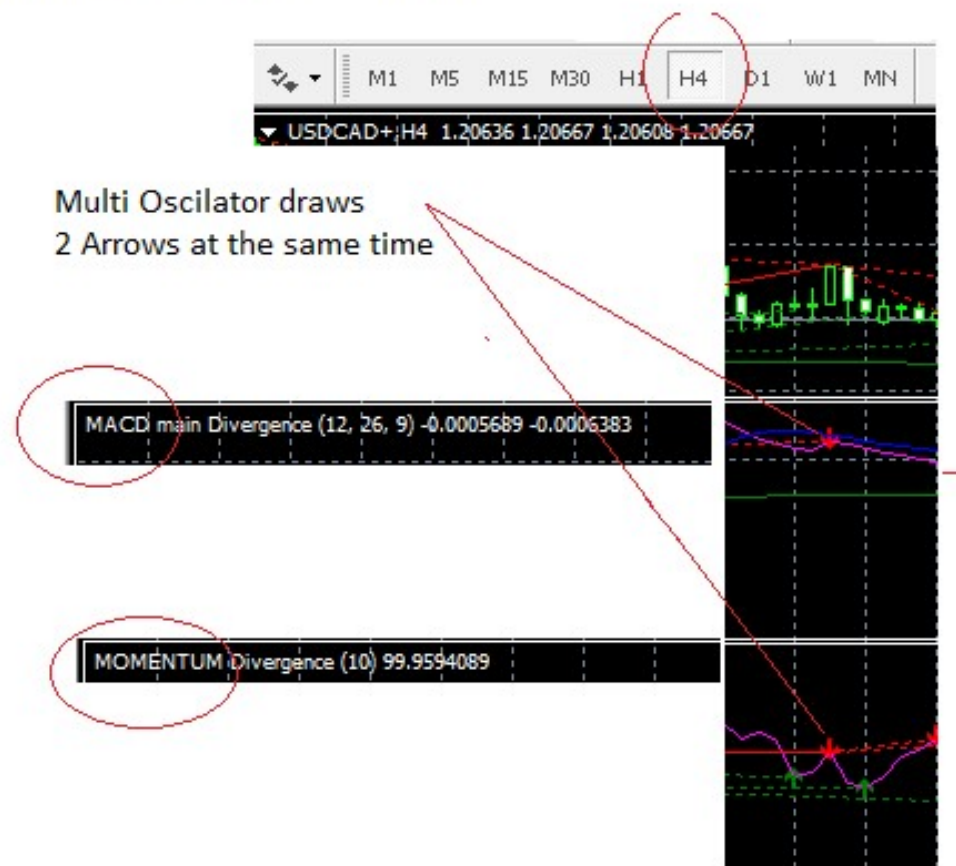


### 2. Bollinger Bands

Price touches upper Band = Short Signal



### 3. Double Divergence Signal for instance with MACD & Momentum



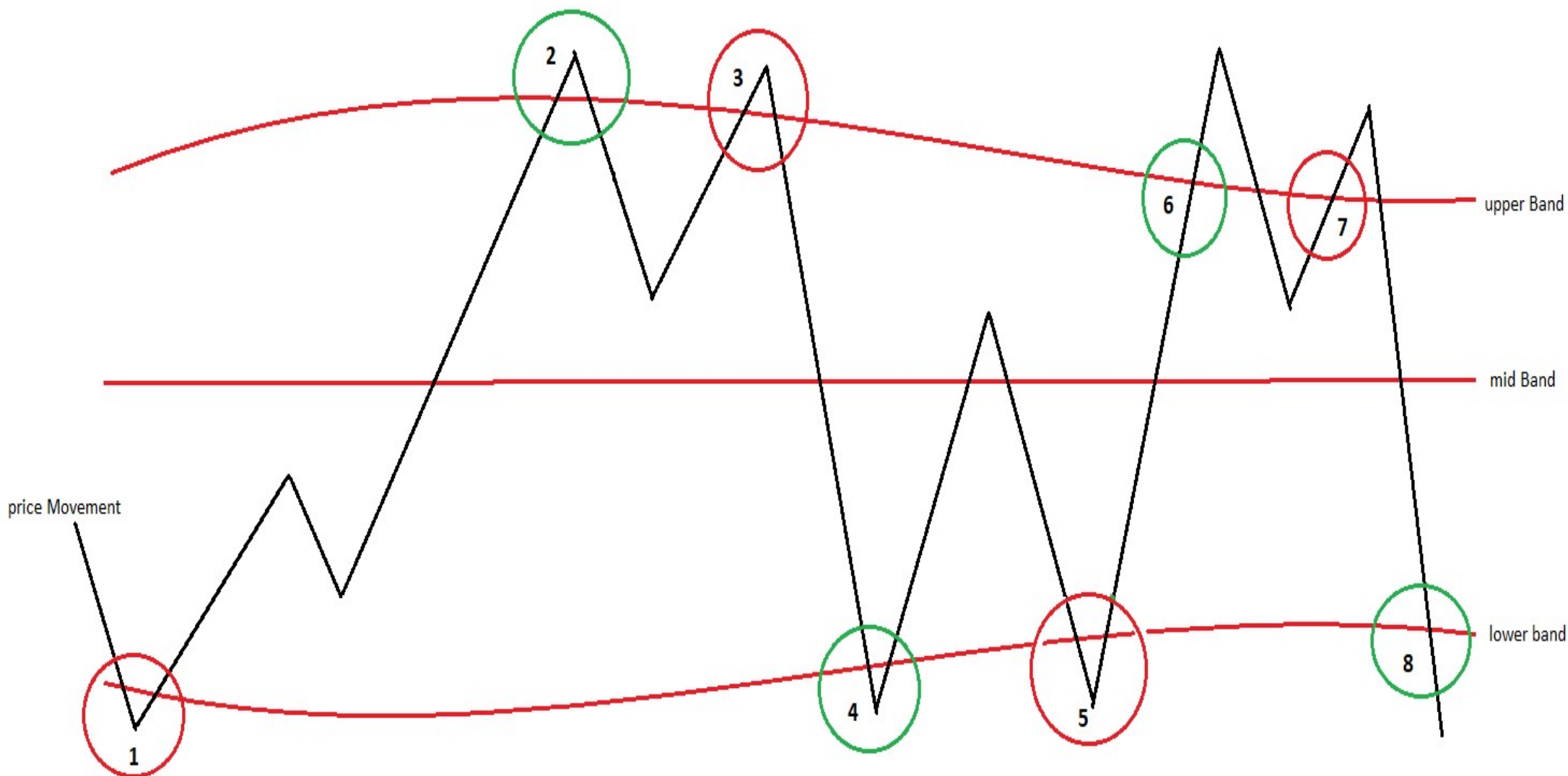
### 4. Main Signal: Simple Candle-Stick color change (bearish Bar)



## Standard Bollinger Bands Signal Logic

Main rules:

- 1 Buy on the lower band if the price touched the upper band before the last touch of the lower band
- 2 Sell on the upper band if the price touched the lower band before the last touch of the upper band

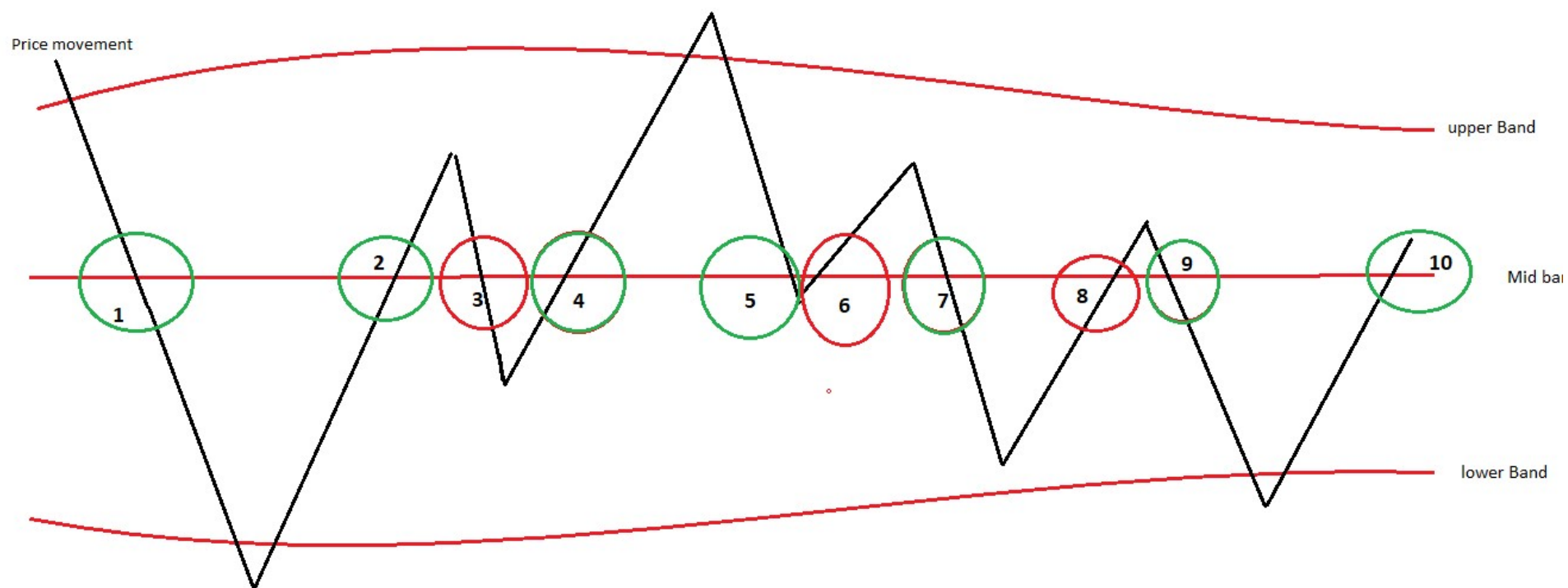


1. No long signal because the price did not touch the upper band before it touched the lower band
2. Valid short signal because the price touched the lower band before touching the upper band
3. No short signal, as the price last touched the upper band and not the lower band before it touched the upper band
4. Valid long signal because the price touched the upper band before touching the lower band
5. No long signal because the price touched the lower band and not the upper band before it touched the lower band
6. Valid short signal because the price touched the lower band before touching the upper band
7. No short signal, as the price last touched the upper band and not the lower band before it touched the upper band
8. Valid long signal because the price touched the upper band before touching the lower band

## Bollinger Bands Mid Band Logic

Main rules

1. Buy when the middle band has been crossed from top to bottom AND the price last touched the upper band and not the lower one
2. Sell when the middle band has been crossed from bottom to top AND the price last touched the lower band and not the upper one



1. Gültiges Long Signal, weil der Preis zuletzt das obere band berührt hat und nicht das untere
2. Gültiges Short Signal, weil der Preis zuletzt das untere band berührt hat und nicht das obere
3. kein long Signal, weil der Preis zuletzt das untere band und nicht das obere berührt hat
4. Gültiges Short Signal, weil der Preis zuletzt das untere band berührt hat und nicht das obere
5. Gültiges Long Signal, weil der Preis zuletzt das obere band berührt hat und nicht das untere
6. kein gültiges Short Signal, weil der Preis zuletzt das obere band und nicht das untere berührt hat
7. Gültiges Long Signal, weil der Preis zuletzt das obere band berührt hat und nicht das untere
8. kein gültiges Short Signal, weil der Preis zuletzt das obere band und nicht das untere berührt hat
9. Gültiges Long Signal, weil der Preis zuletzt das obere band berührt hat und nicht das untere
10. Gültiges Short Signal, weil der Preis zuletzt das untere band berührt hat und nicht das obere

## **2. General Trading Filters**

**2.1** Max Spread = Max allowed spread for open a trade

**2.2** Max Spread (max Spread for closing Trade) = Max allowed spread for closing a Trade. Soll verhindern, wenn der monetary SL an ist, dass Positionen im Verlust geschlossen, nur weil der Spread den Drawdown temporär erhöht.

**2.3** Pause EA after closing position = After a trade has been closed, the EA pauses until the next rollover. It should be ensured that a new trade is only opened if a completely new series of signals (see overview) has taken place

## **3. Money Management**

**3.1** Lots (for first order) = The position size of the first position

**3.2** Enable Monetary SL = On / Off switch of the Monetary SL



**3.3** Stop EA after monetary SL = After the drawdown through the grid orders in the corresponding currency pair has reached the limit, all orders with the corresponding magic number are closed

**3.4** Amount for monetary SL = The amount expressed in the account currency at which all trades with the corresponding magic number are closed (for instance 50 euros)

**3.5** Emergency SL = Max. Drawdown as a percentage, calculated from all current trades, regardless of the spread. If this limit is exceeded, all open positions are closed

## **4. Gain/Loss Settings**

Please note: The take profit should always be marked with a line in the chart for single orders and grid orders

**4.1** Take Profit = Take Profit in Points (20=2Pips)

**4.2** Stop Loss = SL in Points (20=2Pips)

**4.3** Enable ATR-SL = On/off switch ATR-SL

**4.4** ATR SL bar-length = Number of ATR lengths for calculating the SL size

**4.5** Enable TP Ratio = On/Off switch TP ratio

**4.6** TP ratio = 1 means TP Size = SL Size

## **5. Grid Settings**

Please note: only 1 Grid for each Asset is allowed

**5.1** Enable Grid = An/Aus Schalter für Grid orders

**5.2** Enable Mid-Band-Grid Mode = On / Off switch for Bollinger Band Mid Band Mode. True means that the EA can open up to a maximum of 3 trades also in the middle band. If these trades do not reach take profit, the EA waits until the price reaches the outer band in order to continue with the grid orders.



3 buy orders. Price doesn't change direction. EA waits until price reaches lower Band

Price reaches lower Band. EA starts open grid orders again with the defined settings

**5.3** Lot sizes (after first order) = the specified position sizes for all further positions.

Example

0 = all grid orders have the position size of the first order (see 3.1)

0.02; 0.03; 0 = first grid order has position size 0.02 / second grid order has position size 0.03 / all further grid orders have the position size of the last grid order  
- in this example it is 0.03

**5.4** Distance Grid orders = Distance between the grid orders. Attention: In principle, no special signal is required for a grid order. The only signal is that the specified distance has been reached. However, the mid-band mode must of course be observed.

**5.5** Max buy orders = number of maximum buy orders

**5.6** Max sell orders = number of maximum sell orders

## **6. ATR Settings**

**6.1** ATR Period = simply take over as it is in the settings of the indicator

**6.2** ATR timeframe = time unit on which the ATR should run

## **7. Super Trend Filter Settings**

**7.1** Enable Trendfilter = On/Off switch

**7.2** Timeframe = time unit on which the Super Trend should run

**7.3** Nbr\_Periods = simply take over as it is in the settings of the indicator

**7.4** Multiplier = simply take over as it is in the settings of the indicator

## **8. RSI Filter Settings**

**8.1** Enable RSI Filter = On / off switch

**8.2** TimeFrame = time unit on which the RSI should run

**8.3** Overbought Level = value that may not be exceeded for a long order

**8.4** Oversold Level = value which may not be undercut for a short order

## 9. Bollinger Band Settings

Please note: The Bollinger Band signal is always generated by the current price and not by any bar close price

**9.1** Enable Bollinger Bands = On off switch

**9.2** Timeframe = time unit on which the Bollinger Bands should run

**9.3** Bollinger Bands Period = simply take over as it is in the settings of the indicator

**9.4** Bollinger Bands Deviations = simply take over as it is in the settings of the indicator

**9.5** Offset = simply take over as it is in the settings of the indicator

**9.6** Bollinger Bands price = simply take over as it is in the settings of the indicator

**9.7** Add mid band logic = on Off switch Mid-Band-Mode

**9.8** Validity Timeframe = time unit used to determine how long the Bollinger Band signal is valid

**9.9** Amount of Bars for Valid Signal: Number of candles that determine how long the Bollinger band signal is valid

### Example

Validity timeframe = daily

Amount of Bars for Valid Signal = 1

These settings would mean that the Bollinger Band signal is valid until the next rollover. So when the current candle closes.

## 10. Divergence Multi-Oscillator Settings

This area is very important. I leave it to the programmer to set up this area. But what we need here is also a limit to determine the duration of the validity of the signal)

Please note the following conversation between me and the developer regarding the Divergence oscillator:

**Me:** I want to have your Multi Oscillator built into my EA. Is it possible to block it twice so that I can get a double divergence signal?

**Developer:** Hi Chris, please find attached an example EA which can trade based on my paid Multi oscillator divergence indicator (by using the iCustom () function). As you can see in the code I have added even triple divergence.

Here is the developer's profile: <https://www.mql5.com/de/users/jflodin>

→ The developer Jan Flodin is available for questions from the programmer.

## 11. Main Signal Settings

**11.1** Main Signal Timeframe = time unit on which the color change must occur.

→ Color change just means that a bullish signal needs a bullish candle and vice versa

**11.2** Validity Timeframe = the unit of time that defines the maximum time it may take for the main signal to occur after all other requirements have been met.

**11.3** Amount of Bars for Valid Signal: Number of candles that can take a maximum of time before the main signal occurs after all other requirements have been met.

### Example

1. Trendfilter = short

2. Bollinger Band = touched

### 3. Divergence on H4

→ 2.3 Validity Timeframe = H4

→ 2.4 Amount of Bars = 1

In this example, the main signal should occur within the next 4 hours after all other requirements have been met, else its not valid