

# Zebra Finch Breakout Indicator

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The old rules

# Indicator Rationale

- The indicator comprises 4 detection rules:
    - 2 for buy signals
    - 2 for sell signals
  - These 4 detection rules are controlled by 2 general rules
    - 1<sup>st</sup> Rule – Expected market move to look for
    - 2<sup>nd</sup> Rule – Market goes against the current signal → a signal in the opposite direction is created.
- These 2 general rules oversight the functioning of the 4 detection rules.

# The 2 general rules...

- 1<sup>st</sup> Rule – Expected market move to look for
  - This Rule **deactivates** the 4 detection rules when a new signal has been triggered/a new box has been drawn in chart
  - This Rule also **activates** the 4 detection rules IF a given market move has been reached since the last triggering of the last BUY/SELL signal. For instance, if you set a 200 point move to expect, the 4 detection rules are activated if the market moves 200 points in favour (up/down) since last signal.
  - If the previous signal was a buy → the 1st general rule will await for the triggering of one of the two sell detection rules

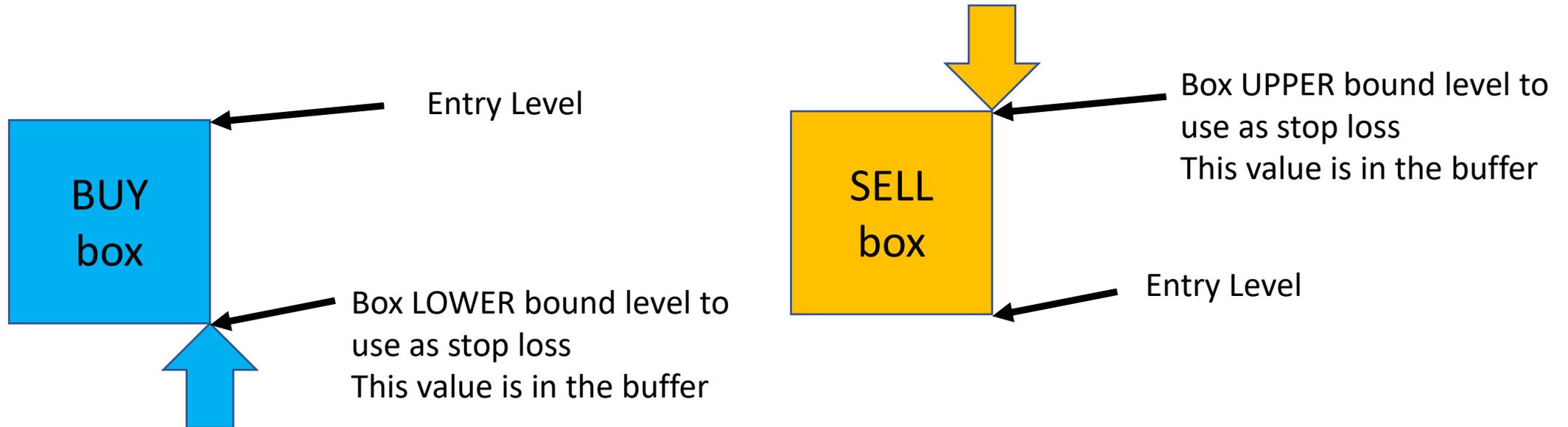
(NB: remember that the 4 detection rules are two pairs: 2 buy rules and 2 sell rules)

  - If the previous signal was a sell → the 1st general rule will await for the triggering of one of the two buy detection rules
- 2<sup>nd</sup> Rule – Market goes against the current signal
  - This Rule **deactivates** the 4 detection rules when the market goes against the last generated BUY/SELL signal.
  - A Signal is a box drawn in the chart which comprising an **entry price** and also a **lower/upper bound** value to use as **SL**. If this value is hit by the market, the indicator will draw a box names MARKET REVERSAL. This is a signal/box that does not have ANYTHING to do with the 4 detection rules.

→ *The lower/upper bound of this signal/box will be the entry point of the previous signal.*

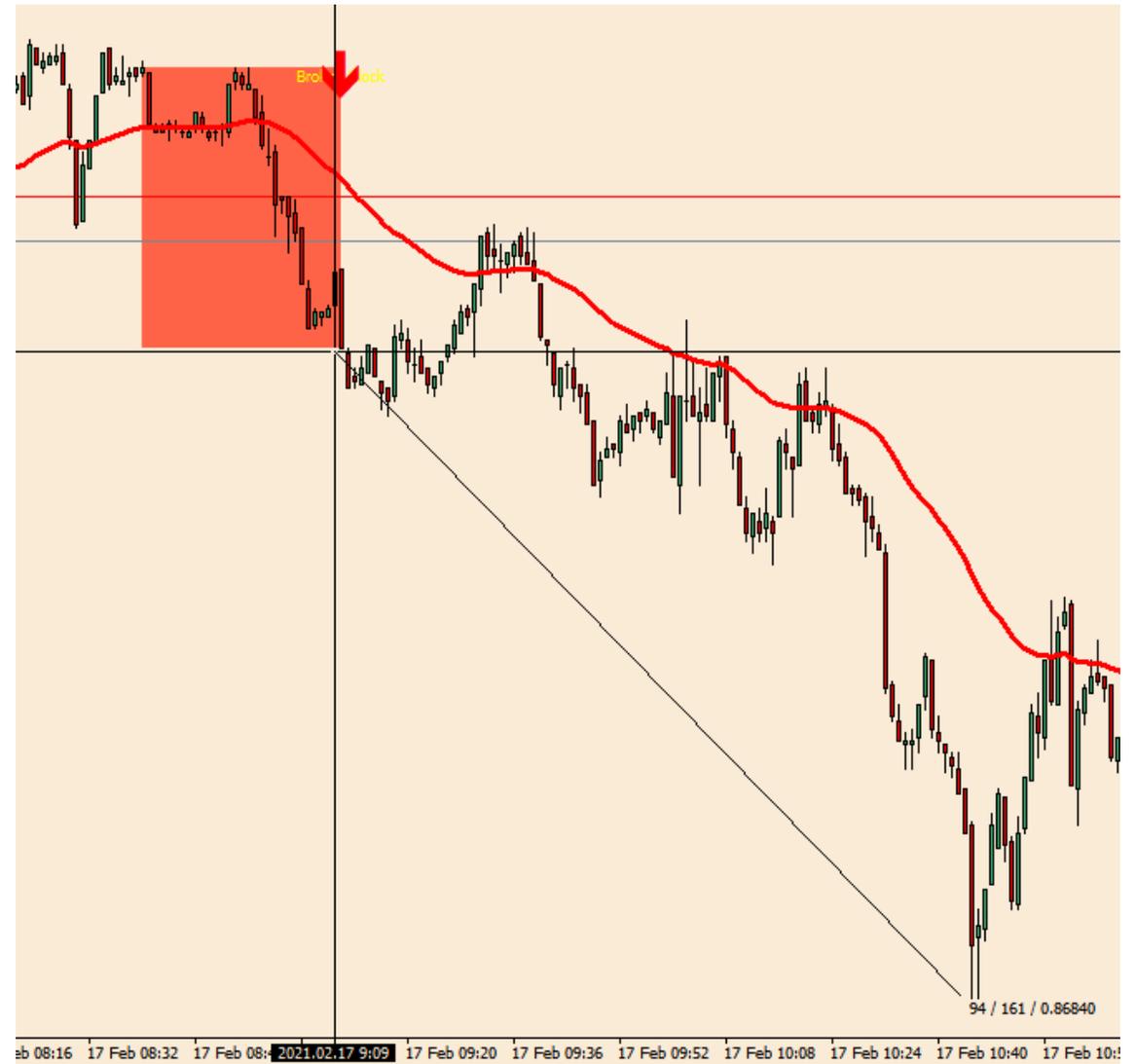
# Terminology 1

- In the .mq4 file → The expected target = extent of move to look for
- Pips and points: in my account 10 pips equals to 1 point



# Terminology 2

- In the .mq4 file → The expected target = extent of move to look for
- Pips and points: in my account 10 pips equals to 1 point
- As in the example here, 161 pips means 16.1 points move.



## Example 1: When the market reaches the expected target for the last triggered BUY signal

- In the .mq4 file → The expected target = extent of move to look for
- In this example this is set to **200** points (in my account 10 pips equals to 1 point)
- The indicator is monitoring whether any of the four detection rules get triggered
- One rule (BUY) is triggered and the market moves in favour of the signal.
- **Unless** the market goes against the signal and goes below the lower bound of the box, the BUY signal remains. If not, a special box called MARKET REVERSAL is drawn. This box is a special rule and does not have anything to do with the 4 detection rules.



Example 1: When the market reaches the expected target for the last triggered BUY signal

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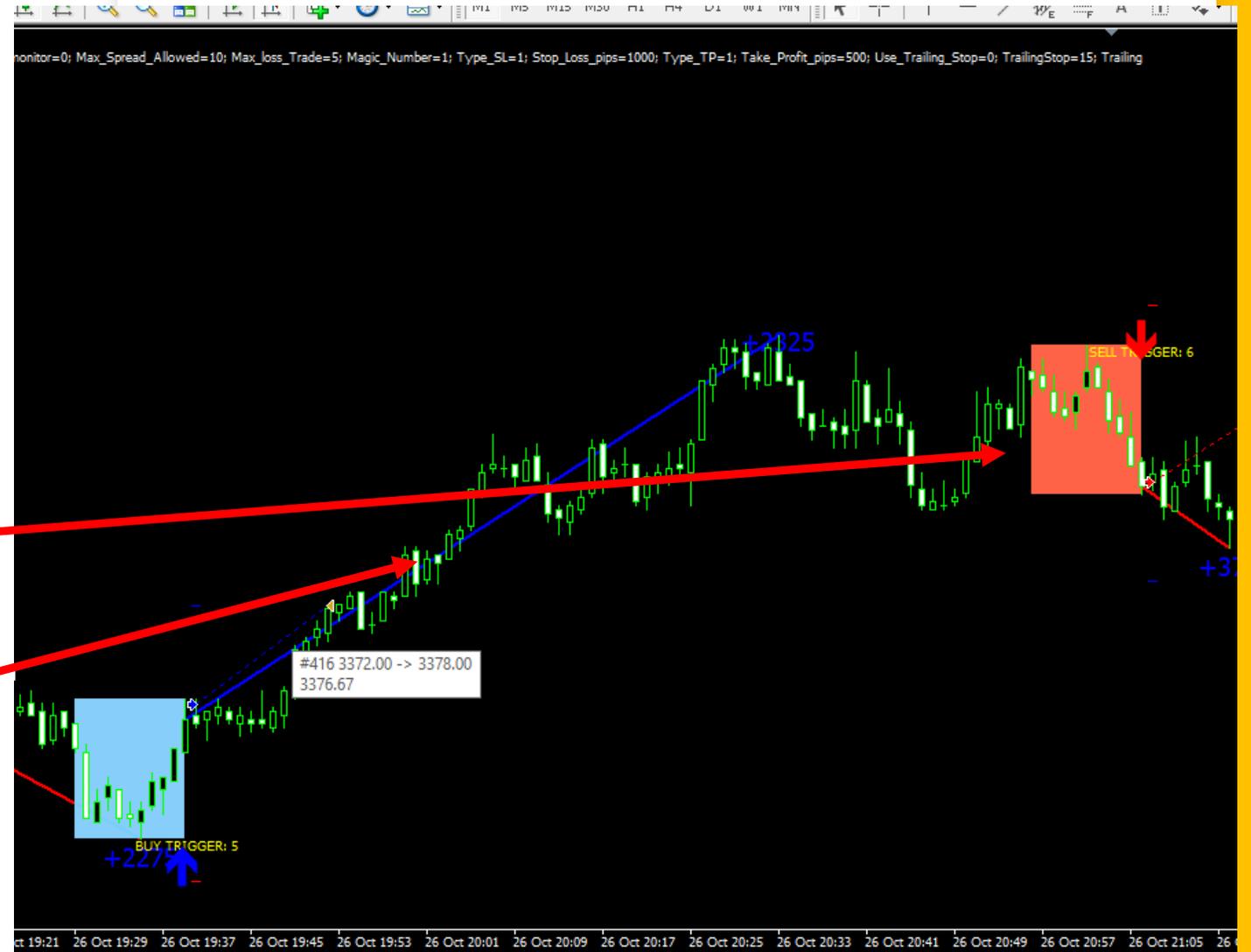
- The market reaches 200 point target.
- When the market hits the 200 point target, the 4 detection rules are activated
- The indicator now awaits that one of the 2 sell rules gets triggered. If not it continues to stay on the current buy signal: *Note that the blue line showing the maximum extent of the move is not shown until this happens*



## Example 1: When the market reaches the expected target for the last triggered BUY signal

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- One of the 2 sell rules is triggered, the indicator draws the SELL box
- ... and the trend line (blue line) showing the maximum extent of the previous market move is shown



## Example 2: When the market reaches the expected target for last triggered SELL signal

- In the .mq4 file → The expected target = extent of move to look for
- In this example this is set to **200** points (in my account 10 pips equals to 1 point)
- The indicator is monitoring whether any of the four detection rules get triggered
- One rule (SELL) is triggered and the market moves in favour of the signal.
- **Unless** the market goes against the signal and goes above the upper bound of the box, the SELL signal remains. If not, a special box called MARKET REVERSAL is drawn. This box is a special rule and does not have anything to do with the 4 detection rules.



## Example 2: When the market reaches the expected target for last triggered SELL signal

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- The market reaches 200 point target.
- When the market hits the 200 point target, the 4 detection rules are activated
- The indicator now awaits that one of the 2 buy rules gets triggered. If not it continues to stay on the current sell signal: *Note that the blue line showing the maximum extent of the move is not shown until this happens*



## Example 2: When the market reaches the expected target for last triggered SELL signal

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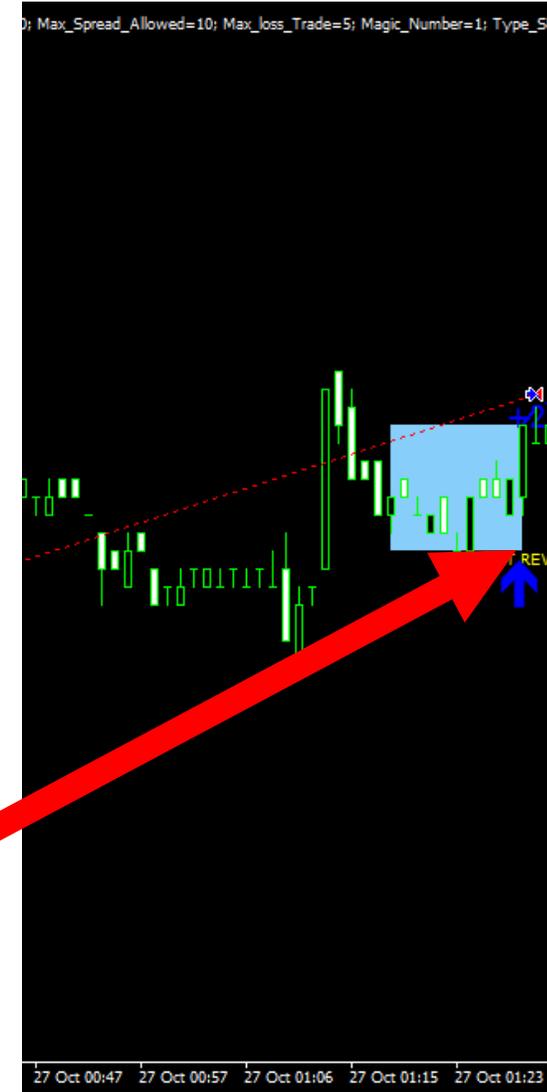
- One of the 2 buy rules is triggered, the indicator draws the BUY box and the trend line showing the maximum extent of the previous market move is shown



## Example 3: When the market goes against the last triggered BUY signal

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- In the .mq4 file → The expected target = extent of move to look for
- In this example this is set to **200** points (in my account 10 pips equals to 1 point)
- As usual, the indicator is monitoring whether any of the four detection rules get triggered
- One rule (BUY) is triggered
- The indicator now monitors whether
  - The target of 200 points is reached
  - Or the market goes below the lower bound of the box

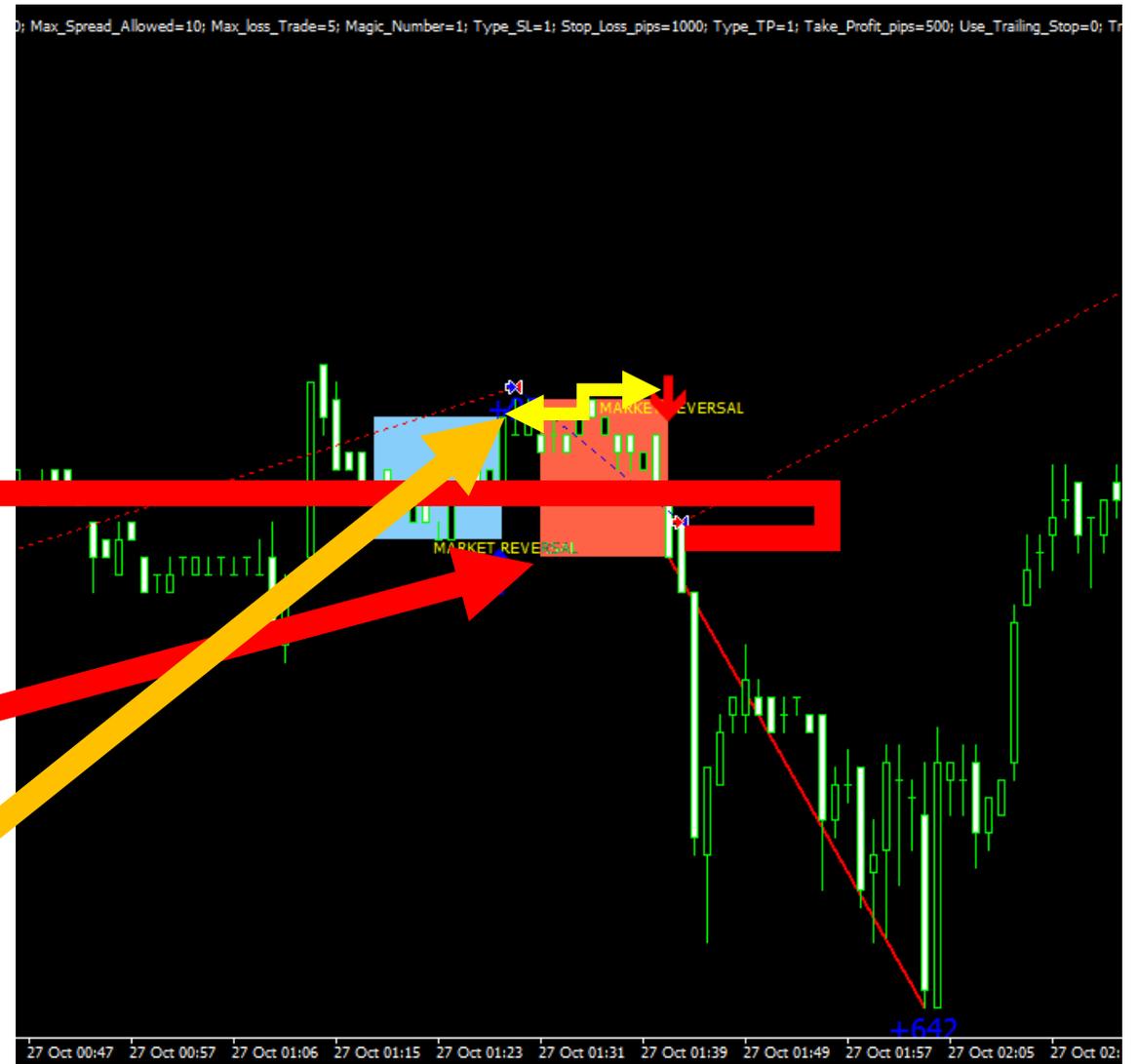


### Example 3: When the market goes against the last triggered BUY signal (Case A)

- The market later goes below the lower bound of the BUY box/signal and a special SELL MARKET REVERSAL BOX is drawn.
- **The indicator must NOT wait for one of the SELL RULES to be triggered once the market has gone below the lower bound of the box**
  - it must act right away, and draw this special box (MARKET REVERSAL).
  - There should be a parameter in the indicator settings, that specify a buffer. For instance “draw market reversal box if the market has gone below the lower bound +  $x$  point(s)”

Note: in this example, the buy box was a false signal, and therefore there is only a very small trend line. If no move in favour at all, then there should be a red 'X'

→ THE UPPER BOUND OF THE NEW SELL BOX MUST BE THE ENTRY POINT OF THE PREVIOUS BUY SIGNAL.



### Example 3: When the market goes against the last triggered BUY signal (Case B)

- In other situations, there might be a bit of move in favour of the signal.
- If during the BUY signal there has been any move in favour of the buy signals, the indicator draws the MARKET REVERSAL SELL box and the trend line showing the maximum extent of the previous market move is shown

→ THE UPPER BOUND OF THE NEW SELL BOX MUST BE THE ENTRY POINT OF THE PREVIOUS BUY SIGNAL.

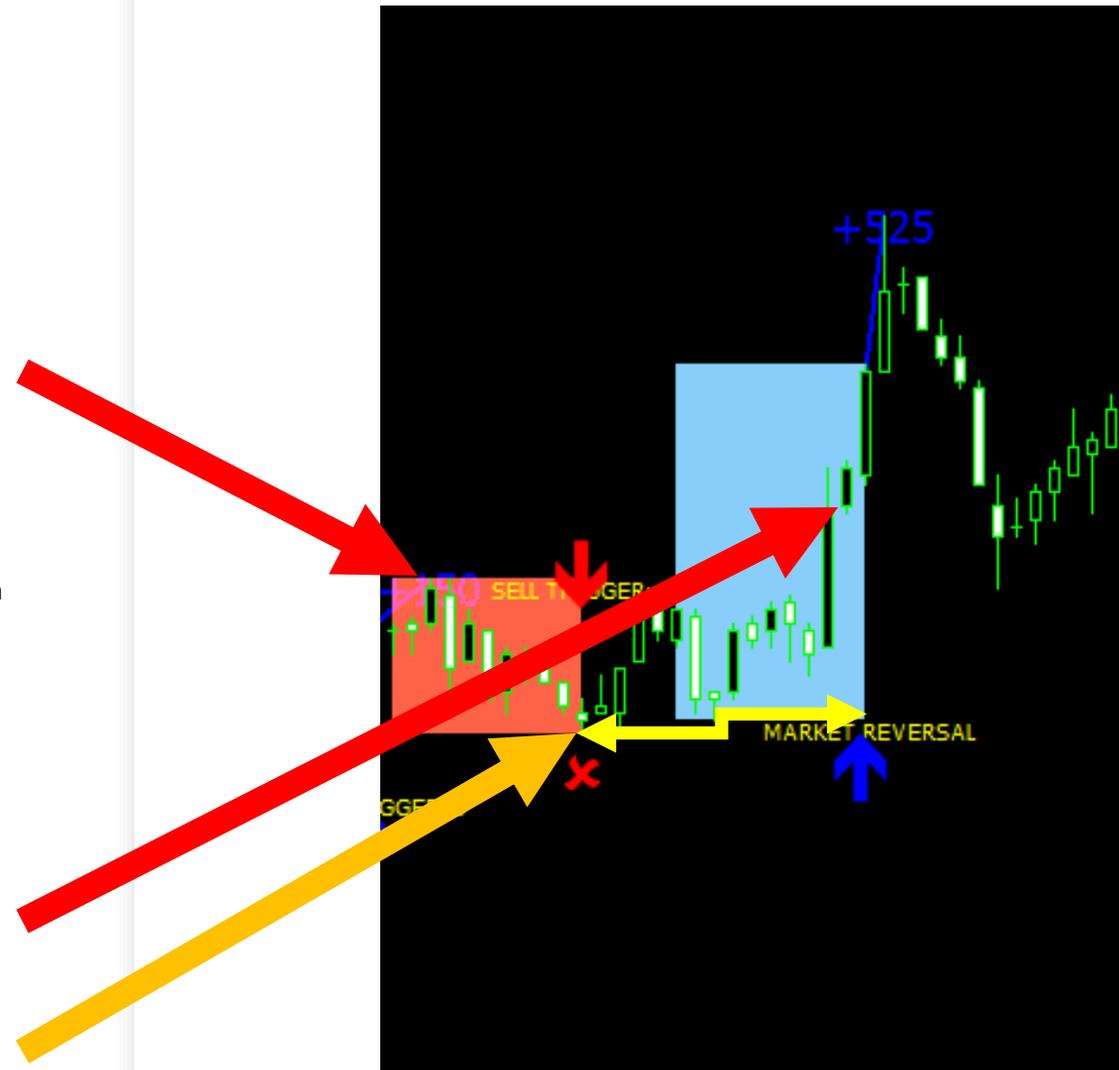


## Example 4: When the market goes against the last triggered SELL signal (Case A)

- The market later goes above the upper bound of the SELL box/signal and a special BUY MARKET REVERSAL BOX is drawn.
- **The indicator must NOT wait for one of the BUY RULES to be triggered once the market has gone above the upper bound of the box**
  - it must act right away, and draw this special box (MARKET REVERSAL).
  - There should be a parameter in the indicator settings, that specify a buffer. For instance "draw market reversal box if the market has gone above the upper bound + x point (s)"

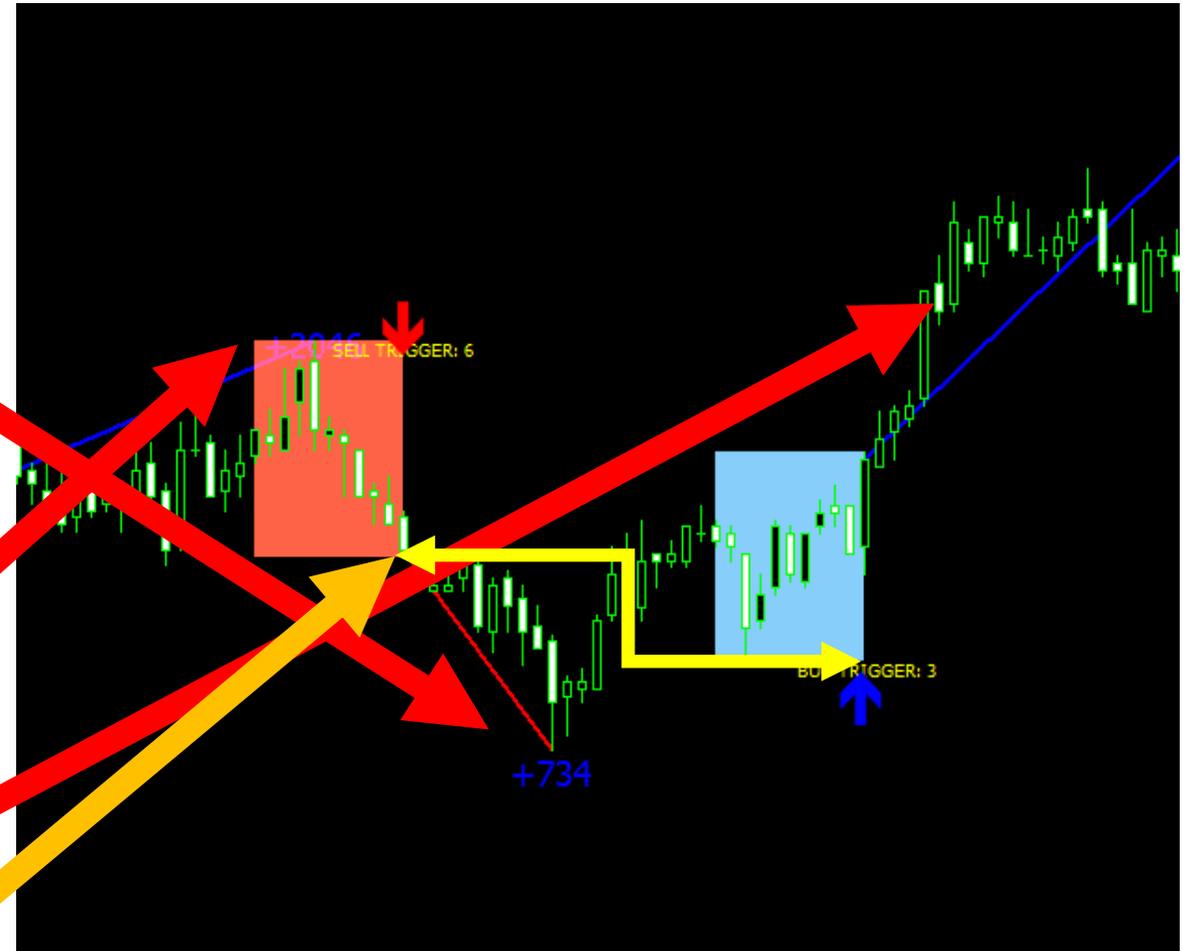
Note: in this example, the sell box was a false signal, and therefore there is no trend line. If no move in favour at all, then there should be an red 'X'

- VERY IMPORTANT: in this example you can see that the indicator waited for one of the BUY rules to get triggered. As said above in this slide this must NOT happen.
- The entry of the box should have been at the opening of the next bar, after the market went above the upper bound of the sell box
- THE LOWER BOUND OF THE NEW BUY BOX MUST BE THE ENTRY POINT OF THE PREVIOUS SELL SIGNAL.



## Example 4: When the market goes against the last triggered SELL signal (Case B)

- In other situations, there might be a bit of move in favour of the signal.
- If during the SELL signal there has been any move in favour of the SELL signal, the indicator draws the MARKET REVERSAL BUY box and the trend line showing the maximum extent of the previous market move is shown
- **VERY IMPORTANT:** in this example you can see that the indicator did NOT wait for the market to move above the upper bound of the SELL box. As said above this must NOT happen.
  - THE NEW BUY BOX SHOULD HAVE BEEN DRAWN HERE
  - THE LOWER BOUND OF THIS NEW BUY BOX MUST BE THE ENTRY POINT OF THE PREVIOUS SELL SIGNAL.



## Further important points :

- the indicator does NOT repaint
- Indicator Moving Window (bar history), it retains the same boxes in a local .csv file

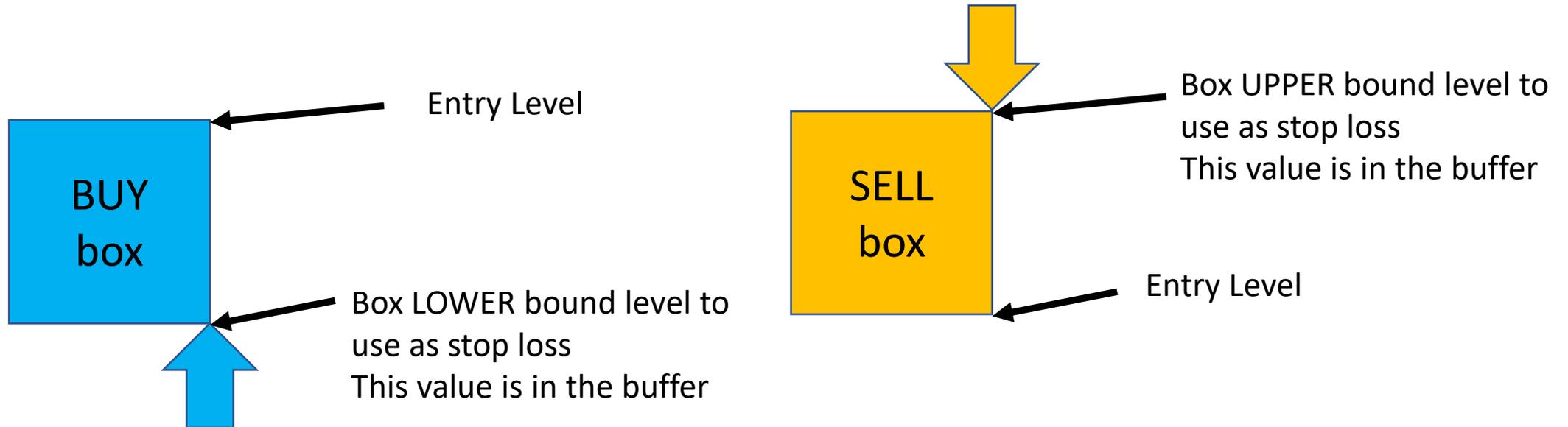
# The new rules to implement

These rules are meant to reduce the false signals

# REMEMBER THE TERMINOLOGY:

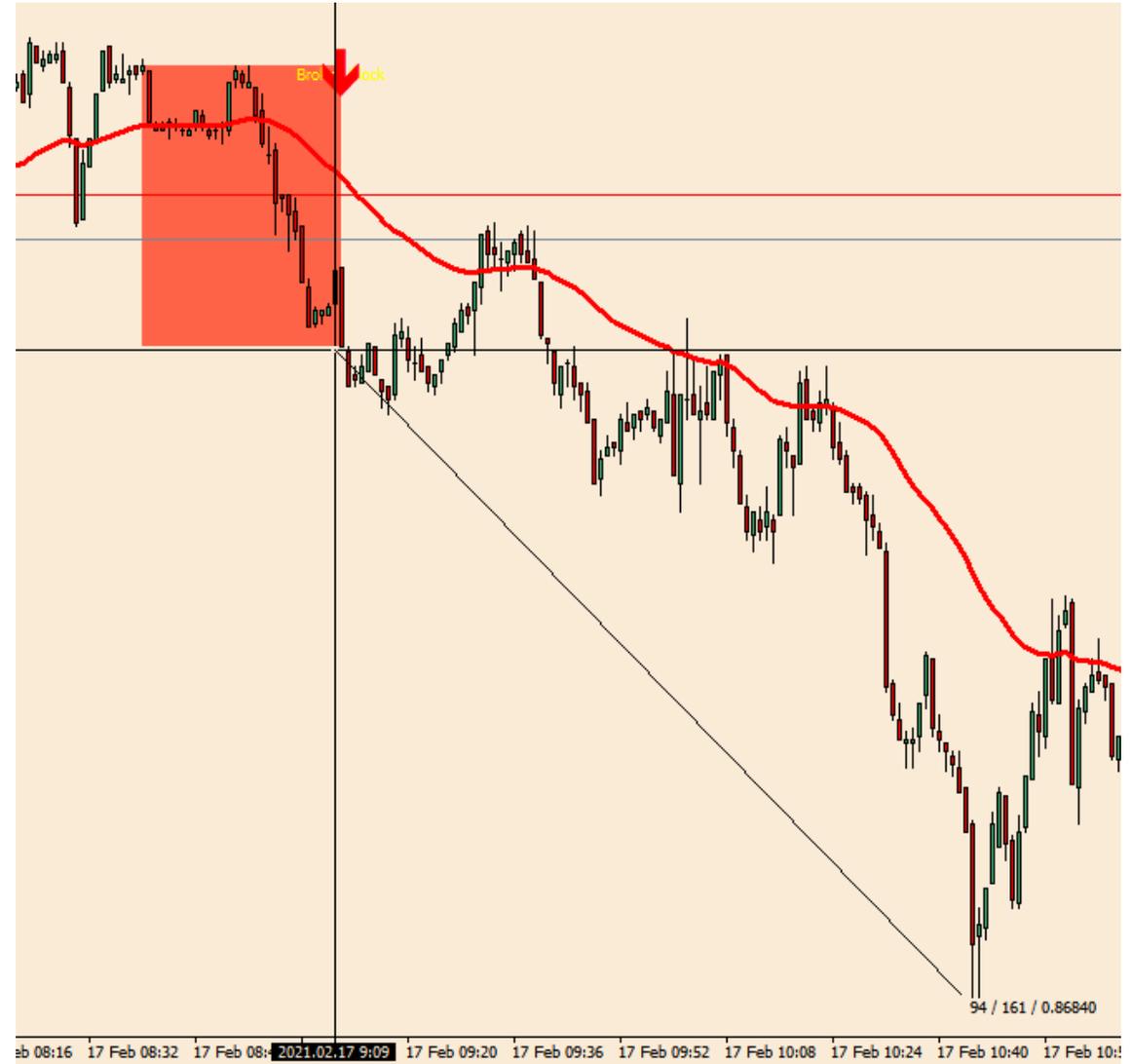
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# Indicator Rationale

- The indicator comprises 4 detection rules:
    - 2 for buy signals
    - 2 for sell signals
  - **These 4 detection rules must remain the same but will have to be controlled by 2 general rules**
    - 1<sup>st</sup> Rule – Expected market move to look for
    - 2<sup>nd</sup> Rule – Market goes against the current signal as triggered by one of the 4 rules above
- These 2 general rules oversight the functioning of the 4 detection rules.
- THE 2<sup>ND</sup> RULE IS THE ONE YOU NEED TO WORK ON**

# The 2 general rules...

- 1<sup>st</sup> Rule – Expected market move to look for
    - THIS RULE REMAINS THE SAME. SEE EARLIER IN THE PRESENTATION (SLIDE 4)
  - 2<sup>nd</sup> Rule – Market goes against the current signal
    - This rule will now have to be divided into 2 SUB-RULES :
    - RULE 2a
      - This rule has to be used when the indicator initialises and draws the **first signal** OR when a counter reaches a certain value (SEE LATER) OR the market reached the *extent of market to look for*
      - If the market goes against this first signal, then this rule **deactivates** the 4 detection rules when the market goes against this first BUY/SELL signal.
      - A Signal is a box drawn in the chart which comprises an **entry price** and also a **lower/upper bound** value to use as **SL**. If this value is hit by the market, the indicator will draw a box named MARKET REVERSAL. This is a signal/box that does not have ANYTHING to do with the 4 detection rules.
- *The lower/upper bound of this **first signal/box** will be the entry point of the next signal.*

- **The rule 2b**

- This rule only applies IF the market goes against the current signal and the signal is NOT the first one when the indicator is initialised OR is not the first one as counted by a counter (SEE LATER LAST POINT IN THIS SLIDE; this is the counter mentioned in the previous slide)
- If the second signal reached *the extent of market to look for*, then the 1<sup>st</sup> rule will be used: This Rule **activates** the 4 detection rules IF a given market move has been reached. SEE SLIDE 4 for details about the 1<sup>st</sup> rule.
- **This is the IMPORTANT PART: for the second signal the market will go against this signal ONLY if the market crosses the maximum favourable excursion of the previous signal (in this explanation the first signal).**
- The IMPORTANT PART IS REITERATED UNTIL:

→ THE MARKET REACHES THE EXTENT TO LOOK FOR SET FOR THE INDICATOR in the input tab  
(the 4 detection rules are activated and a counter called *2b\_rule\_counter* is set to 1 when any of the 4 detection rules are triggered)

OR

→ The maximum number of times to apply this 2b rule has been reached (let's call this *2b\_rule\_counter*); if this is reached the 4 detection rules are activated, and this counter is set to 1 when 1 detection rule is triggered, meaning the first signal of a new cycle has occurred.

## LET'S SEE AN EXAMPLE OF THIS CYCLE – PART 1

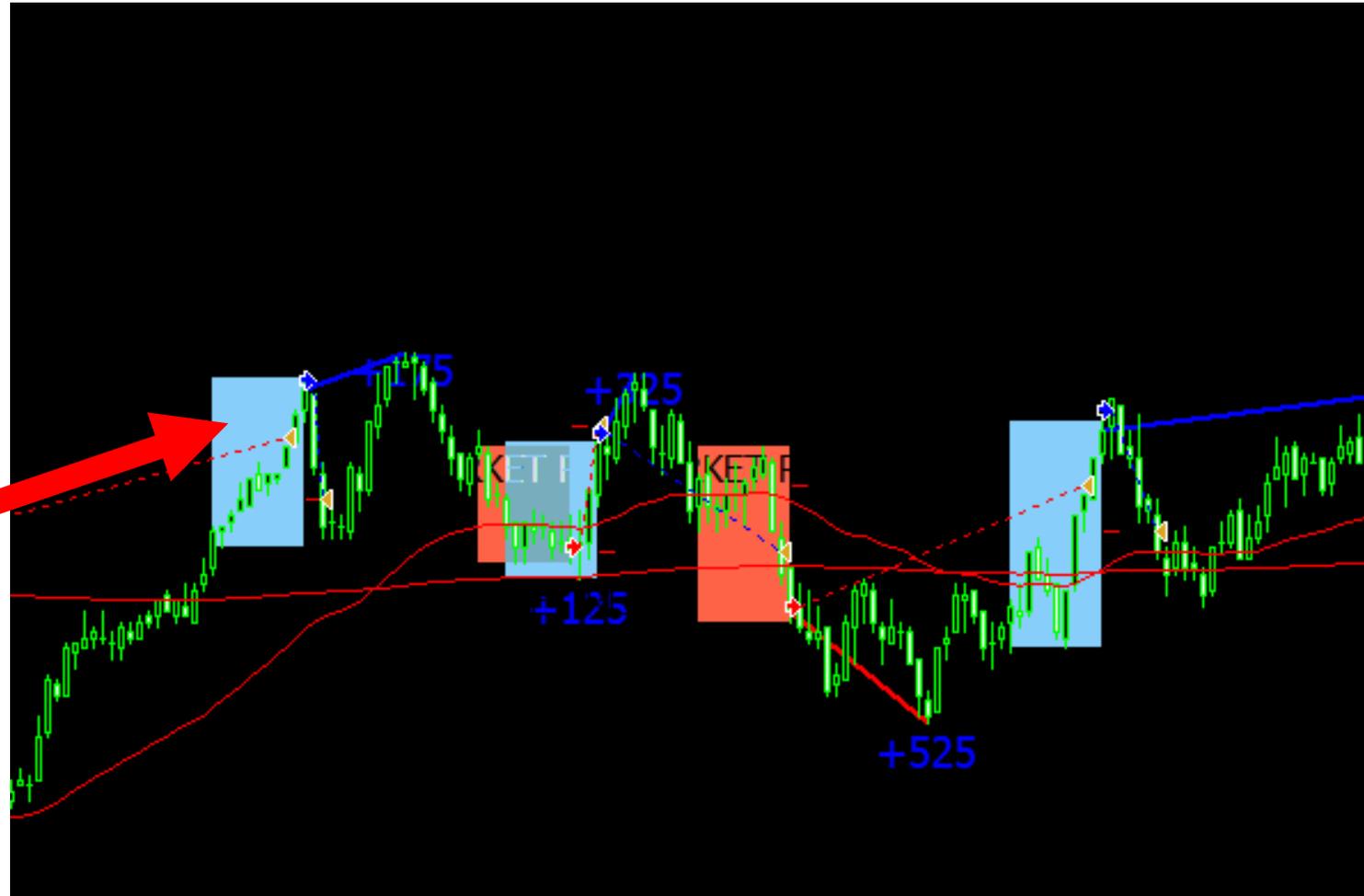
IN THE PICTURE YOU CAN SEE HOW THE INDICATOR IS CURRENTLY WORKING. IN MARKET CONDITIONS SUCH AS THOSE IN THIS CHART, THERE ARE TOO MANY FALSE SIGNALS

→THE RULE 2b will help to get rid of many of these signals.



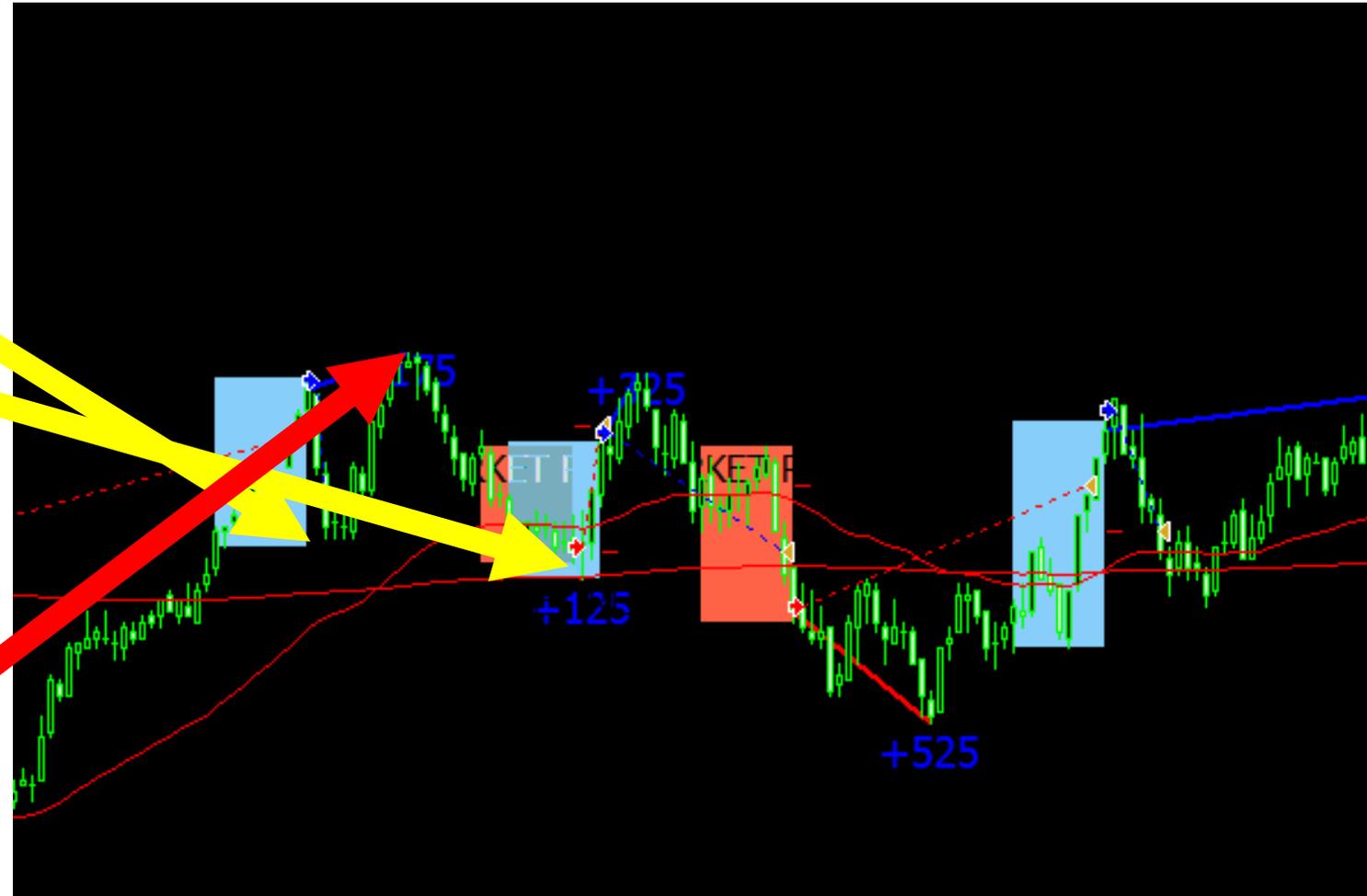
LET'S SEE AN EXAMPLE OF THIS  
CYCLE – PART 2

CONSIDER THE FIRST BUY SIGNAL  
AS THE FIRST SIGNAL WHEN THE  
INDICATOR IS INITIALISED



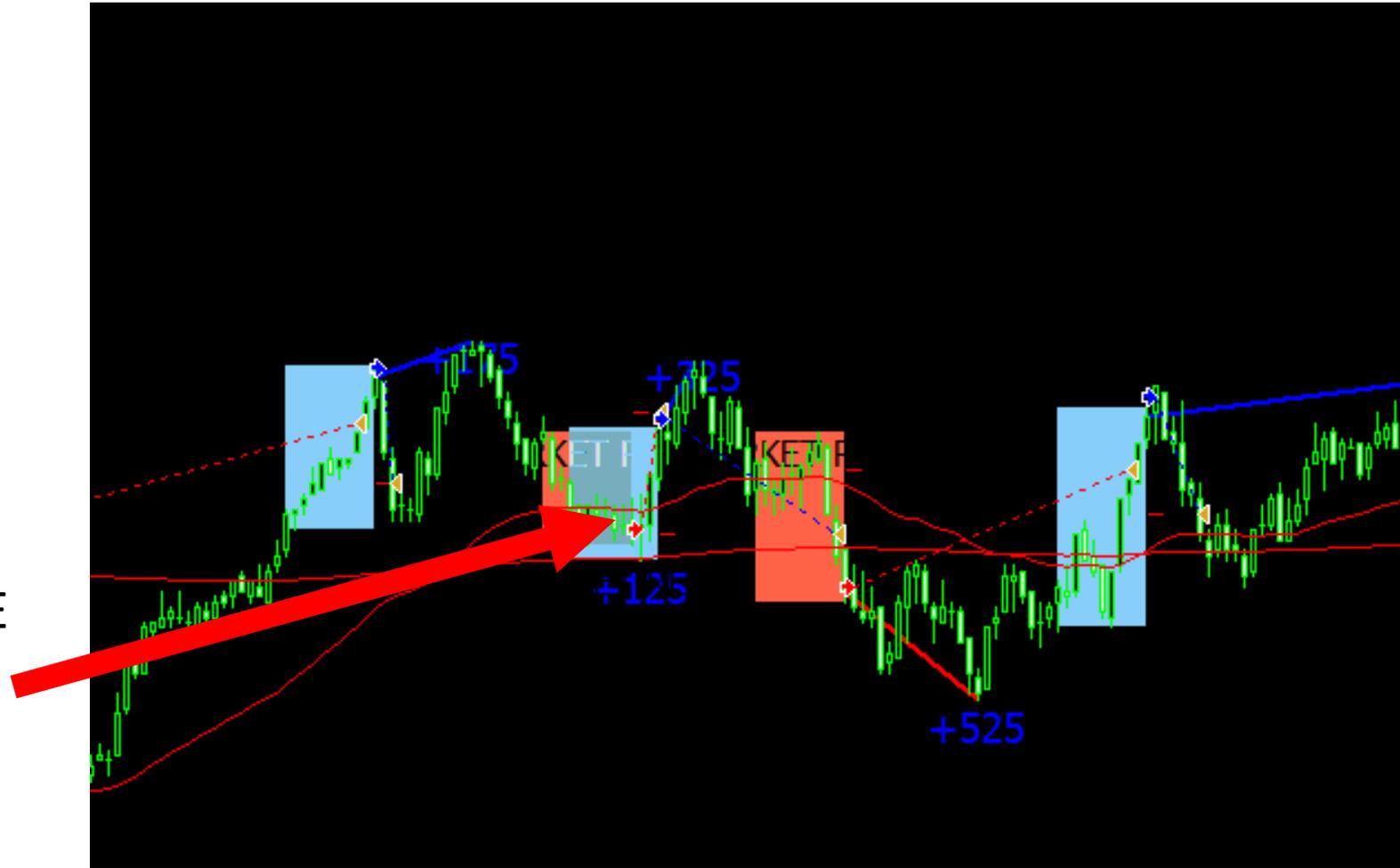
## LET'S SEE AN EXAMPLE OF THIS CYCLE – PART 3

- The extent to look for in this example is set to 1000
- During the first buy signal, the market hit the lower bound of the box and that is why a SELL signal was triggered (second signal of the cycle)
- At this point we are in the second signal (SELL)
- If the market reaches 1000 point in favour the 4 detection rules are activated again.
- But the market goes against the sell signal and a new buy signal (third signal) is created.
- WITH THE RULE 2B THE TRIGGER FOR THE MARKET REVERSAL SIGNAL WILL BE THE MAXIMUM FAVOURABLE EXTENT OF THE FIRST SIGNAL
- SINCE WE ARE IN THE SECOND SIGNAL (SELL), A BUY MARKET REVERSAL SIGNAL WILL NOT BE CREATED UNTIL WE REACH THE MAXIMUM FAVOURABLE EXTENT OF THE FIRST SIGNAL



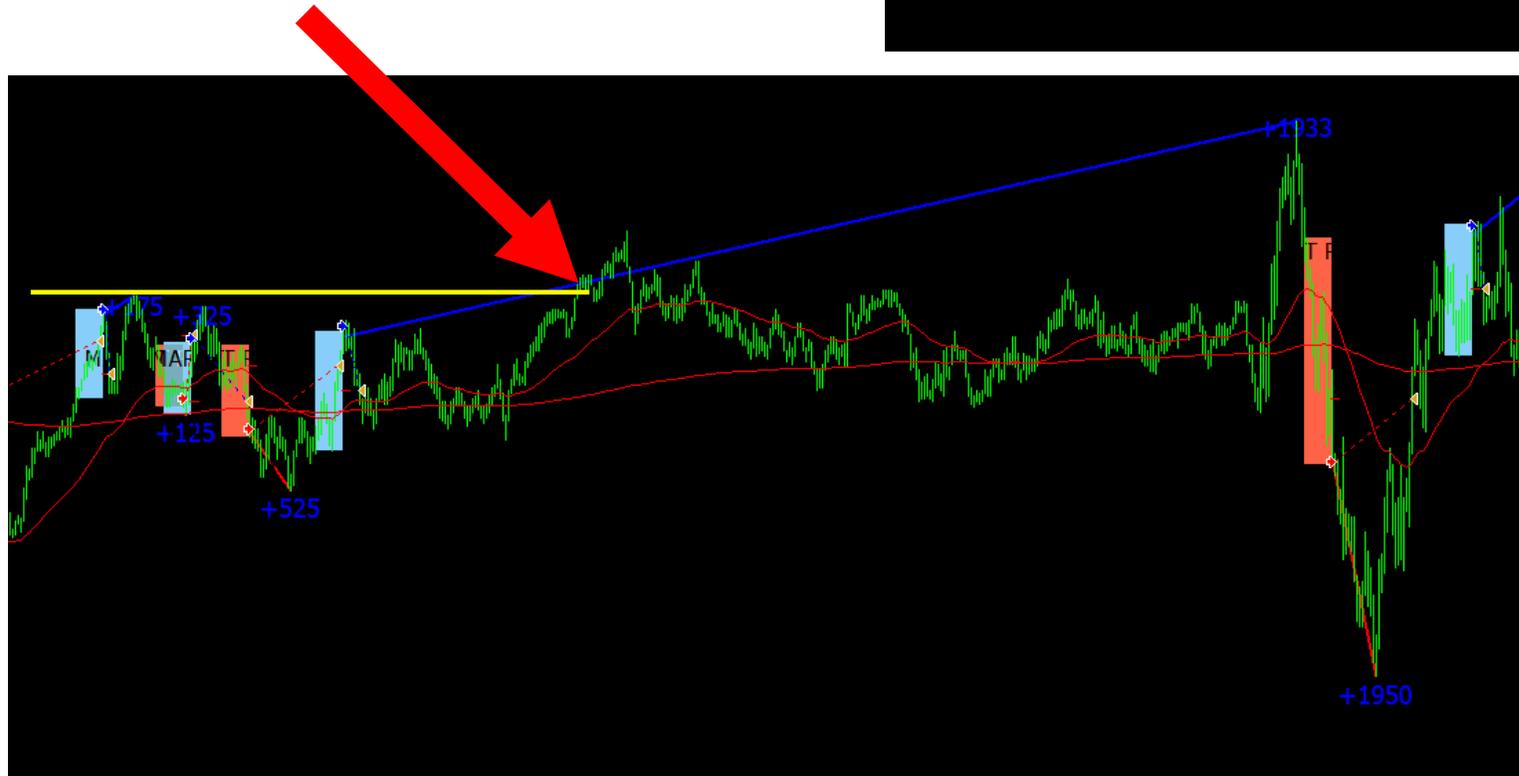
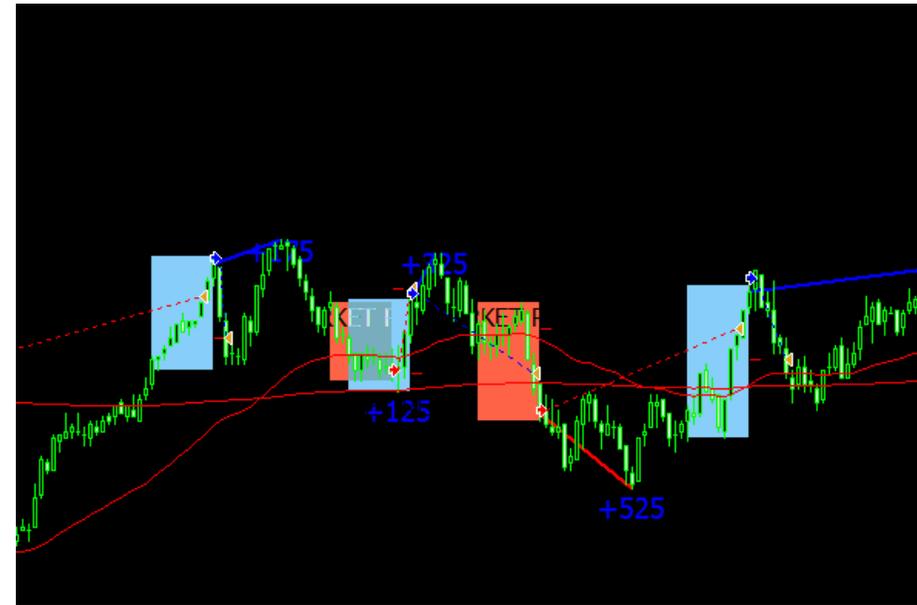
## LET'S SEE AN EXAMPLE OF THIS CYCLE – PART 4

- THIS WAY THE REST OF THE SIGNALS ARE NOT GOING TO OCCUR BECAUSE WE WOULD BE IN A SELL SIGNAL



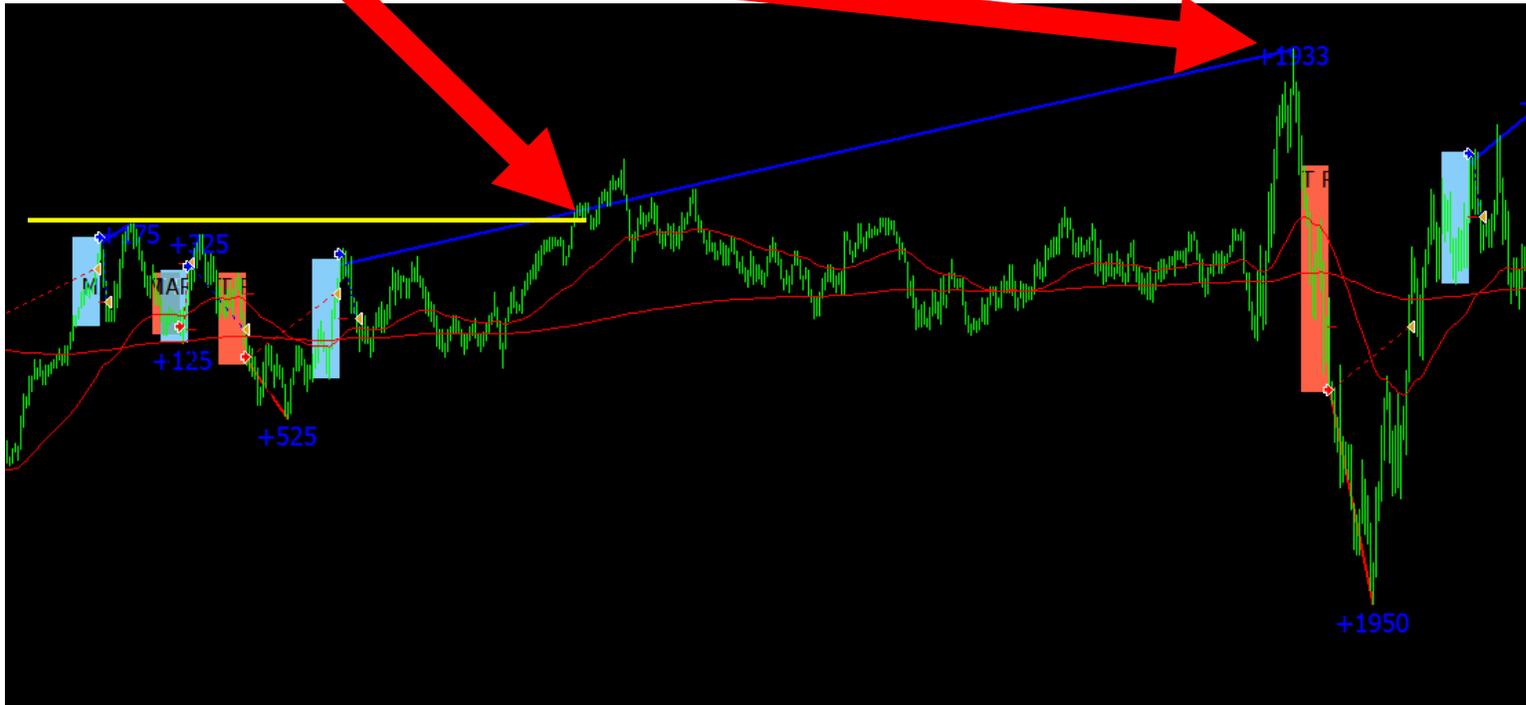
## LET'S SEE AN EXAMPLE OF THIS CYCLE – PART 5

- THIS WAY THE REST OF THE SIGNALS ARE NOT GOING TO OCCUR BECAUSE WE WOULD BE IN A SELL SIGNAL UNTIL THIS POINT
- SEE THE YELLOW LINE



## LET'S SEE AN EXAMPLE OF THIS CYCLE – PART 3

- This has removed 2 signals that were losing. We would have only BUY,SELL, AND THIS THIRD BUY SIGNAL WHICH WILL END UP SUCCESSFUL
- THE MARKET WOULD HAVE THEN REACHED OVER 1000 POINTS



# REMEMBER: The key points to remember

- if the market goes against the second signal in the cycle, then the third signal will only be created when the market reaches the maximum favourable excursion of the previous signal: only then the third signal will be created.
- **this can go on many times and may create a big gap between signals, which is why it is best to have a counter which limits this: *2b\_rule\_counter***
  - When the maximum number is reached for this counter, the 4 detection rules are activated again, and the indicator will start over the cycle as soon as one of these 4 detection rules is triggered.