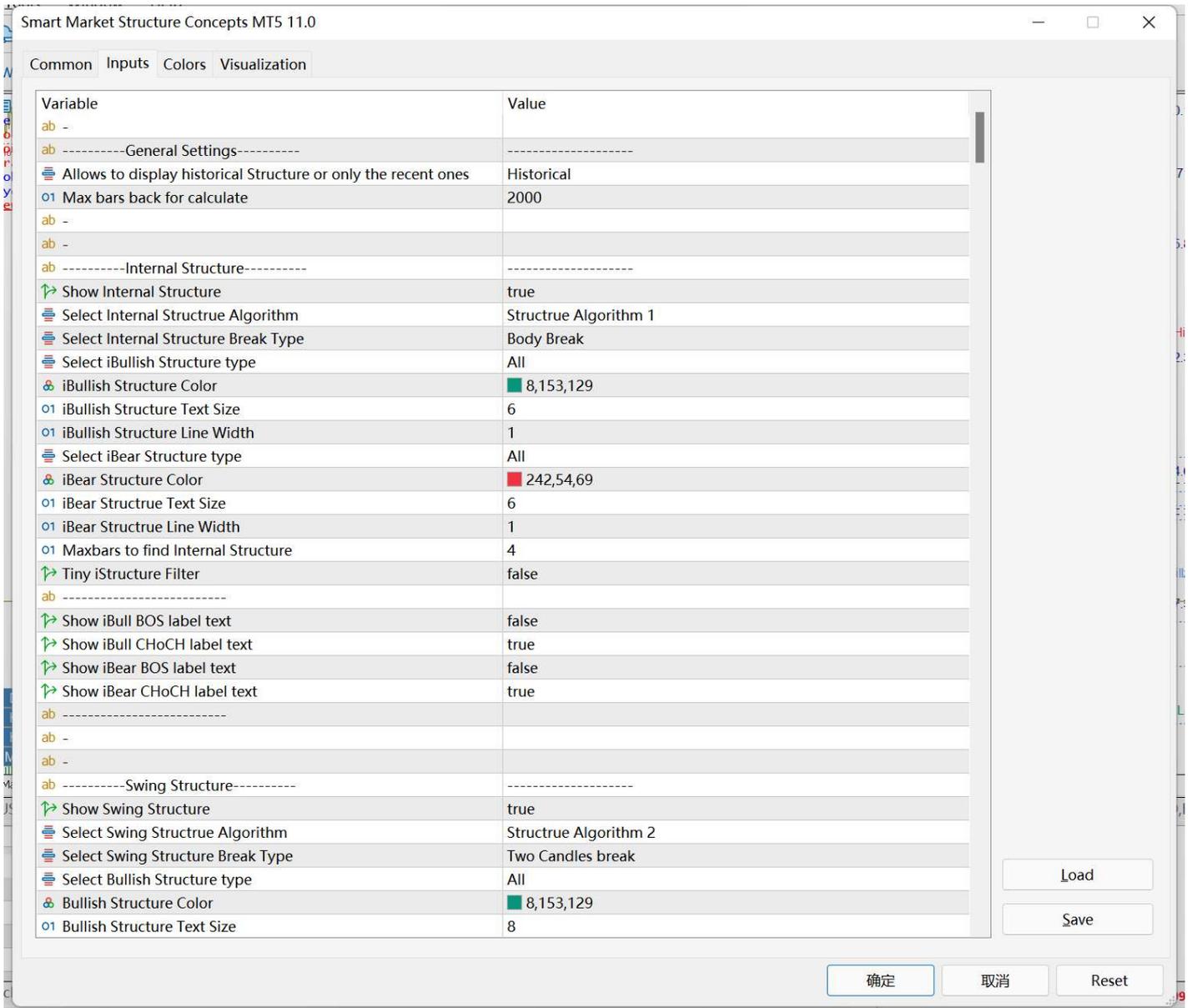


■ Explanation of indicator functions and parameter settings.



1. General Settings

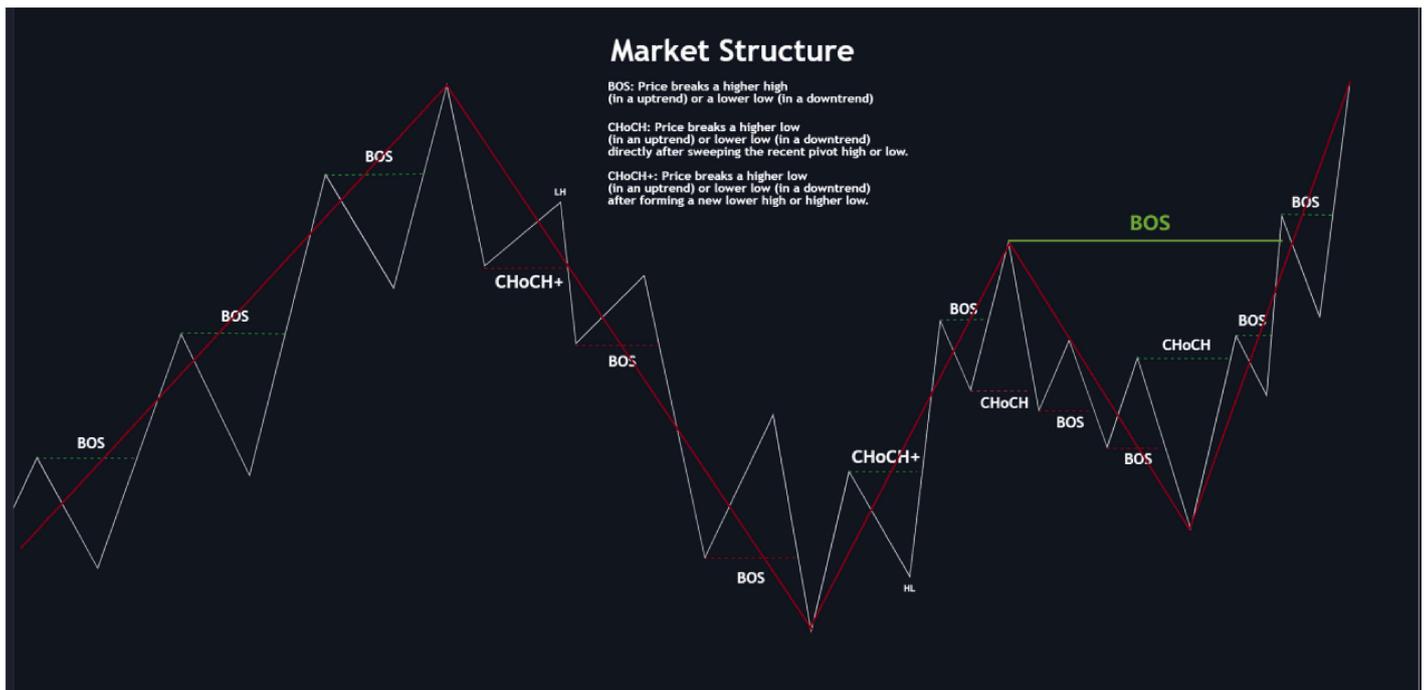
Variable	Value
ab -	
-----General Settings-----	
Allows to display historical Structure or only the recent ones	Historical
Max bars back for calculate	2000

The first setting item has three options. Historical, Present, and Data. By default, historical is selected, and the indicator will be calculated and displayed in historical data. If Present is selected, the indicator is only calculated and displayed in real-time data. The Data option is used internally by the program, and the user does not need to pay attention to it.

The second setting specifies the number of historical candles to be calculated for the program, and the default is 2000. If you need to observe more historical data, set this value higher, but at the same time the indicator loading speed will be slower.

2. Internal Structure and Swing Structure

The market structure is generally divided into the main structure and the secondary structure. The main structure marks price fluctuations and structural breakthroughs in a larger period, and the secondary structure marks price fluctuations and structural breakthroughs in a smaller period.



Let's take a look at this market structure chart. The white line shows the secondary structure, that is, the breakthrough of high and low points formed by small cycle price fluctuations, which is defined as internal structure in the indicator. The red line shows the main structure, that is, the breakthrough of high and low points formed by large-cycle price fluctuations, which is defined as swing structure in the indicator.

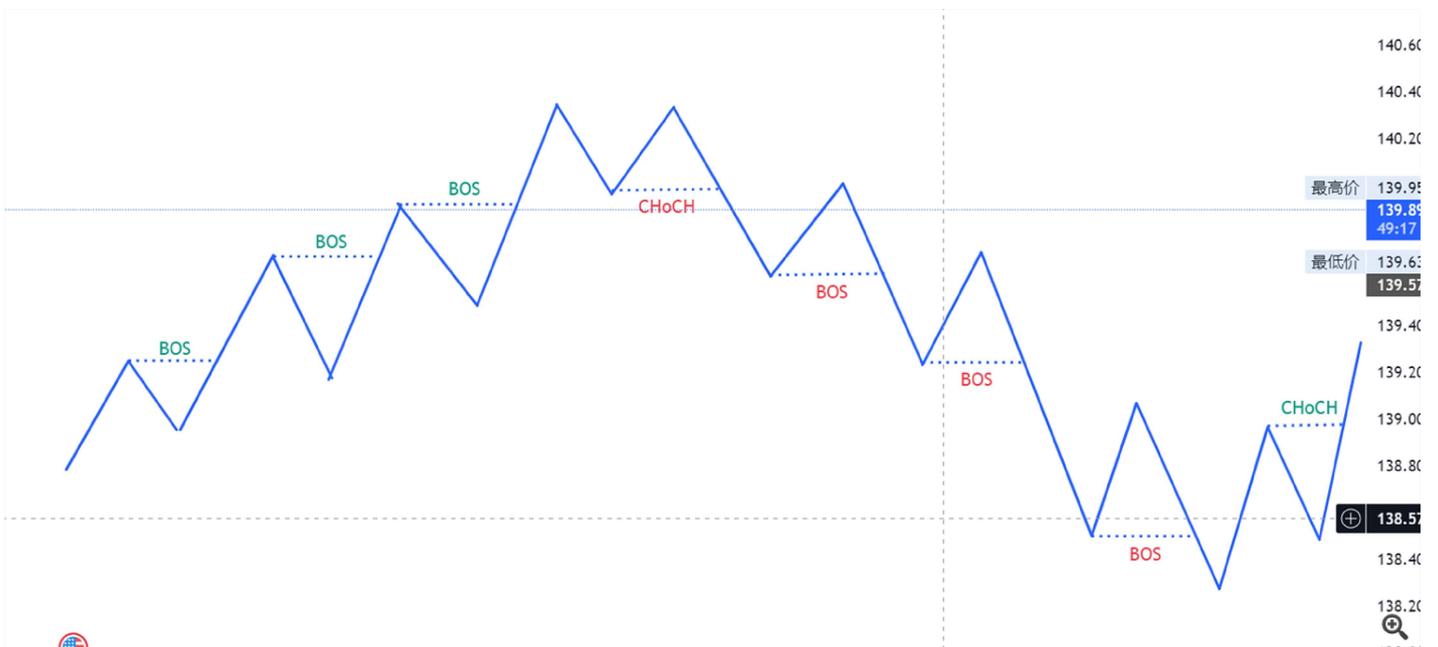
ab -----Internal Structure-----	-----
🔗 Show Internal Structure	true
☰ Select Internal Structure Algorithm	Structure Algorithm 1
☰ Select Internal Structure Break Type	Body Break
☰ Select iBullish Structure type	All
🔗 iBullish Structure Color	■ 8,153,129
01 iBullish Structure Text Size	6
01 iBullish Structure Line Width	1
☰ Select iBear Structure type	All
🔗 iBear Structure Color	■ 242,54,69
01 iBear Structure Text Size	6
01 iBear Structure Line Width	1
01 Maxbars to find Internal Structure	4
🔗 Tiny iStructure Filter	false
ab -----	
🔗 Show iBull BOS label text	false
🔗 Show iBull CHoCH label text	true
🔗 Show iBear BOS label text	false
🔗 Show iBear CHoCH label text	true
ab -----	

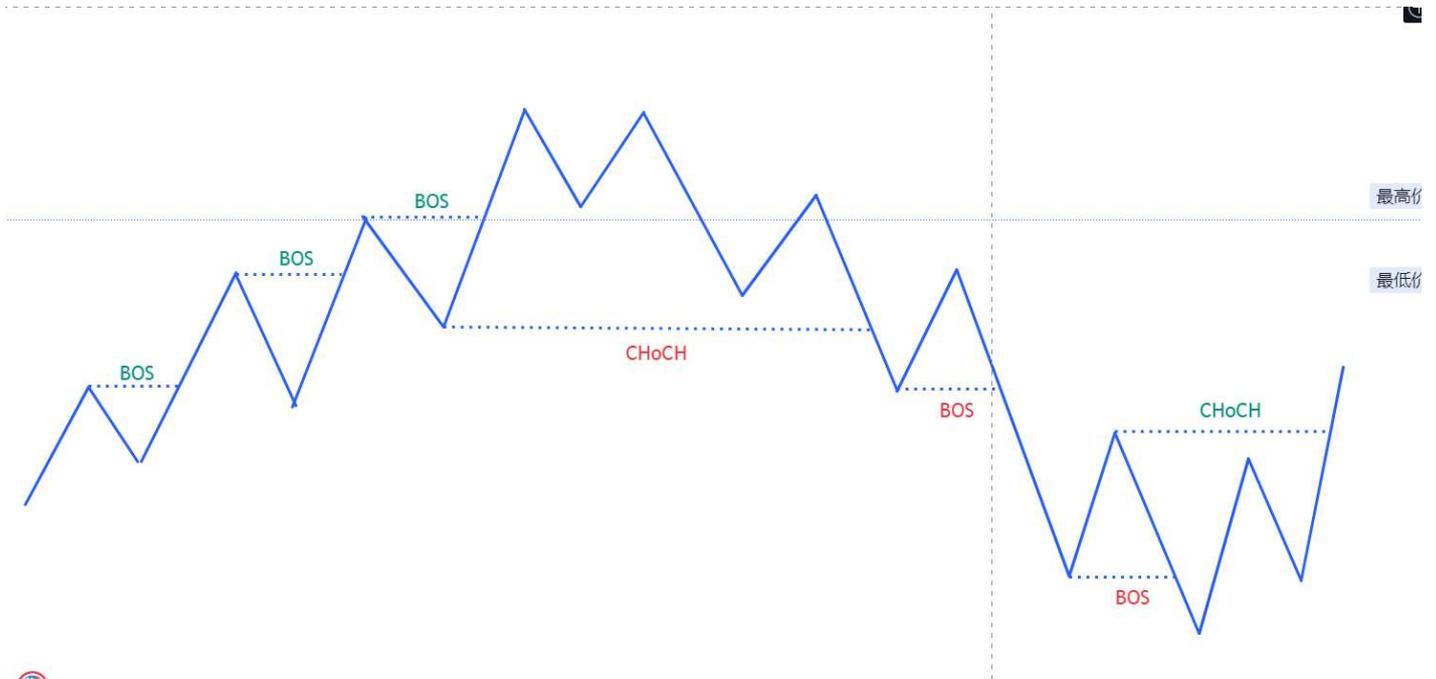
ab -----Swing Structure-----	-----
👉 Show Swing Structure	true
☰ Select Swing Structure Algorithm	Structure Algorithm 2
☰ Select Swing Structure Break Type	Two Candles break
☰ Select Bullish Structure type	All
🎨 Bullish Structure Color	■ 8,153,129
01 Bullish Structure Text Size	8
01 Bullish Structure Line Width	2
☰ Select Bear Structure type	All
🎨 Bear Structure Color	■ 242,54,69
01 Bear Structure Text Size	8
01 Bear Structure Line Width	2
👉 Show Swings Points(HH/HL/LL/LH)	false
01 Maxbars to find Swing Structure (min value 10)	30
👉 Show Strong/Weak High/Low	true
ab -----	
👉 Show Bull BOS label text	false
👉 Show Bull CHoCH label text	true
👉 Show Bear BOS label text	false
👉 Show Bear CHoCH label text	true
👉 Show Strong/Weak High/Low label text	true
ab -----	
ab -----	

In the setting interface, the value of maxbars for find internal structure determines the number of candles needed to confirm the high and low points of the small period. The default is 4, which means that at least 4 candles are required to confirm the high or low point of a secondary structure. You can set this value yourself according to your own experience or the volatility characteristics of the trading variety.

The value of maxbars for find swing structure determines the number of candles needed to determine the high and low points of the main structure. The default is 50, which means that 50 candles are needed to confirm the high or low point of a large period. Again, you can set this value according to your needs. If ALGO2 is selected for the "Select Swing Structure Algorithm", it is recommended to set the value of maxbars to be smaller, such as between 20-30.

Select Internal/Swing Structure Algorithm to select the algorithm for the market structure. This program provides two algorithms, and users can choose one of them according to their preferences. The difference between the two algorithms is shown in the following two figures.





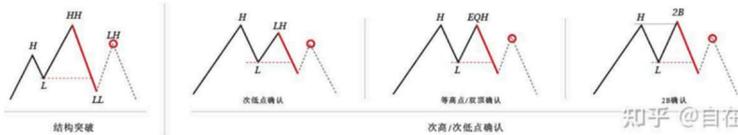
In the settings of internal structure and swing structure, there are two important settings, internal structure break type and swing structure break type. At the micro level, there are mainly three situations in which the price breaks through the structure, all of which can be counted as effective breakthroughs. Introduced in the SMC profile available on the indicator's main page. The article mainly introduces three situations: the shadow line breaks through, the shadow line breaks through the shadow line, the entity breaks through the entity, and the entity breaks through.

What is a reversal structure?

Learning to effectively identify reversal structures is one of the prerequisites for capturing tops and bottoms (retacement failure is a prerequisite for reversal structures).

Reversal structures mainly have two forms:

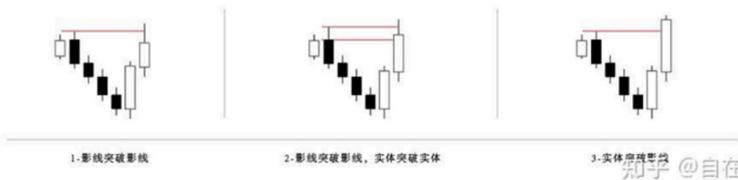
- Structure breakout (retacement failure)
- Confirmation of secondary high/low points (including double tops/bottoms and shadow false breakouts)



Price breaking in the direction of the trend is called a trend, is breaking against the trend a reversal? Please consider the similarities and differences between the two reversal structures in light of retracement failure.

Structure breakout

At the micro level, there are three main situations of price breaking structure, all of which can be considered as valid breakouts, but I prefer the latter two:



Please consider the momentum and think about which breakout is stronger? [3]

After-class reflection:

The indicator also provides three types of breakthroughs for selection, shadow line breakthrough, entity breakthrough and double candlestick breakthrough. The program uses entity breakthrough by default, and

users can choose the type of breakthrough they need.

The remaining settings are basically display settings, and users can set them according to their preferences.

For example, we can set not to display the internal structure at all, only to display the swing structure, or set to only display the internal structure but not the swing structure.

Or set to display only a certain type of market structure, bullish BOS/CHOCH , bearish BOS/CHoCH .

For experienced traders, they may not want to see too many labels, so the indicator provides a switch to display labels. You can also turn off all tags or choose to only display tags of a certain type that you are particularly concerned about.

The show swing points setting turns on and off the display of large cycle high and low points (HH LL HL LH). The Show strong/weak high/low setting turns on the display of the recent high/low points of the main structure, marked with two lines extending to the current candle, and the high and low points consistent with the large-cycle price trend are marked as strong high/low. Otherwise, mark it as weak high/low.

Finally, I would like to add that in the internal structure setting, the Tiny internal Structure filter setting is used to filter out the market structure formed by small fluctuations in small periods.

3. Fractal Points and Order Blocks

Below we introduce the two functions of Fractal and OB.

Variable	Value
ab -	
ab -----Fractal Points-----	-----
👉 Show ZigZag Lines	false
👉 Show Fractal Points	false
01 Bars For Fractal	30
☰ ZigZag Line style	Solid
🔗 ZigZag Line color	DarkTurquoise
🔗 Fractal High Color	Orange
🔗 Fractal Low Color	GreenYellow
ab -	
ab -	
ab -----Order Blocks-----	-----
👉 Show Internal Order Blocks	true
👉 Show Internal Order Blocks With Volume Metrics	true
01 Number of iOB to display on chart(min value 1)	6
👉 Show Swing Order Blocks	true
01 Number of OB to display on chart(min value 1)	5
👉 Show OB mean threshold	true
☰ Select OB Display Type	Display With Top-Bottom Lines
ab -----	
👉 Bull Bear OB Alternating display(More concise)	false
ab If you don't want to see too many messy OB blocks,select true	
ab -----	
ab -	
ab -----OB Style settings-----	-----
🔗 Internal Bullish OB Color	<input type="text" value="241,245,254"/>
🔗 Internal Bearish OB Color	<input type="text" value="251,238,240"/>
🔗 Bullish OB Color	<input type="text" value="225,233,253"/>
🔗 Bearish OB Color	<input type="text" value="247,219,222"/>
👉 Extend the OB/iOB rectangles	false
🔗 Bull OB/iOB mean threshold color	<input type="text" value="177,215,252"/>
🔗 Bear OB/iOB mean threshold color	<input type="text" value="239,169,177"/>
☰ OB/iOB mean threshold style	Dot
ab -----	
☰ Bullish OB/iOB Top-Bottom Lines style	Solid

Fractal Points:

It mainly provides users with the function of displaying zigzag lines and fractal points, and can set the time period for zigzag and fractal separately.

Here fractal Points is that the program finds the high and low points of price fluctuations in a given period according to the algorithm, and then marks them with a dot. Usually, there are limit orders and stop loss orders near the previous high/low of the price, which is the so-called liquidity, which is the focus of many traders.

Zigzag uses segment line to connect these high and low points, so that traders have a clearer and more intuitive perspective on price fluctuations, and can avoid the interference of some smaller periodic fluctuations.

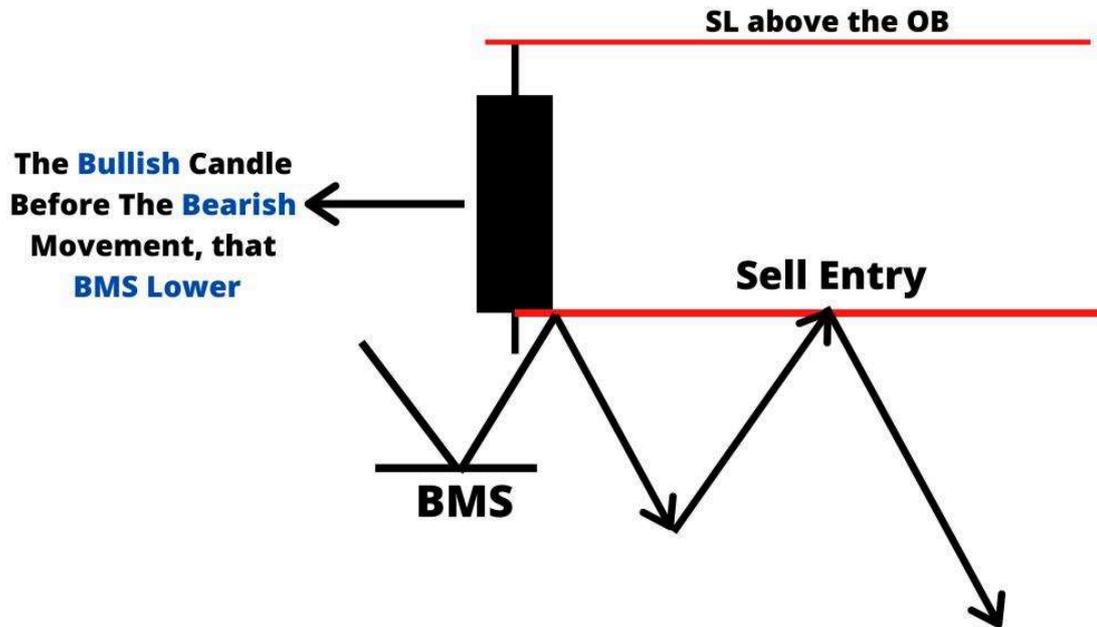
The first setting item is to turn on and off the display of zigzag, the second setting item is to turn on and off the display of fractal points, and the third setting item is to specify the period for the program to calculate the high and low points, which is the number of candles required to confirm the high and low points. The default is 4, if it is changed to 6, and the Timeframe of the current chart is daily, it means that the program will mark the high and low points under the one-week fluctuation period for you.

Below are the formatting for the zigzag, and the formatting for the fractal points.

BULLISH ORDER BLOCK



BEARISH ORDER BLOCK



BEARISH ORDER BLOCK



Let's take a look at the cause or principle of OB, and the role of OB. Refer to the SMC article I shared:

"Causes and Effects:

As for the causes, I don't know the specific truth, but the order flow theory can explain it, so for now, let's assume that it is true, because no one can understand all the market truths.

The key is how you view the market, what kind of market outlook you have, and how to trade based on your market viewpoint.

In order to go long, someone has to go short, and in order to go short, someone has to go long. Only when there is a buyer and a seller can a transaction be completed. If there is a lack of buy orders when shorting, the market price will fall to find buyers. Conversely, the market price will rise to find sellers. (Please refer to Daemon Goldsmith's "Order Flow Trading" for more information.)

Large institutions mainly trade using algorithms, and even if their large orders are split, they can still have a significant impact on the market price. They usually complete price delivery on a daily basis or match orders during the periods of the highest liquidity.

To ensure that the orders are successfully executed, and to reduce the adverse effects of orders on market prices and slippage costs, institutions will use the "sell to buy" or "buy to sell" method of trading at critical positions.

That is, first pushing down the price by selling to break through the support of the previous low, and then matching the small breakout sell orders and buy stop-loss orders (i.e., market sell orders) of retail investors with the large buy orders of institutions (the main bodies of the completed transactions are the institutions' own sell orders).

After the price rises, the institutions' sell orders are trapped as costs. If it is a retail investor, they may have to stop loss. However, with abundant assets, institutions can recover costs by selling to make a profit (traditional technical analysis refers to this behavior as testing or pullback confirmation).

If the institution's orders have not been completely filled, they will use the order flow of the recovered costs to trade near the initial cost price. These behaviors are reflected on the chart as a confirmation of a price reversal, which opens a new trend.

The institution's cost accumulation area is the order block. A large number of order costs are stacked inside, which is an area that institutions will definitely protect.

Not all order blocks will be recovered quickly, and don't be too rigid about the concept of order flow. Don't try to seek certainty. The order flow strategy is just a probability advantage. "

Let's see for yourself, his main principle is to analyze the principle of institutional Positions and find the traces of institutional Positions. OB is the cost area of institutional Positions, so our Position in the cost area of the institution is of course the place with the best winning rate.

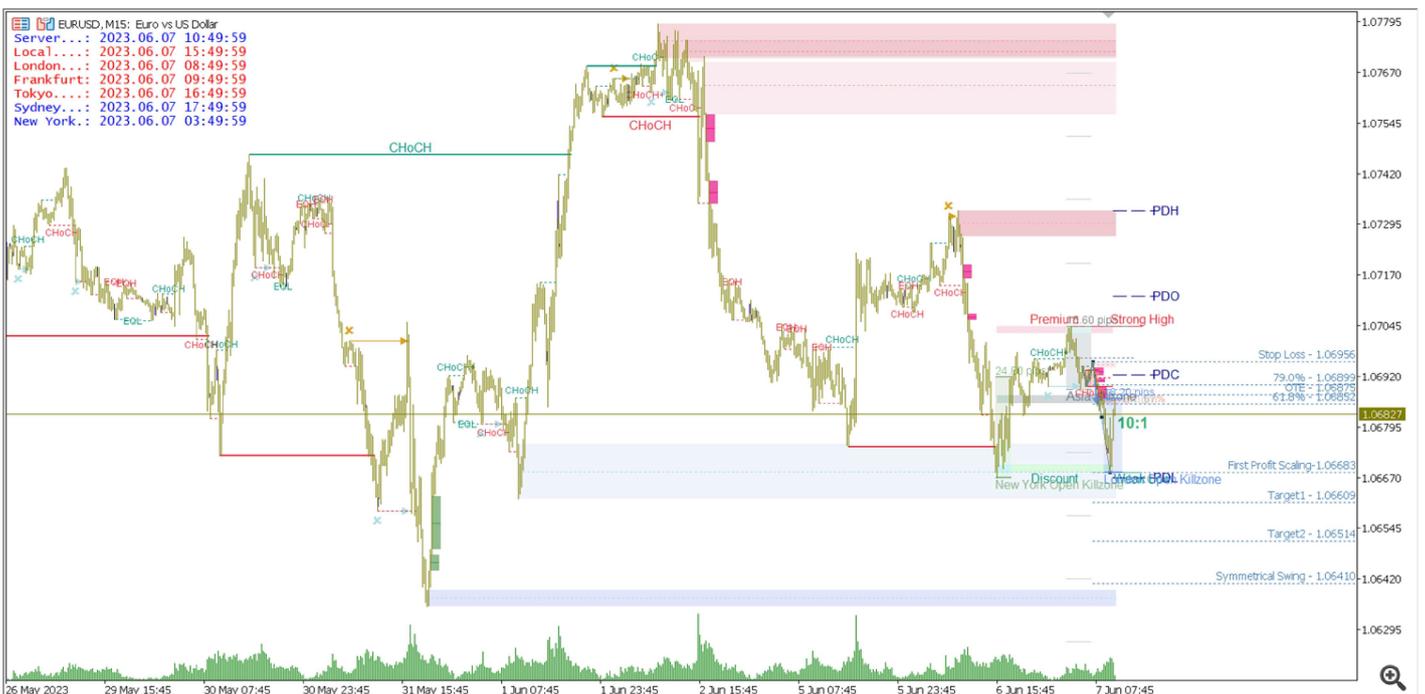
Take a look at this picture again:

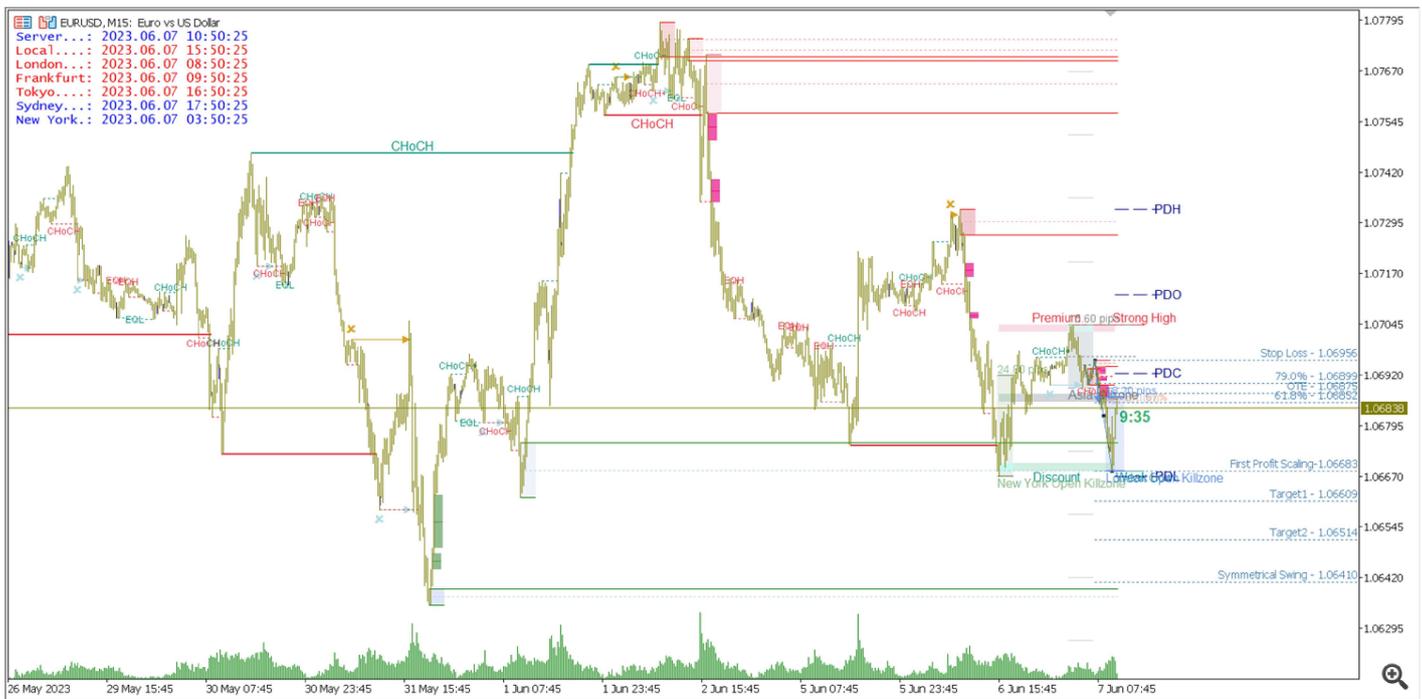


In the order flow strategy, it is more important to judge the price trend, so traders judge the direction in their own big cycle or direction cycle, and trade in their own small cycle or trading cycle. Multi-period analysis is very important in SMC trading, at least you need two periods, one direction period and one transaction period. Many people ask me what is the best cycle choice, but there is no unified answer. If you use the 5-minute chart as the trading period, then I think your direction period is at least 1 hour or 4 hours; if you use the 15-minute chart as the trading period, then I think your direction period is at least 4 hours or more. This is a combination that I personally think makes sense.

When the price completely crosses an OB, the OB is deleted.

In the settings, we can set whether to display internal ob and swing ob, and the number of recent OBs that need to be displayed. Users can also set whether to display OB mean threshold and the way of OB display. There are two types of OB display methods to choose from. One is Display As Rectangles, which means that the program identifies the OB with a rectangular block filled with color. The second type is Display With Top-Bottom Lines, which means that the program will mark the high and low points of the OB with two straight lines up and down. This option is mainly used by traders who want a more concise OB display.





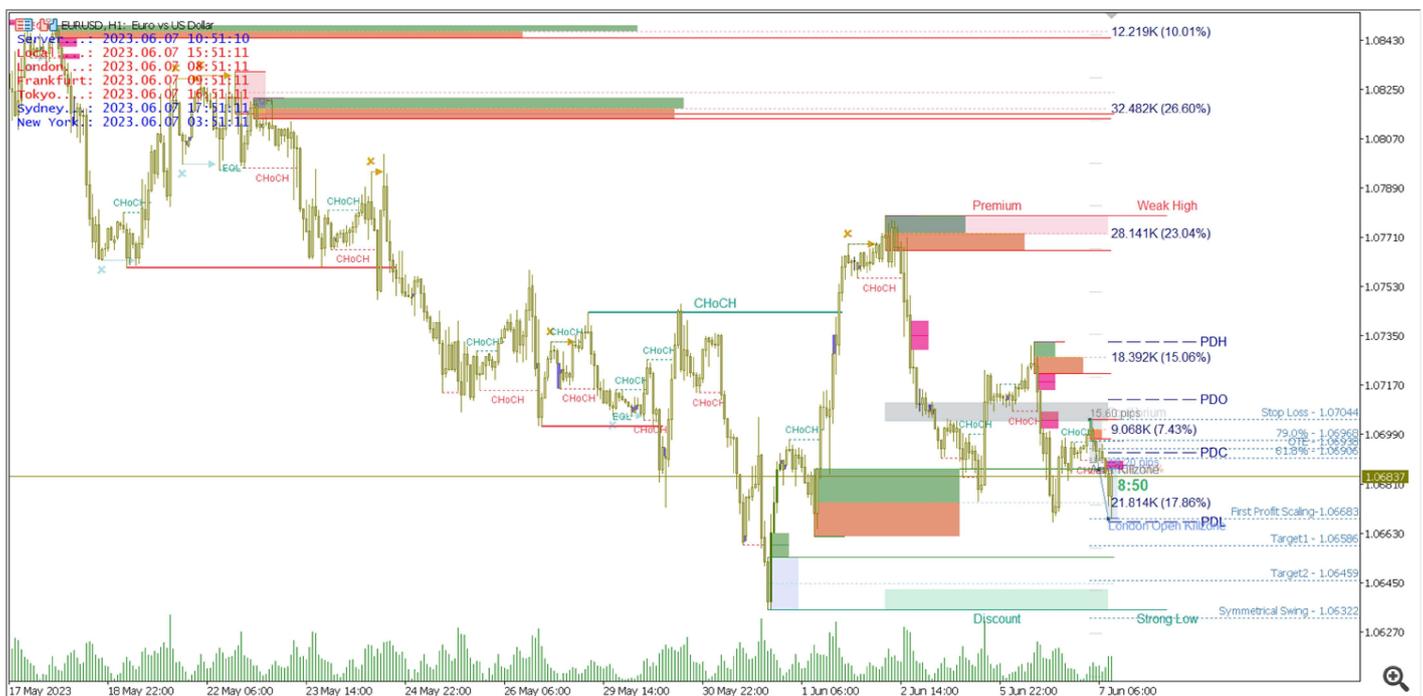
BULL bear ob alternative display, this setting enables the OBs on the upper and lower sides of the current price to be displayed alternately in the most recent order and meet the display quantity limit.

ab -----OB Style settings-----	-----
Internal Bullish OB Color	<input type="checkbox"/> 241,245,254
Internal Bearish OB Color	<input type="checkbox"/> 251,238,240
Bullish OB Color	<input type="checkbox"/> 225,233,253
Bearish OB Color	<input type="checkbox"/> 247,219,222
Extend the OB/iOB rectangles	false
Bull OB/iOB mean threshold color	<input type="checkbox"/> 177,215,252
Bear OB/iOB mean threshold color	<input type="checkbox"/> 239,169,177
OB/iOB mean threshold style	Dot
ab -----	
Bullish OB/iOB Top-Bottom Lines style	Solid
Bullish OB/iOB Top-Bottom Lines width	1
Bullish OB/iOB Top-Bottom Lines Color	<input type="checkbox"/> Green
Bearish OB/iOB Top-Bottom Lines style	Solid
Bearish OB/iOB Top-Bottom Lines width	1
Bearish OB/iOB Top-Bottom Lines Color	<input type="checkbox"/> Red
Extend OB/iOB Top-Bottom Lines	false
ab -----	
Volumes Type	Tick volume
Buy Volume Box Color	<input type="checkbox"/> 143,188,143
Sell Volume Box Color	<input type="checkbox"/> DarkSalmon
Volume Metrics Text Size	8
Volume Metrics Text Color	<input type="checkbox"/> MidnightBlue
ab -	

OB style settings, where users can freely set the color of OB to suit your chart style, making the chart look more concise and beautiful. Extend the ob/iob rectangles, this setting allows the OB block to automatically

extend to the far right of the chart, if you like this OB display, you can set this to TURE. Below is the formatting for OB mean threshold line. You can choose solid or dashed lines and the color of the lines according to your preferences. Next is the place to set the format of OB top-bottom lines, the format, color, width and whether to extend to the far right of the chart.

ab -----Order Blocks-----	-----
↗ Show Internal Order Blocks	true
↗ Show Internal Order Blocks With Volume Metrics	true
01 Number of iOB to display on chart(min value 1)	6
↗ Show Swing Order Blocks	true
01 Number of OB to display on chart(min value 1)	5
↗ Show OB mean threshold	true
☰ Select OB Display Type	Display With Top-Bottom Lines
ab -----	
↗ Bull Bear OB Alternating display(More concise)	false
ab If you don't want to see too many messy OB blocks,select true	
ab -----	



Below is the place to set the format of the internal OB with volume metrics. You can turn this feature on or off by setting Show Internal Order Blocks With Volume Metrics. Here we can choose two volume types, Tick Volume and Real Volume. If we trade currency pairs, there is only Tick Volume data.

This function will calculate and display the sum of the transaction volume in the structural breakthrough corresponding to the OB, as a reference for the OB in the transaction volume dimension. Here, the green rectangular block is the statistics of the trading volume of the bullish candles, and the orange rectangular block is the statistics of the trading volume of the bearish candles. The rightmost tab shows the sum of long and short volumes. Percentage is the ratio of this OB transaction volume compared with other several OB transaction volumes.

Variable	Value
ab -	
ab -----Alerts-----	-----
👉 Alert when Bullish CHoCH formed	false
👉 Alert when Bullish BOS formed	false
👉 Alert when Bearish CHoCH formed	false
👉 Alert when Bearish BOS formed	false
👉 Alert when Internal Bullish CHoCH formed	false
👉 Alert when Internal Bullish BOS formed	false
👉 Alert when Internal Bearish CHoCH formed	false
👉 Alert when Internal Bearish BOS formed	false
ab -----	-----
👉 Alert when Internal Bullish CHoCH+ formed	false
👉 Alert when Internal Bearish CHoCH+ formed	false
👉 Alert when Bullish CHoCH+ formed	false
👉 Alert when Bearish CHoCH+ formed	false
ab -----	-----
👉 Alert when Internal Bullish OB formed	false
👉 Alert when Internal Bearish OB formed	false
👉 Alert when Bullish OB formed	false
👉 Alert when Bearish OB formed	false
ab -----	-----
👉 Alert when Internal Bullish OB break	false
👉 Alert when Internal Bearish OB break	false
👉 Alert when Bullish OB break	false
👉 Alert when Bearish OB break	false
ab -----	-----
👉 Alert when Internal Bullish OB touched	false
👉 Alert when Internal Bearish OB touched	false
👉 Alert when Bullish OB touched	false
👉 Alert when Bearish OB touched	false
1/2 OB Touch threshold(minval=0, maxval=1, step=0.1)	0.2
ab -----	-----
👉 Alert when Bullish Breaker Block formed	false
👉 Alert when Bearish Breaker Block formed	false
ab -----	-----

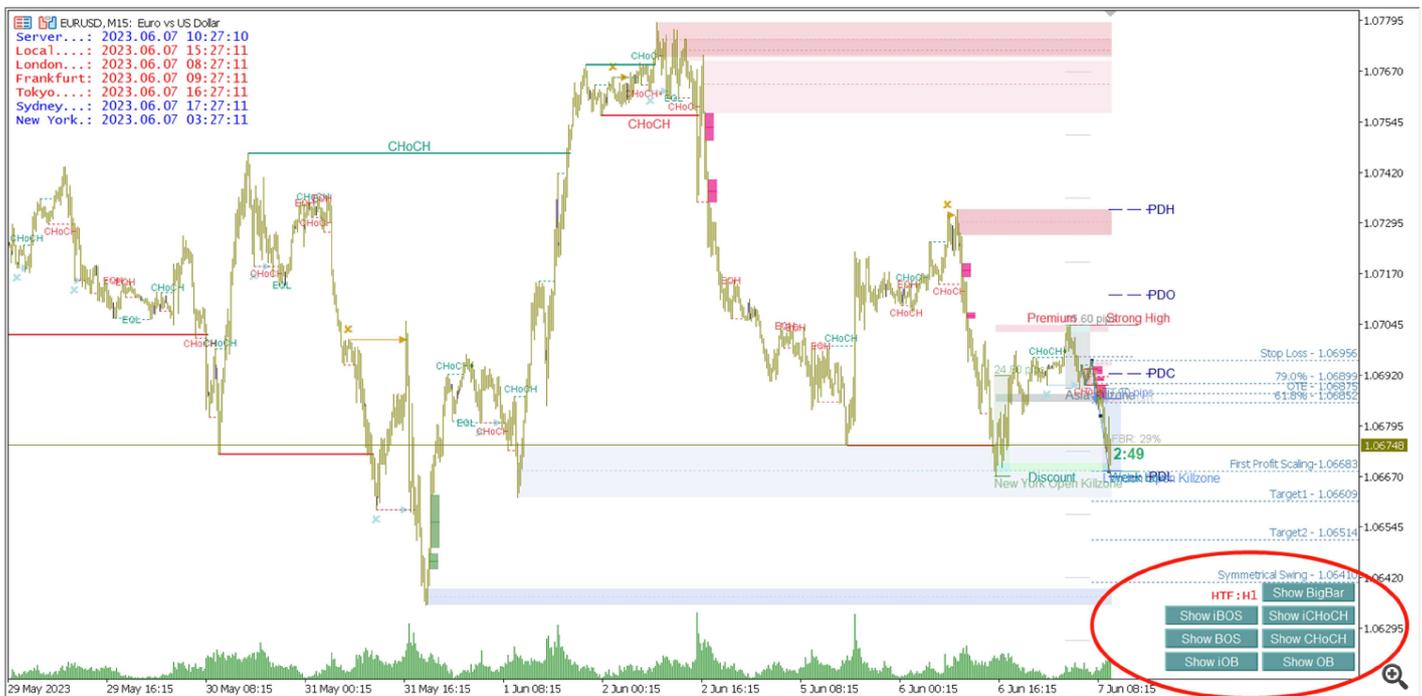
For market structure and OB, indicators have perfect and detailed reminder functions. At the very end of the setting interface is the area where ALERT is set intensively. Here you can set alerts for the formation of each market structure. OB formed , OB touched , OB break can also set reminders. On the MT computer side, a prompt window will pop up and a prompt tone will be played. If you want to send these reminders to the mobile terminal, you can set it under Alerts to mobile below. In order to send reminders to the MT4/5 software on the mobile phone, you need to perform a simple configuration in the MT software on the computer.

ab -----Alerts to mobile-----	-----
👉 Alert to your MT4/5 mobile device	false
ab To realize this function you need:	
ab 1.MetaQuotes IDs are specified.	(Tools->Options->Notifications->MetaQuotes ID)
ab 2.Enable Push Notifications.	(Tools->Options->Notifications->Enabel Push Notifications)
ab -----	-----
ab -----Alerts to Email-----	-----
👉 Alert to your Email address	false
ab To realize this function you need:	
ab 1.Enable Email Notifications.	(Tools->Options->Email->Enable Email Notifications)
ab 2.Setup an Email Account at www.gmx.com.	Video tutorial: https://www.youtube.com/watch?v=ISomE8aFa2Q
ab 3.Enable access to GMX account via POP3 and IMAP.	GMX Email->Settings->POP3 & IMAP
ab 4.Fill in the mailbox information for sending mail.	(Tools->Options->Email->SMTP Server/SMTP login/SMTP psw/Fr...
ab -----	-----

4. High Timeframe Structure

ab -	
ab -----High Timeframe Structure-----	-----
👉 Show High Timeframe Control Panel	true
☰ Select High Timeframe	current
👉 Show HTF BigBar	false
👉 Show HTF Internal BOS	false
👉 Show HTF Swing BOS	false
👉 Show HTF Internal CHoCH	false
👉 Show HTF Swing CHoCH	false
👉 Show HTF Internal OB	false
👉 Show HTF Swing OB	false
👉 Show HTF OB mean threshold	false
👉 Show HTF Strong/Weak High/Low	false
👉 Show HTF Premium&Discount Zone	false
ab -	
ab -----HTF Structure Style settings-----	-----
🔗 Internal Bullish OB Color	<input type="color" value="#241245254"/> 241,245,254
🔗 Internal Bearish OB Color	<input type="color" value="#251238240"/> 251,238,240
🔗 Bullish OB Color	<input type="color" value="#225233253"/> 225,233,253
🔗 Bearish OB Color	<input type="color" value="#247219222"/> 247,219,222
👉 Extend the OB rectangles	false
👉 OB Rectangles filled	false
🔗 Bull OB mean threshold color	<input type="color" value="#177215252"/> 177,215,252
🔗 Bear OB mean threshold color	<input type="color" value="#239169177"/> 239,169,177
🔗 Internal Bullish Structure Color	<input type="color" value="#143188143"/> 143,188,143
🔗 Internal Bear Structure Color	<input type="color" value="#Plum"/> Plum
🔗 Swing Bullish Structure Color	<input type="color" value="#143188143"/> 143,188,143
🔗 Swing Bear Structure Color	<input type="color" value="#Plum"/> Plum
🔗 Bull BigBar color	<input type="color" value="#143188143"/> 143,188,143
🔗 Bear BigBar color	<input type="color" value="#Plum"/> Plum
ab -	
ab -	

The HTF Structure function mainly provides users the market structure information of two different Timeframes simultaneously displayed on the same chart. As long as the first item is set to true and the second item "Select High Timeframe" selects a period larger than the current TF, then the HTF function will start. At this point, the control buttons for HTF will appear in the lower right corner of the chart.



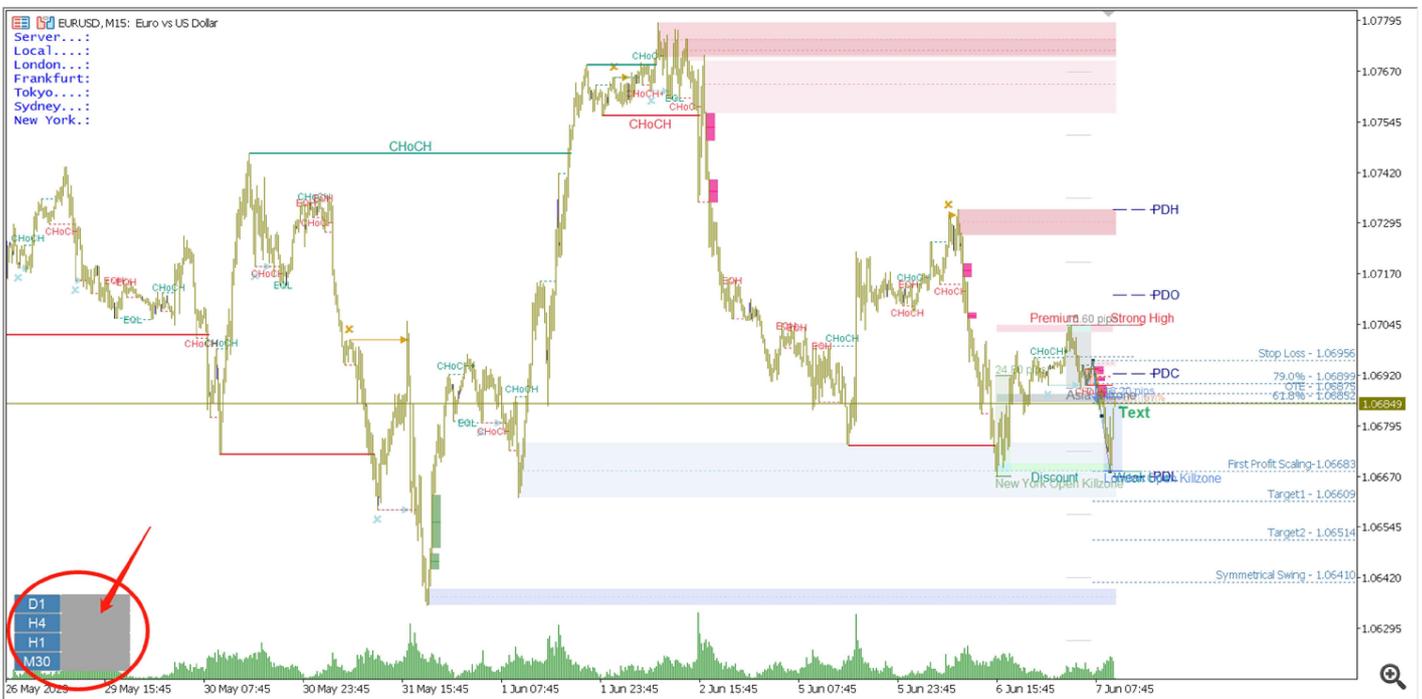
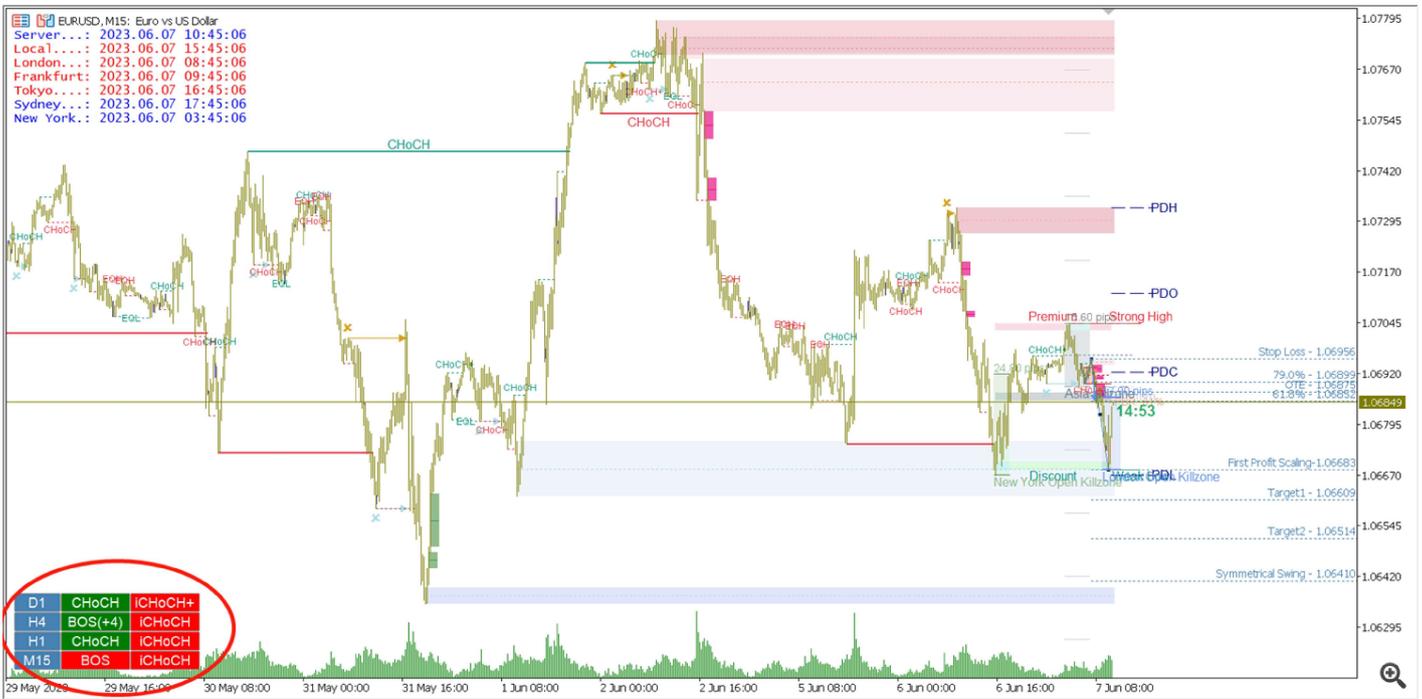
Clicking different buttons will display different information of HTF. The shortcut button functions of HTF BigBar, HTF internal BOS, HTF internal CHoCH, HTF swing BOS, HTF swing CHoCH, HTF internal OB, HTF swing OB are provided here. HTF OB mean threshold, HTF Strong/Weak High/Low, HTF Premium&Discount Zone functions need to open the setting interface for setting.

The HTF Structure Style Settings area is the style property setting area for HTF functionality. Users can set it according to their needs.

5. MTF Structures Dashboard

ab -	
ab -----MTF Structures Dashboard-----	-----
↗ Show MTF Structures Dashboard	true
☰ MTF Dashboard Panel Corner	Left lower chart corner
☰ Select Timeframe1	15 Minutes
☰ Select Timeframe2	1 Hour
☰ Select Timeframe3	4 Hours
☰ Select Timeframe4	1 Day
↗ Show Internal Structures	true
↗ Show External Structures	true
🔗 Bull Structure Label Text Color	<input type="checkbox"/> White
🔗 Bear Structure Label Text Color	<input type="checkbox"/> White
🔗 Bull Structure Label BgColor	<input checked="" type="checkbox"/> Green
🔗 Bear Structure Label BgColor	<input checked="" type="checkbox"/> Red
ab -	

This function will display BOS/CHoCH information of 4 different periods in one panel on the chart at the same time, so that users can quickly understand the market structure information of other periods. Users can set the 4 periods they need in the settings, and can choose to display only internal structures or swing structures. Users can choose the display position of MTF Dashboard. The program provides four corners of the chart for selection, and the default is the lower left corner of the chart.



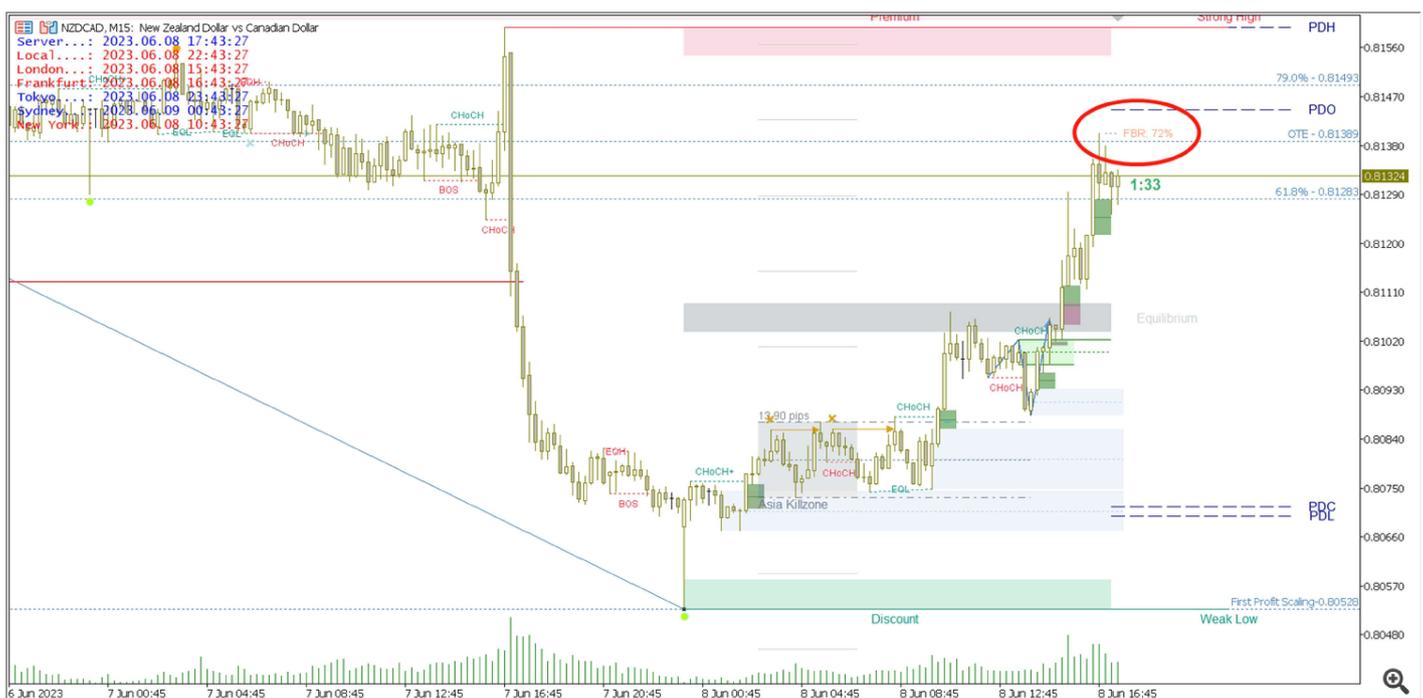
If there is no data as shown in the figure above, please right-click on the chart and select Refresh on the pop-up menu.

6. Fibonacci Retracement/Fibo OTE

ab -	
ab -----Fibonacci Retracement/Fibo OTE-----	-----
👉 Show Fibonacci Retracement Line	true
☰ Select FB Retracement type	Swing Structure
🎨 Fibonacci Retracement Line color	DarkGray
🎨 FBR Text color when price retracement exceeds 50%	LightSalmon
ab -----	
👉 Display FB levels for OTE and Profit Target	true
ab Tip:You can double-click the fibo line then it's taken out	
ab of program control, only the user can modify and delete it	
ab -----	
½ Level 1(-100 Symmetrical Swing)	-100.0
½ Level 2(-62 Target2)	-62.0
½ Level 3(-27 Target1)	-27.0
½ Level 4	61.8
½ Level 5(70.5 OTE)	70.5
½ Level 6	79.0
🎨 FB levels color	SteelBlue
ab -	

In the order flow strategy we mentioned that trend traders are keen to trade breakouts, while the order flow strategy uses structure breakouts to estimate direction and analyze institutional order blocks. Wait until the price pulls back to the discount area or the order block area before entering the position. Therefore, it is a very important function for SMC traders to use FIBO to mark a wave of price breakthroughs, and to predict and mark the possible retraction range of prices. The Fibonacci Retracement function can automatically draw a wave of FIBO based on break internal structures and break swing structures, and mark important positions that traders care about: Stop Loss(100%), OTE(70.5), 79%, 61.8%, First Profit scaling(0%), Target 1(-27%), Target 2(-62%), Symmetrical Swing(-100%). You can also set the callback range according to your own needs. Level 1-6 can be set freely.

In the setting, the first four setting items are for setting FBR, as shown in the figure below. According to the price trend, FBR displays the maximum correction range in real time. When the correction range exceeds 50%, it will be displayed in a more eye-catching color. You can also set reminders for FBR in the Alerts area.



The following setting items are for setting the Fibo Levels for OTE function. See below. If you feel that the high and low points of Fibo Levels automatically drawn by the program are incorrect, you can drag and adjust by yourself. If you need to display this Fibo Levels all the time and don't want the program to delete or modify it, then you can double-click this Fibo Levels to make it out of the control of the program.



7. Breaker Blocks

ab -----Breaker Blocks-----	-----
👉 Show Breaker Blocks	true
☰ Select Breaker Blocks Display Type	Display With Top-Bottom Lines
👉 Show N-Lines	true
01 Number of Breaker Blocks to display on chart(min value 1)	5
👉 Show Breaker Blocks mean threshold	true
☰ Breaker Blocks Line Type	Solid
☰ Breaker Blocks Mean Threshold Line Type	Dot
🟢 Bullish BBs Line Color	Green
🔴 Bearish BBs Line Color	Red
🟢 Bullish BBs Mean Threshold Line Color	Green
🔴 Bearish BBs Mean Threshold Line Color	Red
🟢 Bullish Breaker Blocks Color	222,250,222
🔴 Bearish Breaker Blocks Color	255,218,204
🟡 N-Lines Color	CornflowerBlue
☰ N-Lines Style	Solid
01 N-Lines Width	2
ab -	

8. Supply&Demand Order Blocks

ab -	
ab -----Supply&Demand Order Blocks-----	-----
↕ Show Supply&Demand Order Blocks	false
☰ Select Supply&Demand OB Type	ALL
☰ Select Supply&Demand OB Display Type	ALL
01 Number of Supply OBs to display on chart(min value 1)	10
01 Number of Demand OBs to display on chart(min value 1)	10
☰ Supply&Demand Line Type	Solid
☰ Supply&Demand Mean Threshold Line Type	Dot
🔗 Supply Line Color	Red
🔗 Demand Line Color	Green
🔗 Supply Mean Threshold Line Color	Red
🔗 Demand Mean Threshold Line Color	Green
🔗 Supply Zone Color	LightSalmon
🔗 Demand Zone Color	LightGreen
ab -	

Before using the supply and demand order block function, please read the chapter "Structure-Based Supply and Demand Trading Strategy" in the SMC article I shared. It contains a detailed introduction of what is a supply and demand area (Institutional positions building area or decision area), how to identify a supply and demand area, and the type of a supply and demand area, etc. Simply put, supply and demand can be divided into two types: reversal structure and continuation structure. You can choose to display one or all of them in the indicator settings. The indicator also provides two display types of supply and demand OB, which users can set according to their preferences.

What is the difference between a supply and demand zone order block and an order block in order flow strategy? In my personal opinion, the theoretical basis of the two is different. Compared with the concept of supply and demand, the order block in the order flow strategy can be regarded as a generalized supply and demand area, or the supply and demand area can be regarded as a chivalrous order block. Because the supply and demand zone in the supply and demand strategy specifically refers to the interval candles with spindle candle/doji as the main shadow candle(the shadow candle are greater than 50%). But in practice, you will find that the supply and demand zone is somewhat impractical - the price often reverses at the large physical order block, rather than the supply and demand zone (spindle/doji etc. interval candles). Therefore, when the indicator calculates the supply and demand area, it does not strictly follow the definition to find the interval candles as the supply and demand block. Users can open OrderBlocks and Supply&Demand OBs at the same time to view their similarities and differences, or choose to use only the order flow strategy or only the supply and demand strategy based on their own trading experience.



9. Strong Imbalance Labeling, Liquidity Voids, Volume Imbalance, and Fair Value Gaps

ab -	
ab -----Strong Imbalance Labeling-----	-----
↗ Display Strong Imbalances	true
🔗 Bull Imbalances Color	Green
🔗 Bear Imbalances Color	Red
↗ Delete IMBs When filled	true
ab -	
ab -----Fair Value Gaps-----	-----
↗ Display Fair Value Gaps	true
½ FVG Threshold(minval=0.1, step=0.1)	0.1
☰ Timeframe(pls refresh the chart if not displayed)	current
🔗 Bullish FVG Color	147,190,143
🔗 Bearish FVG Color	241,90,170
01 Extend FVG(minval = 0)	2
↗ Extend FVG rectangle to current candle	false
↗ Delete FVG when filled	true
🔗 Filled FVG color	225,233,253
↗ Show FVG Consequent Encroachment	true
🔗 Bull FVG Consequent Encroachment color	70,159,90
🔗 Bear FVG Consequent Encroachment color	236,19,143
☰ Bull FVG Consequent Encroachment line style	Solid
☰ Bear FVG Consequent Encroachment line style	Solid
01 Bull FVG Consequent Encroachment line width	1
01 Bear FVG Consequent Encroachment line width	1
ab -	

ab -	
ab -----Liquidity Voids-----	-----
↗ Display Liquidity Voids	true
↗ Auto Threshold	true
🔗 Liquidity Voids Color	 163,214,243
↗ Delete LVs when filled	true
🔗 Filled LVs color	 225,233,253
ab -	
ab -	
ab -----Volume Imbalance-----	-----
↗ Display Volume Imbalance	true
↗ Auto Threshold	true
🔗 Volume Imbalance Color	 MediumSlateBlue
ab -	

Before discussing these functions, please read the chapter on order flow strategy in the SMC article shared on the indicator page, which introduces the content of liquidity and liquidity imbalance.

Liquidity:

In speculative markets, liquidity can be simply understood as pending orders.

There are roughly three types of orders:

market order

Limit order (limit order), also known as callback order

Stop order (stop order), I am more used to call a breakthrough order

Liquidity pool:

The liquidity pool refers to the area where a large number of pending orders are accumulated, usually located outside the high/low points of the large cycle.

At this key position, there are accumulated stop losses of entrants and stop orders of non-entrants. Once the price breaks through here, a large amount of liquidity can be obtained.

Liquidity Imbalance:

In any cycle, the large entity candle and the continuous candle in the same direction are all liquidity imbalances, which indicate that there are only buy orders or only sell orders in these candles. This situation is inefficient and unhealthy for the market. Institutions Algorithms will necessarily guide prices to (completely or partially) fill these areas (immediately or in the future).

There are two main types of liquidity imbalances that deserve attention:

Liquidity gap (LV, Liquidity void)

Fair value gap (FVG, Fair value gap)

The liquidity gap mainly refers to the continuous entity big candles and the gap.

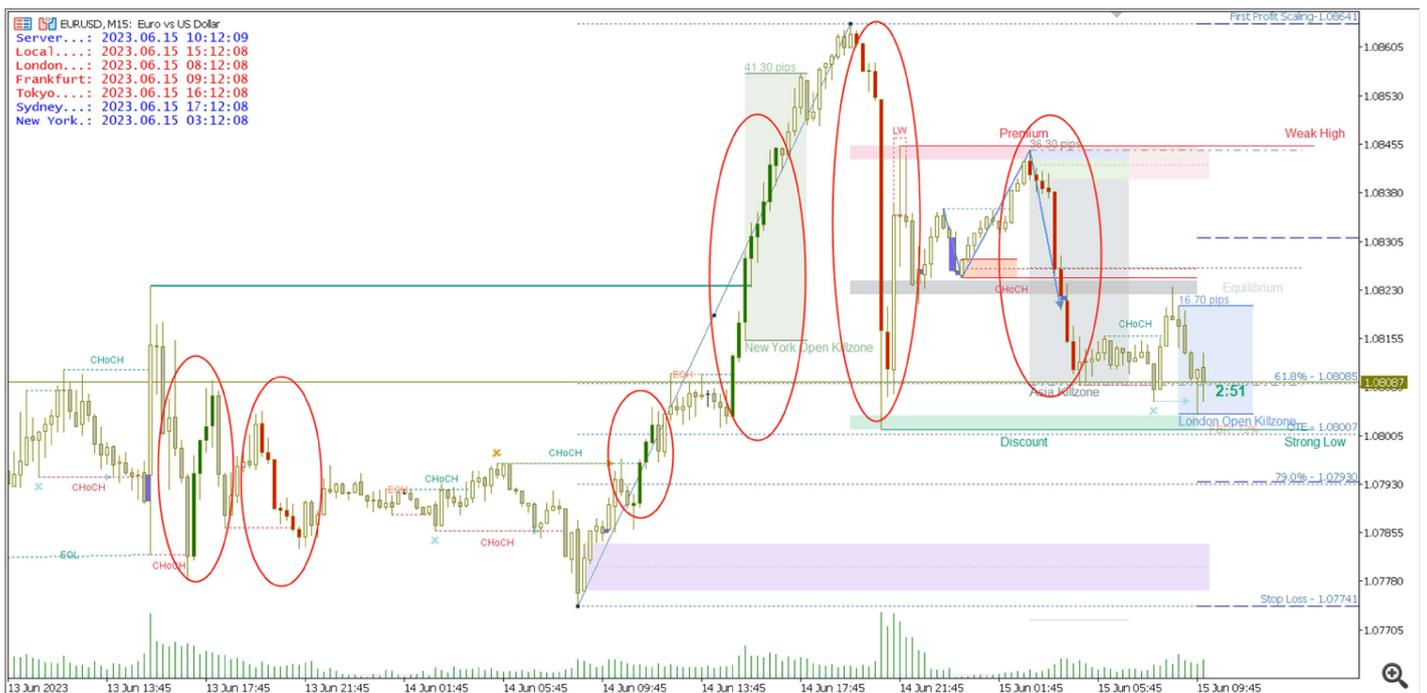
In the indicator function, Strong Imbalance corresponds to the liquidity imbalance of the continuous entity large candles. Liquidity Voids corresponds to the liquidity imbalance of the gap. Fair Value Gaps corresponds to the liquidity imbalance of the fair value gap. Volume imbalance is similar to a Liquidity Void, but its not a true open gap. It has the candle wicks overlapping one another, but the candle bodies are apart.



In the figure above, the blue circle shows Volume Imbalance, and the red circle shows Liquidity Void.

Currently, the indicators provide reminders related to FVG, Liquidity Void and Strong Imbalance, and users can set them according to their needs.

The Strong Imbalance function of MT5 is marked with Colored Candles, as shown in the red circle in the figure below.



Since MT4 does not support the Colored Candles function, the Strong Imbalance function of the MT4 version of the indicator is marked with a rectangular block, as shown in the red circle in the figure below.



The FVG function supports displaying a higher period FVG on the current period chart, and select a larger period in the Timeframe in the settings.

Timeframe(pls refresh the chart if not displayed)		current
Bullish FVG Color		147 190 143

The FVG Threshold setting filters out smaller FVG blocks. Extend FVG sets the width of how many candles to extend the FVG block to the right. The Extend FVG to current candle setting extends the FVG rectangle to the current candle.



10. BSL/SSL Taken Detect

ab -	
ab -----BSL/SSL Taken Detect-----	-----
↗ Show BSL/SSL Taken Line	true
↗ Show BSL/SSL Taken Text	false
½ BSL/SSL Taken threshold(minval=0.5, step=0.1)	1.0
🔗 BSL line and text color	■ Goldenrod
🔗 SSL line and text color	■ PowderBlue
ab -	

3. LIQUIDITY

The FOREX market is a zero sum game, which means that for a trader/institution to buy/sell 1 currency pair it's necessary that there is another trader/institution with an opposite position. If Smart Money (Banks) want to buy a currency pair they will need sellers in the market, the existing facility to place these positions in the market is called **LIQUIDITY.**

The banks manipulate the price because of **liquidity, but why? banks negotiate large trading volumes and sometimes find it difficult to find the other side of their trades, so they manipulate the price so that they can have their positions in the market.**

3.2. Buy Stops Liquidity (BSL)

The BSL is originated by Stop Losses of sell orders, after the BSL is taken, the market reverses to the downside, because banks use the BSL to place sell orders in the market.

3.3. What to focus on (for BSL)

PMH - Previous Month High

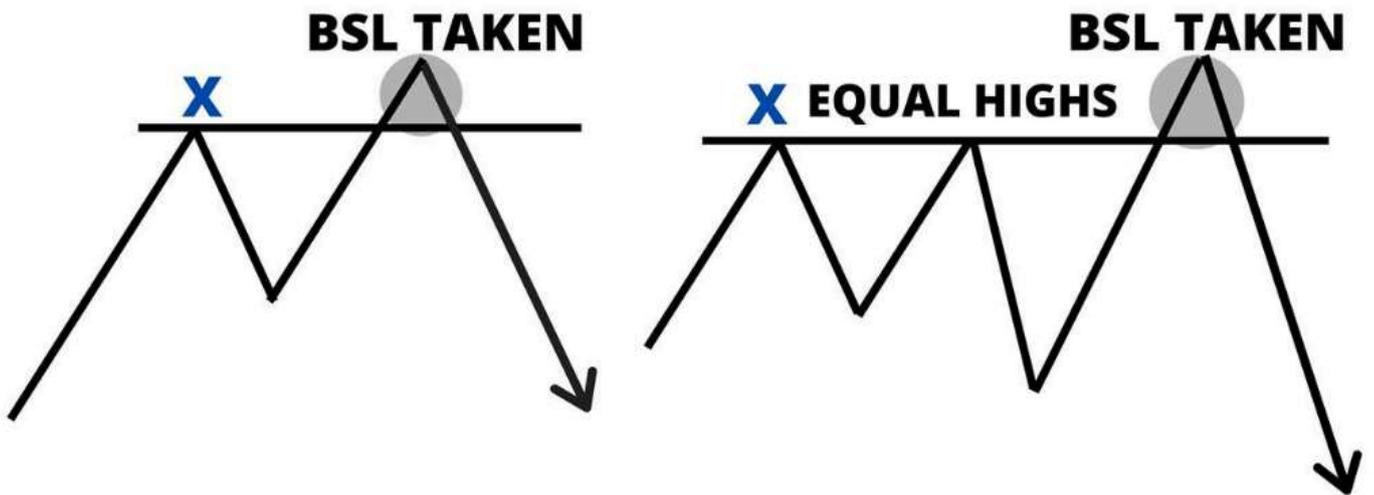
PWH - Previous Week High

PDH - Previous Day High

HOD - High Of Day

OLD HIGH - Swing High

EQUAL HIGHS = Retail Resistance



**X- PMH, PWH, PDH,
HOD, OLD HIGH.**

3.4. Sell Stops Liquidity (SSL)

The SSL is originated by Stop Losses of Buy orders, after the SSL is taken, the market reverses to the Upside, because banks use the SSL to place Buy orders in the market.

3.5. What to focus on (for SSL)

PML - Previous Month Low

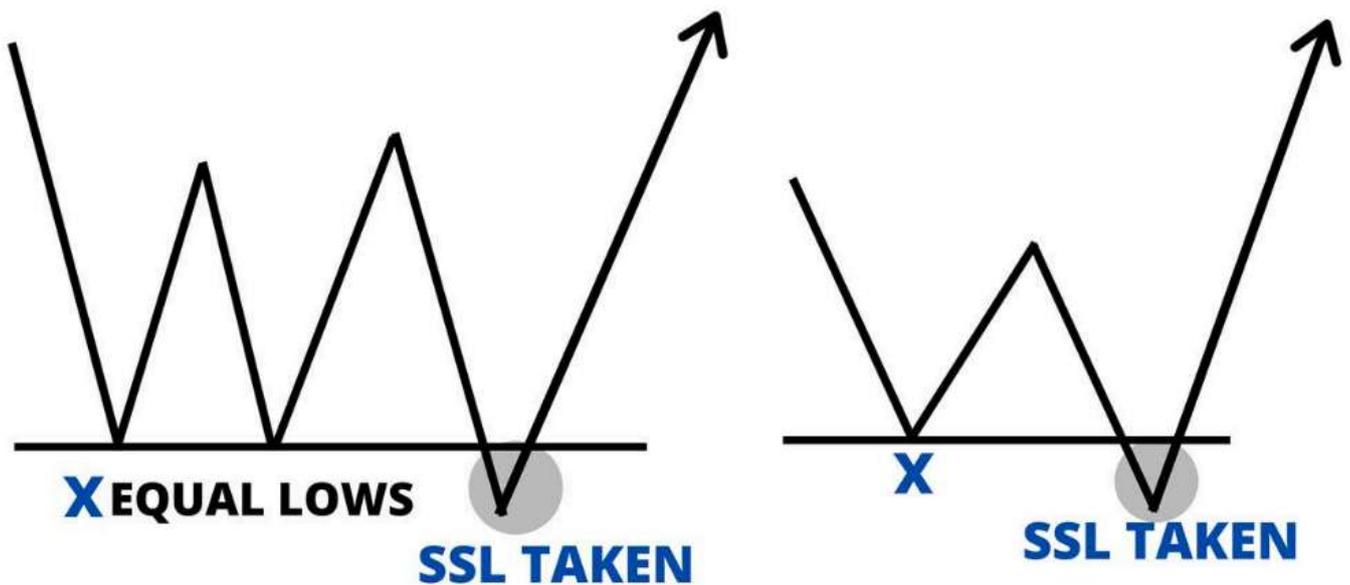
PWL - Previous Week Low

PDL - Previous Day Low

LOD - Low Of Day

OLD LOW - Swing Low

EQUAL LOWS = Retail Support



**X- PML, PWL, PDL,
LOD, OLD LOW.**

3.6. Stop Hunt: Manipulation For Liquidity

SH is a movement used to neutralize liquidity (stop losses). It's a false breakout above / below the zone where there is LIQUIDITY.

THE MARKET MARKERS (BANKS) USUALLY USE HIGH IMPACT NEWS TO TAKE LIQUIDITY.

Stop Hunt: Manipulation For Liquidity



Stop Hunt: Manipulation For Liquidity



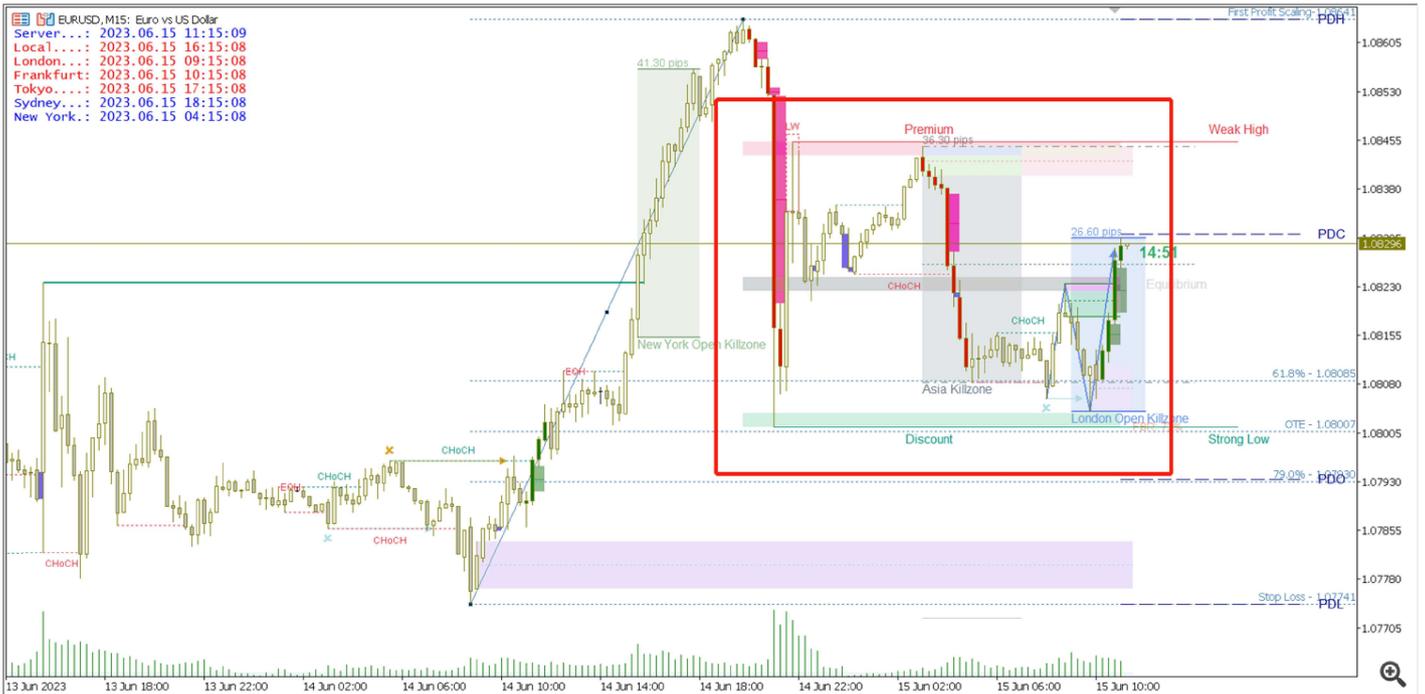
In order to apply to all sizes of cycles, the BSL/SSL function of the indicator is only calculated using the previous high/low points, and does not specifically use the PDH/PDL/PWH/PWL/PMH/PML points for calculation. Due to the limitations of the algorithm, the BSL/SSL automatically marked by the indicators will not be very accurate, please use it in combination with practical experience.

11. Premium/Discount Zones

ab -	
ab -----Premium/Discount zones-----	-----
➤ Show Premium/Discount Zones	true
➤ Show Label Text	true
🎨 Premium Zone Color	252,224,230
🎨 Equilibrium Zone Color	210,215,219
🎨 Discount Zone Color	211,241,225
ab -	

Please read the Order Flow Strategies chapter in the SMC article shared on the Indicators page, which covers value balancing.

Here, the indicator uses recent swing highs/lows as parameters for calculating premium and discount zones.



12. Previous Day/Week/Monthly High/Low and Previous Day Open/Close

ab -	
ab -----Previous Day/Week/Monthly High/Low-----	-----
👉 Show daily high/low	true
👉 Show Label text	true
👉 Auto Extend to left	false
🎨 Line Color for daily	■ DarkBlue
☰ Line Style	Dash
01 Line Width	1
👉 Show weekly high/low	false
👉 Show Label text	true
👉 Auto Extend to left	false
🎨 Line Color for weekly	■ DarkBlue
☰ Line Style	Dash
01 Line Width	1
👉 Show Monthly high/low	false
👉 Show Label text	true
👉 Auto Extend to left	false
🎨 Line Color for monthly	■ DarkBlue
☰ Line Style	Dash
01 Line Width	1
ab -	
ab -	
ab -----Previous Day Open/Close-----	-----
👉 Show previous day open/close	true
👉 Show Label text	true
👉 Auto Extend to left	false
🎨 Line Color for PDO/PDC	■ DarkBlue
☰ Line Style	Dash
01 Line Width	1
ab -	



By default, the indicator uses a Dash line to mark these important positions on the right side of the current Candle. Users can set the style, width and color of this line segment. The indicator also supports setting to automatically extend the line to the left by a certain distance. Assuming it is PDH, then if Auto extend to left is set to true, the indicator will automatically extend the line of PDH to the left by a distance of one day.

13. Market Time Session

ab -	
ab -----Market Time Session-----	-----
👉 Show Market Time Session	true
01 Number of Each Market Time Session to display(0 means all)	1
🔗 Time Session Rectangle color for opening market	■ Tomato
🔗 Time Session Rectangle color for closed market	■ DarkGray
01 Time Session label font size	6
👉 Show London Time Session	false
👉 Show Frankfurt Time Session	false
👉 Is European Summer Time	true
👉 Show Tokyo Time Session	false
👉 Show Sydney Time Session	false
👉 Show New York Time Session	false
👉 Is US Summer Time	true
ab -----	-----
👉 Show Tokyo Open Price	false
👉 Show Sydney Open Price	false
👉 Show London Open Price	false
👉 Show Frankfurt Open Price	false
👉 Show NewYork Open Price	false
🔗 Open Line Color	■ DarkBlue
01 Open Line Width	3
ab -----	-----
👉 Show Time Session Panel at top left corner	true
📄 Time Session Panel Corner	Left upper chart corner
🔗 Panel text color	■ Blue
🔗 Panel text color for market opening	■ Red
ab -	

This function automatically marks the specified foreign exchange market trading time session on the chart for the user. The indicator uses a dotted rectangular box to mark the start and end ranges of a given forex market as well as the high and low points during the trading hours of this market. 5 major foreign exchange market time sessions for users to choose from. London, Frankfurt, Tokyo, Sydney, New York. If your time zone is the European time zone, Is European Summer Timer sets whether it is currently European summer time. If your time zone is US Time, Is US Summer Time sets whether it is currently US Summer Time.



Users can choose whether to display the opening price of each foreign exchange market according to their needs. By default, it will be marked by a thicker line. Users can set the line width and line color.



Show Time Session Panel at top left corner sets whether to display the Time Session Panel, and can be set to display the Time Session Panel at the four corners of the chart.



14. NY Midnight Open

ab -	
ab -----NY Midnight Open-----	-----
↗ Show NY Midnight Open	false
↗ Show NY Midnight VLine	true
☰ NY Midnight VLine style	Dot
⊗ NY Midnight VLine color	DarkTurquoise
☰ NY Midnight HLine style	Dashdot
⊗ NY Midnight HLine color	DarkTurquoise
ab -	



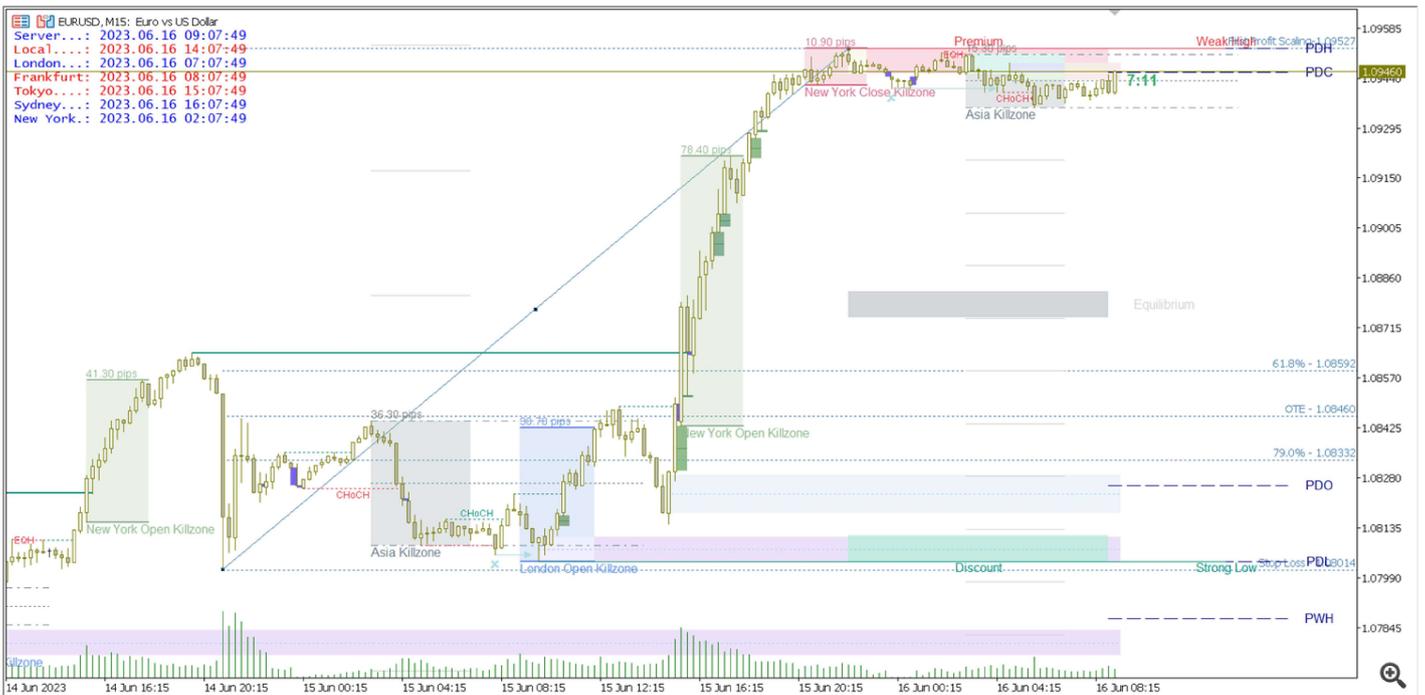
This function automatically draws the opening price of ICT New York midnight and the vertical dividing line at that time for the user.

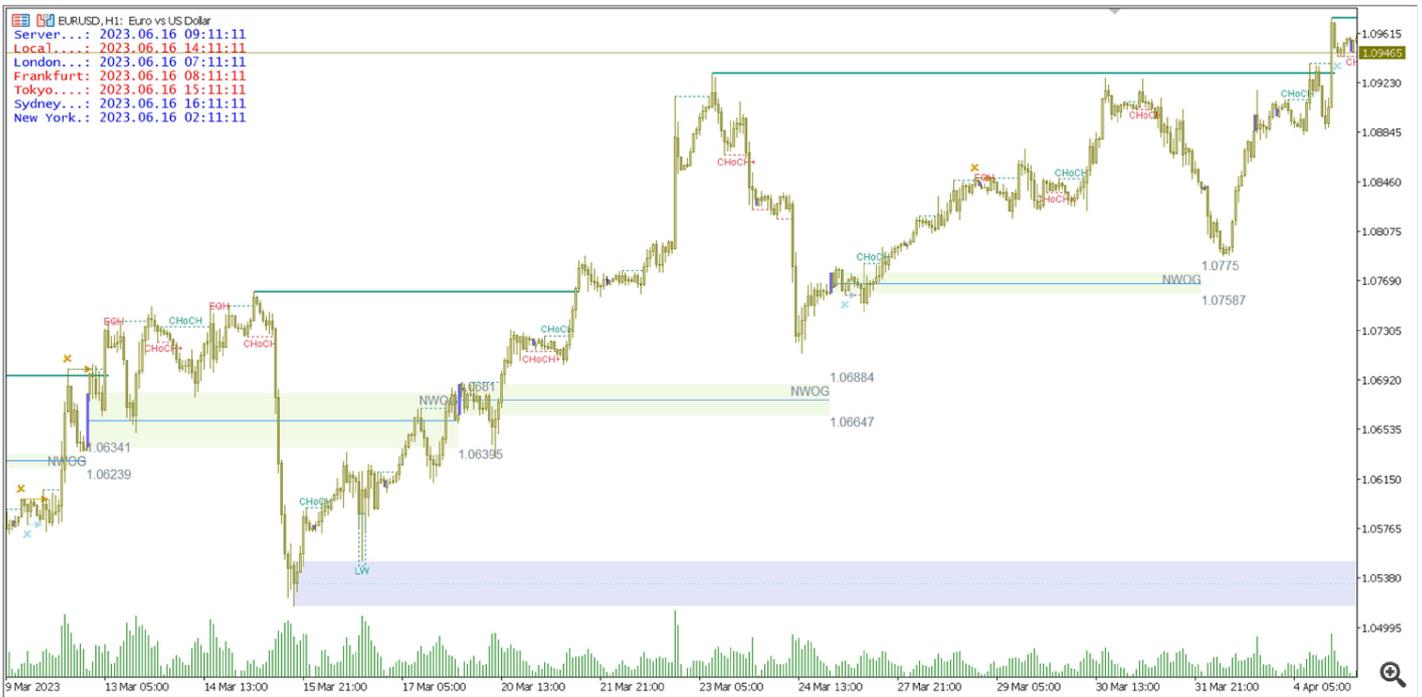
The price at 12 o'clock in the morning of New York time is a position that intraday traders are very concerned about . If the price trades above this position, it can be considered Bullish. If the price trades below this position, it can be considered Bearish.



15. Asian Range(Asia Killzone), London Open Killzone, London Close Killzone, New York Open Killzone, New York Close Killzone

ab -	
ab -----Asian Range(Asia Killzone)-----	-----
👉 Show Asian Range	true
👉 Show Asian Range Label Text	true
ab Customize Asian Range Label Text	Asia Killzone
01 Number of Asian Box to display(0 means all)	1
👉 Show Asian Prediction Lines	true
👉 Using Standard Definitions(8pm to 12am EST)	true
ab If the option above is set to false	Please customize the start and end times below:
ab Asian Range Begin	02:00
ab Asian Range End	06:00
🔗 Asian Range Box Color	<input type="color" value="#D3D3D3"/> 227,231,234
🔗 Asian Range Line Color	<input type="color" value="#696969"/> SlateGray
01 Asia Max Favourable Range	40
🔗 Asian Range Prediction Lines Color	<input type="color" value="#D3D3D3"/> LightGray
ab -	
ab -----London Open Killzone-----	-----
👉 Show London Killzone	true
👉 Show London Killzone Label Text	true
ab Customize London Killzone Label Text	London Open Killzone
01 Number of London Killzone to display(0 means all)	1
👉 Using Standard Definitions(2am to 5am EST)	true
ab If the option above is set to false	Please customize the start and end times below:
ab London Killzone Begin	07:00
ab London Killzone End	10:00
🔗 London Killzone Box Color	<input type="color" value="#ADD8E6"/> 226,236,252
🔗 London Killzone high/low Line Color	<input type="color" value="#4169E1"/> CornflowerBlue
🔗 London Killzone high/low Line Style	Solid
01 London Killzone high/low Line Width	2
ab -	





17. Candle Timer

ab -	
ab -----Candle Timer-----	-----
👉 Show Candle Timer	true
01 Text Size	10
🎨 Text Color	MediumSeaGreen
🎨 Text Color Countdown	IndianRed
01 Text Shift Bars(Candle Location)	2
½ Text Shift Price(Candle Location)	0.0
👉 Enable Alarm when the Candle is going to finished	false
01 Set Countdown seconds for Candle Alarm	10
ab Sound Wav File	alert.wav
ab -	

This feature displays a candle countdown for the user in real time. Users can set the display position, horizontal direction (Bars Shift), vertical direction (Price Shift). An alarm can be set for the countdown, such as an alarm at the last 10 seconds.



18. Draw Candles By Trend

ab -	
ab -----Draw Candles by Trend-----	-----
↗ Draw Candles by Trend	false
🔗 Bull Candles Color	LightGray
🔗 Bear Candle Color	SlateGray
ab -	

This function judges whether the current trend is bullish or bearish according to the internal structure. If it is bullish, then all candles will be colored with bull color, if it is bearish, all candles will be colored with bear color.



19. Alerts

Variable	Value
ab -	
ab -	
ab -----Alerts-----	-----
👉 Alert when Bullish CHoCH formed	false
👉 Alert when Bullish BOS formed	false
👉 Alert when Bearish CHoCH formed	false
👉 Alert when Bearish BOS formed	false
👉 Alert when Internal Bullish CHoCH formed	false
👉 Alert when Internal Bullish BOS formed	false
👉 Alert when Internal Bearish CHoCH formed	false
👉 Alert when Internal Bearish BOS formed	false
ab -----	-----
👉 Alert when Internal Bullish CHoCH+ formed	false
👉 Alert when Internal Bearish CHoCH+ formed	false
👉 Alert when Bullish CHoCH+ formed	false
👉 Alert when Bearish CHoCH+ formed	false
ab -----	-----
👉 Alert when Internal Bullish OB formed	false
👉 Alert when Internal Bearish OB formed	false
👉 Alert when Bullish OB formed	false
👉 Alert when Bearish OB formed	false
ab -----	-----
👉 Alert when Internal Bullish OB break	false
👉 Alert when Internal Bearish OB break	false
👉 Alert when Bullish OB break	false
👉 Alert when Bearish OB break	false
ab -----	-----
👉 Alert when Internal Bullish OB touched	false
👉 Alert when Internal Bearish OB touched	false
👉 Alert when Bullish OB touched	false
👉 Alert when Bearish OB touched	false
½ OB Touch threshold(minval=0, maxval=1, step=0.1)	0.2
ab -----	-----
👉 Alert when Bullish Breaker Block formed	false
👉 Alert when Bearish Breaker Block formed	false
ab -----	-----

Variable	Value
 Alert when Bullish Breaker Block formed	false
 Alert when Bearish Breaker Block formed	false
ab -----	-----
 Alert when Supply OB formed	false
 Alert when Demand OB formed	false
 Alert when Supply OB break	false
 Alert when Demand OB break	false
 Alert when Supply OB touched	false
 Alert when Demand OB touched	false
$\frac{1}{2}$ Supply&Demand OB Touch threshold(minval=0, maxval=1, ste...	0.2
ab -----	-----
 Alert when EQH formed	false
 Alert when EQL formed	false
 Alert when Swing High formed	false
 Alert when Swing Low formed	false
ab -----	-----
 Alert when Bullish FVG formed	false
 Alert when Bearish FVG formed	false
 Alert when Bullish FVG filled	false
 Alert when Bearish FVG filled	false
 Alert when Bullish FVG touched	false
 Alert when Bearish FVG touched	false
$\frac{1}{2}$ FVG Touch threshold(minval=0, maxval=0.5, step=0.1)	0.2
ab -----	-----
 Alert when Liquidity Voids formed	false
 Alert when Liquidity Voids filled	false
ab -----	-----
 Alert when Bullish LW formed	false
 Alert when Bearish LW formed	false
 Alert when Bullish LW filled	false
 Alert when Bearish LW filled	false
ab -----	-----
 Alert when BSL Taken	false
 Alert when SSL Taken	false
ab -----	-----
 Alert when Previous Day High touched	false

Variable	Value
👉 Alert when Liquidity Voids formed	false
👉 Alert when Liquidity Voids filled	false
ab -----	-----
👉 Alert when Bullish LW formed	false
👉 Alert when Bearish LW formed	false
👉 Alert when Bullish LW filled	false
👉 Alert when Bearish LW filled	false
ab -----	-----
👉 Alert when BSL Taken	false
👉 Alert when SSL Taken	false
ab -----	-----
👉 Alert when Previous Day High touched	false
👉 Alert when Previous Day Low touched	false
½ PDH/PDL Touch threshold(minval=0, maxval=0.5, step=0.1)	0.2
ab -----	-----
👉 Alert when Fibo-Retracement-OTE touched	false
ab -----	-----
👉 Alert when Bullish Strong Imbalance formed	false
👉 Alert when Bearish Strong Imbalance formed	false
ab -----	-----
👉 Alert when Price Touch Premium Zone	false
👉 Alert when Price Touch Discount Zone	false
ab -----Alerts to mobile-----	-----
👉 Alert to your MT4/5 mobile device	false
ab To realize this function you need:	
ab 1.MetaQuotes IDs are specified.	(Tools->Options->Notifications->MetaQuotes ID)
ab 2.Enable Push Notifications.	(Tools->Options->Notifications->Enabel Push Notifications)
ab -----	-----
ab -----Alerts to Email-----	-----
👉 Alert to your Email address	false
ab To realize this function you need:	
ab 1.Enable Email Notifications.	(Tools->Options->Email->Enable Email Notifications)
ab 2.Setup an Email Account at www.gmx.com.	Video tutorial: https://www.youtube.com/watch?v=ISomE8aFa2Q
ab 3.Enable access to GMX account via POP3 and IMAP.	GMX Email->Settings->POP3 & IMAP
ab 4.Fill in the mailbox information for sending mail.	(Tools->Options->Email->SMTP Server/SMTP login/SMTP psw/Fr...
ab -----	-----

Alerts centrally sets area, and will be prompted in the form of pop-up windows and alarms on the MT4/MT5 computer. If you want to send the opened reminder notification to the mobile terminal and to the specified email, please follow the instructions to set up Alerts to mobile and Alerts to Email.