Neural Agent v.AK-2.17.1
User Documentation

Breakfree Trading

Neural Agent Settings

Execution Settings

* Execution mode
Defines what types of orders to use in strategy. The available options are LIMIT_ORDERS and STEALTH. It is recommended to use LIMIT_ORDERS. In LIMIT_ORDERS mode, NA will operate with limit orders. In STEALTH mode, market orders will be used. The Stealth Mode market order could place the order slightly differently than the Limit Order mode due to data processing time delays. Hedging in STEALTH mode will use limit orders in any case. STEALTH mode can be used to decrease the number of requests to the MT server.

* Minimal points of price shift to modify orders
Define a minimal shift in price for SL, TP, or the open price to trigger the modify order functionality in NA. The Neural Bands on different timeframes are updated every minute, and based on this data, NA determines various order parameters such as SL, TP, and Open Price. To prevent unnecessary frequent updates in the bot, users can utilize this parameter. However, it's important to note that increasing this option will decrease the sensitivity of the bot. The default parameter is set at 3 points. For instance, if we consider EURUSD with 3 points, the corresponding value would be 0.00003. This means that any price change within this range will not trigger any order updates.

* Trailing TP pips
Enable or disable trailing stop functionality. If set to 0, the functionality is disabled. It is not recommended to use this feature in HEDGING mode. Instead, we recommend using the 'Lock position SL in Profit' functionality.

* Max positions on a time frame
Defines the number of orders to be placed within a single timeframe band. The default option is 1. Any additional orders will be placed with a shift within the band. The risk allocated for an instrument will be divided between all of these orders. It is not recommended to use more than 1 position on small timeframes such as 1 or 5 minutes because price fluctuations will likely trigger all of these orders in almost all cases.

* Skip orders smaller than minimum allowed size
You can enable or disable the functionality to skip orders that are smaller than the minimum size allowed by the broker. For instance, if you have a small account or if the risk allocated for an instrument results in an order size smaller than the minimum allowed, the order will not be placed if this functionality is turned on. However, if you switch off this functionality, the order will be placed with the minimum allowed size, but in doing so, you may exceed your defined risk.

For example, if the broker's defined minimum order size for an instrument is 0.01 lot and the calculated order size is 0.005 lot, and the "Skip orders smaller than minimum allowed size"

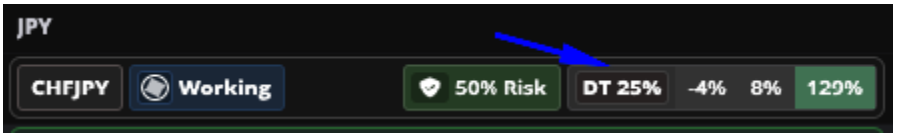
option is set to **true**, then the order will be skipped.

On the other hand, if the "Skip orders smaller than minimum allowed size" option is set to **false**, then the order will be placed with the minimum order size defined by the broker, which in this case would be 0.01 lot.

* Use Stop Loss
NA can operate without an SL, and the bot's logic will not rely on any specific static SL values (except in SCALPER mode). However, if you do require stops, you can simply switch them on.

Risk Settings

* Scale risk based on strength %
Defines the dedicated risk to be scaled according to the strength percentage of the specific instrument. For example, if you allocate 30% of your total account for trading (using the 'Total Risk Allocation Of Account' option in Navigator) and a maximum of 12% for each instrument (using the 'Risk Each Market' option in Navigator), then the risk for the instrument will be 3.6% (12% of the dedicated 30%) of your account. If the 'Scale risk based on strength %' is **true,** additional calculations will be performed. NA will consider the instrument's strength, which is displayed on the Trend Index in BFT Navigator.



For instance, let's take CHFJPY as an example. The current total strength for CHFJPY is 25%. Therefore, the risk will be adjusted using the following logic: The 3.6% from the previous step will be multiplied by 25% of the strength value. This results in an adjusted risk of 0.9%.

adjusted risk = dedicated risk / 100 * total strength

* Lock position SL in Profit
With this option, the bot can lock in your profit by placing a stop loss in profitable positions when the price hits a certain level. For example:

A stop loss will be placed in a profitable position, ensuring that if the price reverses, the position will be closed with a profit. This functionality will work even if the 'Use Stop Loss' feature is switched off.

Trading Timeframes

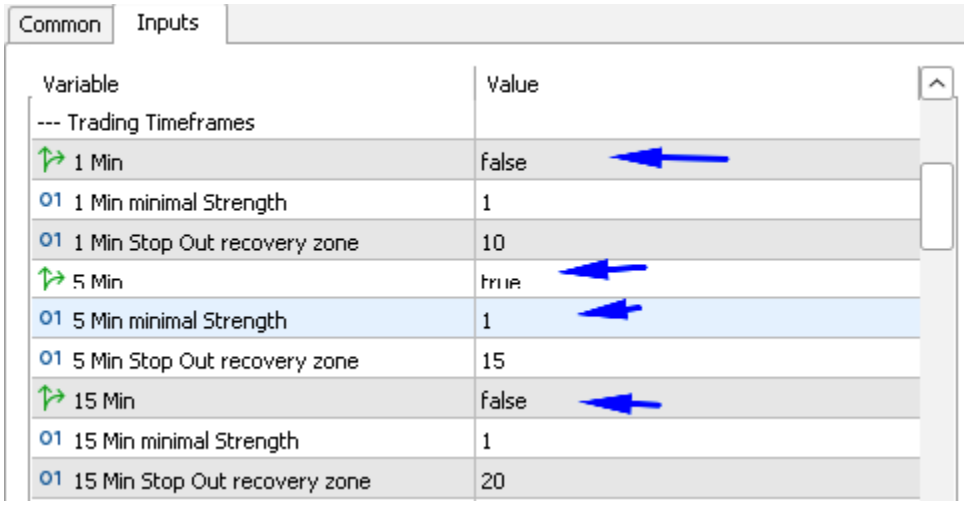
In this section, the user can configure which timeframes to trade on.

Variable	Value
--- Trading Timeframes	
1 Min	true
1 Min minimal Strength	3
1 Min Stop Out recovery zone	10
5 Min	false
5 Min minimal Strength	1
5 Min Stop Out recovery zone	15
15 Min	false
15 Min minimal Strength	1
15 Min Stop Out recovery zone	20

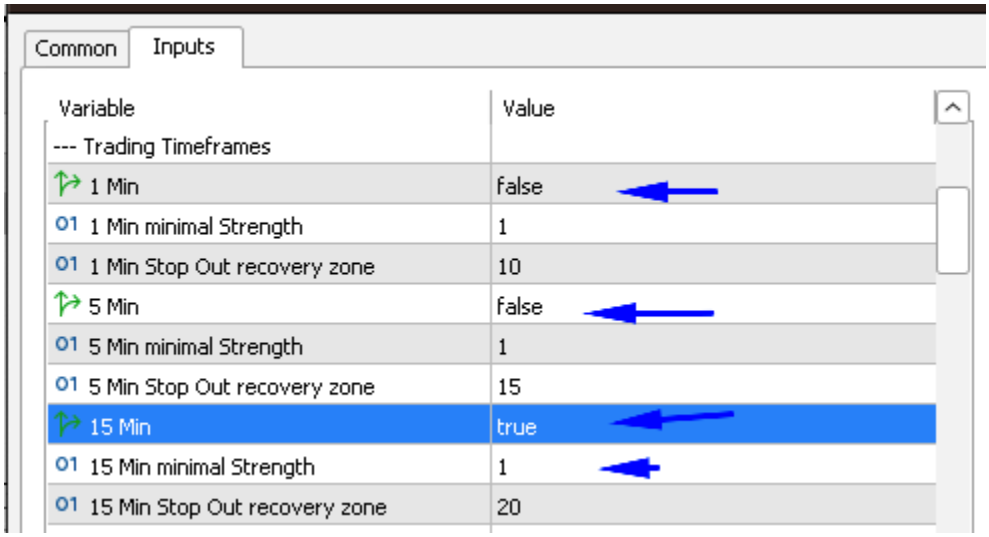
The user can configure three timeframe bands - 1 minute, 5 minutes, and 15 minutes - for trading. Based on the current settings provided above, only one timeframe will be used for trading. Each timeframe provides three options for configuration: whether to use the specific timeframe, the minimum instrument total strength required to start using that timeframe, and the recovery zone to be employed for hedging or in classic trading mode. By default, only the 1-minute timeframe is enabled, and trading on all other timeframes is inactive.

Example of usage:
To use a single timeframe (such as 1 minute, 5 minutes, or 15 minutes), you need to choose

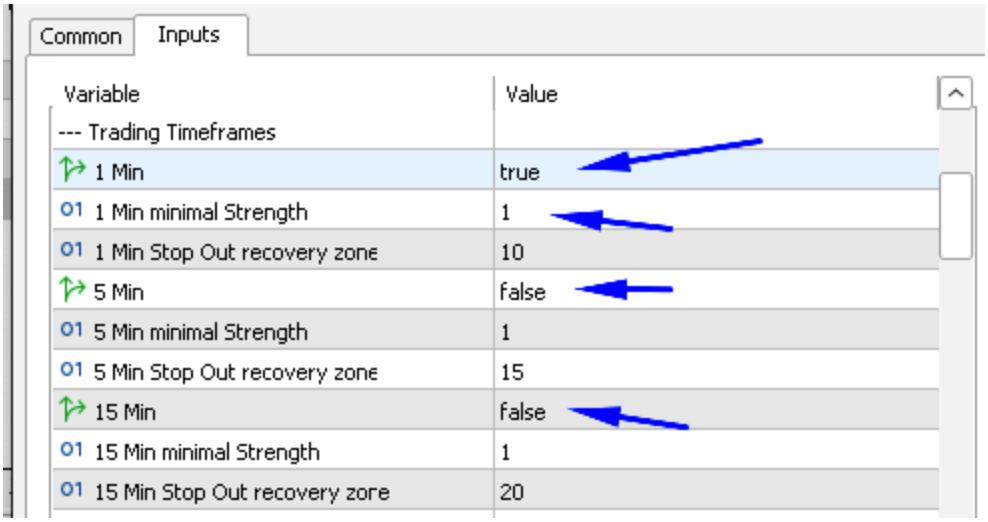
one of them and turn it on, set the minimum strength required to trigger trades on that timeframe and adjust the recovery zone if needed.



Using single 5 min timeframe with min strength 1%

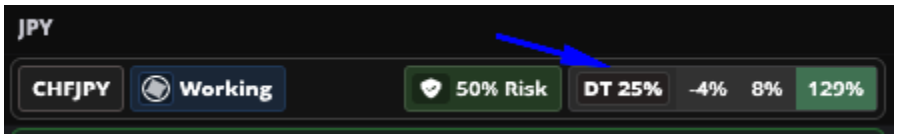


Using single 15 min timeframe with min strength 1%

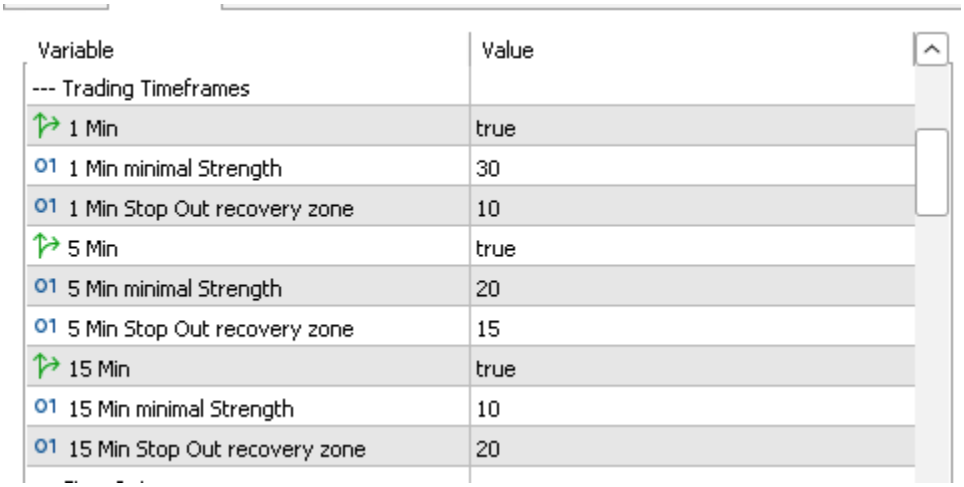


Using single 1 min timeframe with min strength 1%

Another option that can be configured is dynamic TF. Selection depends on the total instrument strength value. In this case, the user needs to switch on multiple timeframes that he wants and set a minimal strength level for each. As soon as the total strength of the instrument crosses the configured level, this timeframe will be tradable. The total strength can be seen in the Navigator trend index.



The idea of this is to trade highly trending markets on low timeframes and weak trending markets on higher timeframes.



Using multiple timeframes

In this example, all 3 timeframes are active. If the total strength of an instrument becomes higher than 30% then the 1 min timeframe will be activated to trade. If the total strength is lower than 30% but higher than 20% - the 5 min timeframe will be activated.

+30% - 1 min timeframe tradable
20-30% - 5 min timeframe tradable
10-20% - 15 min timeframe tradable
less than 10% - no timeframes are tradable

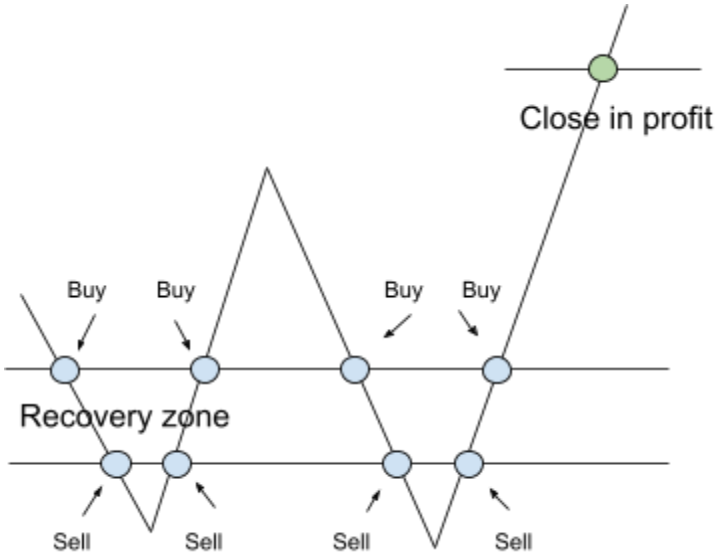
Timeframes must have a higher total strength requirement than all higher timeframes.

Stop Out

In stop out conditions, the user can configure when to start hedging in HEDGING mode or close the position to prevent a bigger loss in CLASSIC mode.

* Mode
Allows the user to change the algorithm stop out logic. Allowed values are HEDGING, CLASSIC and SCALPER. You can read about the specific modes separately below.

* Hedging max chain length
Define the maximum amount of orders that can be handled in the hedging chain. Works just in HEDGING mode. In hedging, every next order will be placed if the price crosses the recovery zone and this order will have a higher size.



Example of hedging chain with 7 hedge positions

* Hedge multiplier

Defines the multiplication of position sizes depending on the opposite position. 1.4 multiplication is the default. This means that all of the time, your hedged position will be at least 1.4 times larger than the opposite.

By changing this multiplier, you will automatically change the approximate price level shift that needs to be reached to close the hedge chain profit. When setting a higher multiplier, you need to understand that the size of the orders will be increased and you will need to monitor the free margin available in your account. For approximate calculation of next order size in chain you can just multiply previous order size on 'Hedge multiplier' value. For approximate calculation of price level required to close hedge chain in profit you can use next formula:

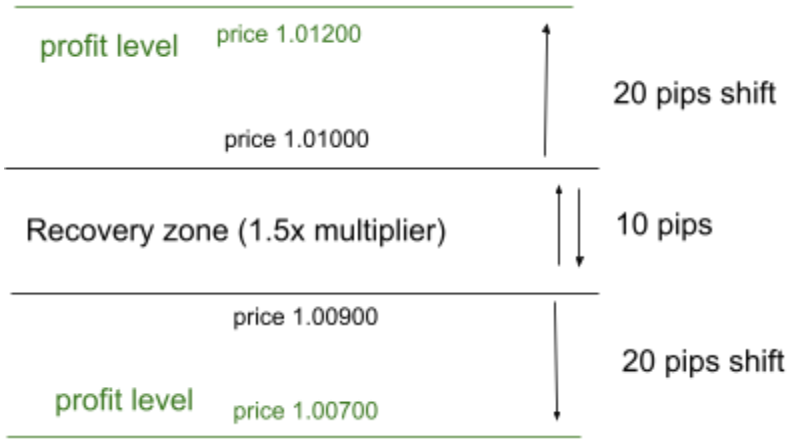
shift = 1 / (hedge_multiplier - 1)
price_level = recovery_zone ± (recovery_zone_pips * shift)

Examples:

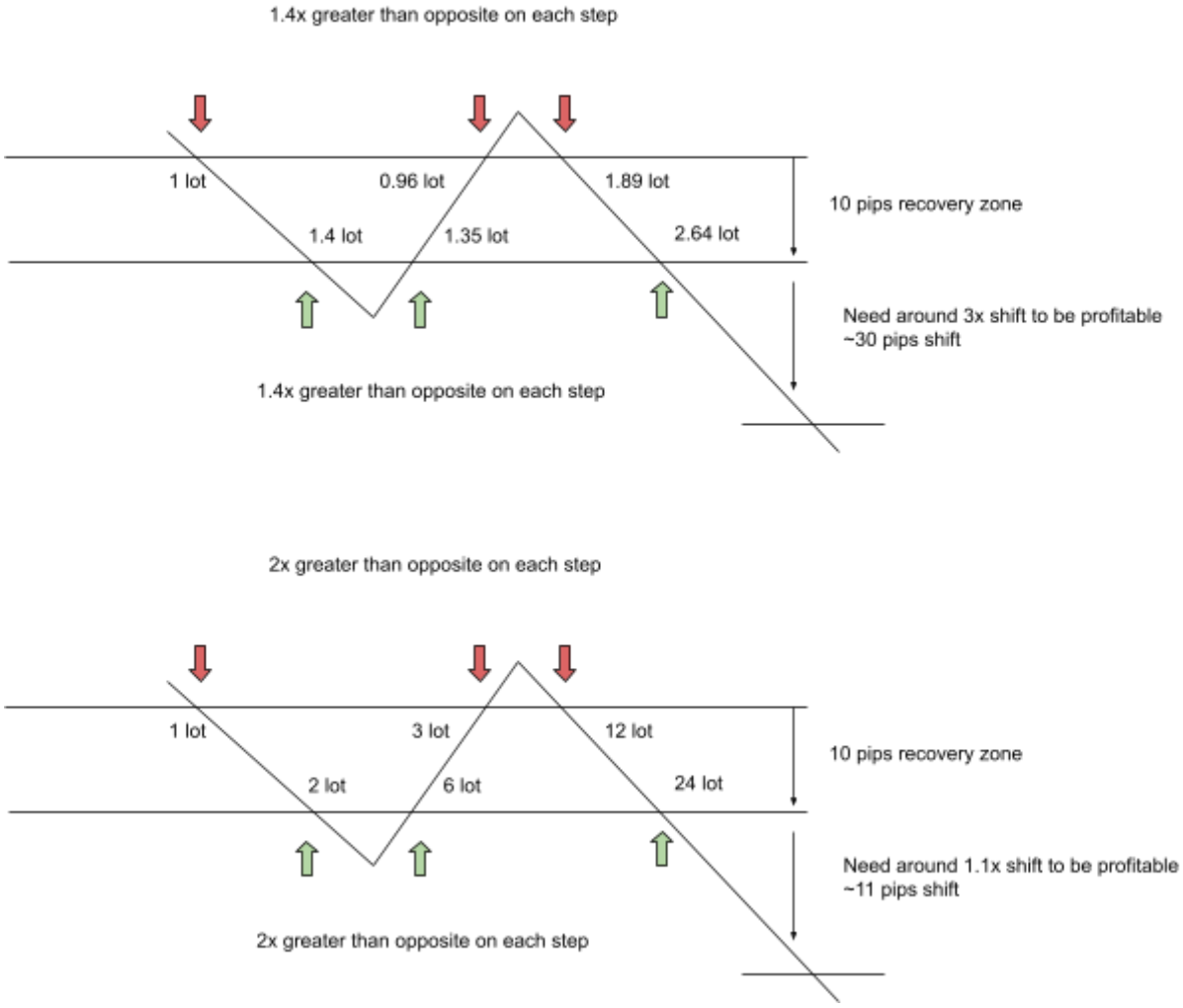
hedge_multiplier = 1.4;
recovery_zone = 10 pips;
shift = 1 / (1.4 - 1) = 2.5 times;

Shift from top or bottom of recovery zone must be at least 2.5 times greater than recovery zone itself, 10 pips * 2.5 = 25 pips.

hedge_multiplier = 1.5;
recovery_zone = 10 pips;
shift = 1 / (1.5 - 1) = 2 times;



Example of position size change with 1.4x and 2x multipliers



* Count Swap In Hedge PNL

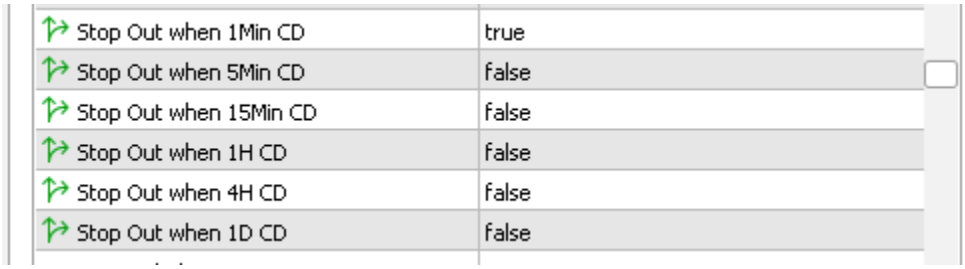
During the hedging process, NA calculates the profitability of all positions in the chain and closes it when the summary of profits and losses give a positive value. This option gives the ability to add swap fees in this calculation. But if positions are running for a long period of time, profits will not be able to cover swap commissions. By default it is switched off.

* Close positions by opposite

Gives the ability to close positions by opposite positions. Saves part of commission and is not sensitive to spread. Switched on by default.

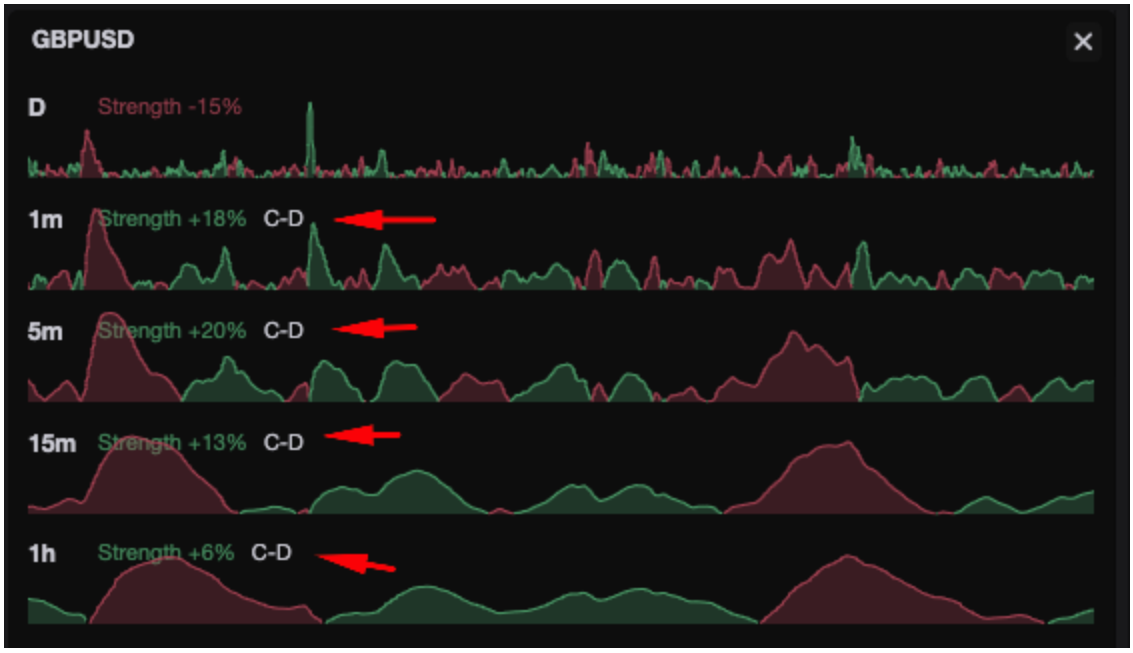
* Stop Out rules

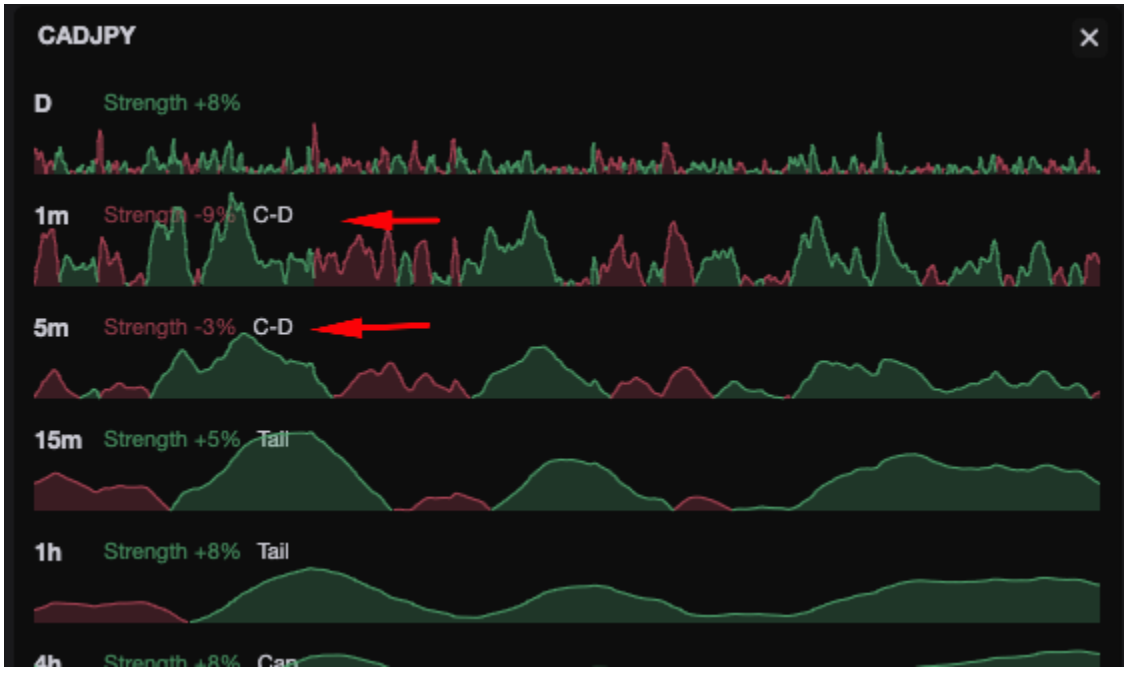
Defines when to start hedging or close position in CLASSIC mode.

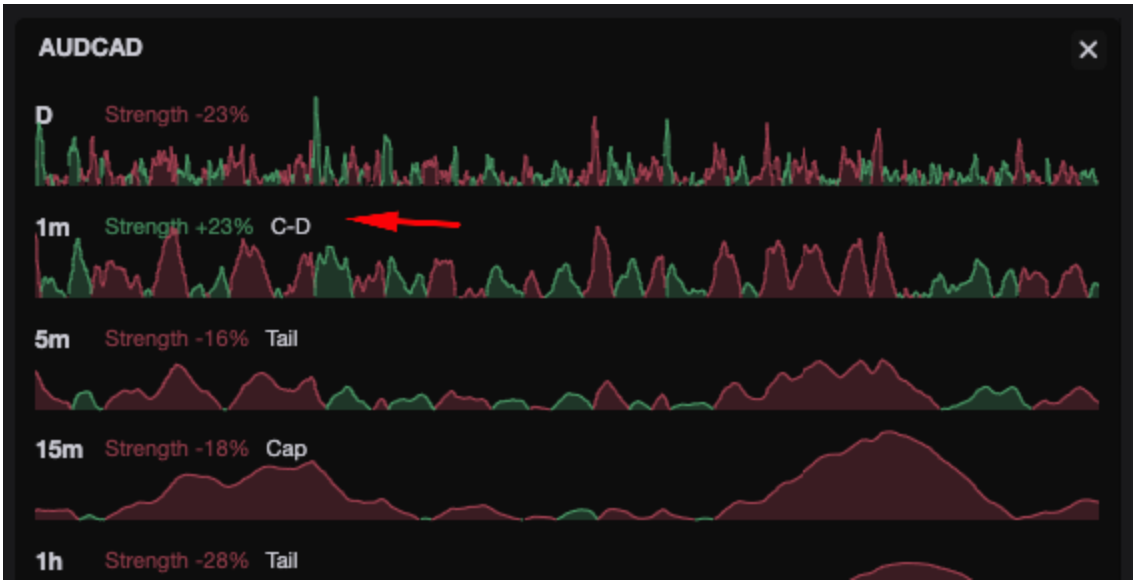


By combining these options, users can define the moment when NA will start to hedge. CD - means counter drive, so this is a combination of counter drive state(s) on different timeframes. You can see the states of specific timeframes in the trend index in Navigator. This parameters combining with AND condition.

If 1 Min CD, 5 Min CD, 15 Min CD are selected - then all these timeframes must be in counter drive to fit these conditions and start hedging/closing ([1 Min CD] AND [5 Min CD] AND [15 Min CD]). If at least one of them is in counter drive, conditions will not be met.

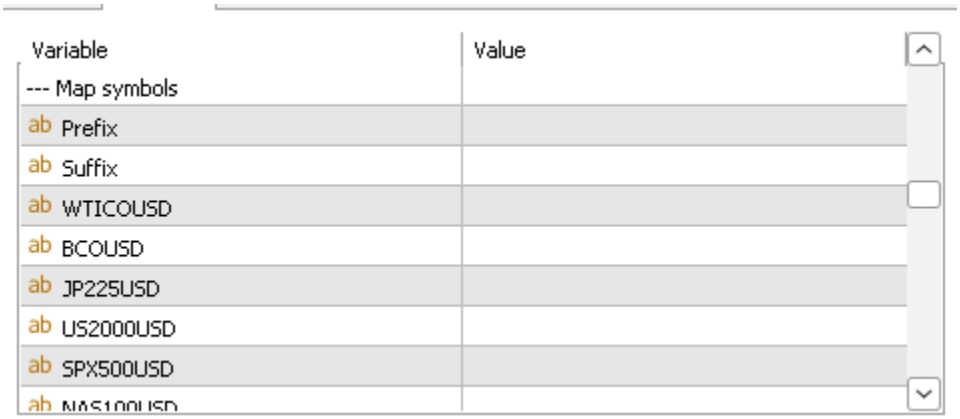

GBPUSD
D
Strength -15%
1m
Strength +18%
C-D
5m
Strength +20%
C-D
15m
Strength +13%
C-D
1h
Strength +6%
C-D


CADJPY
D
Strength +8%
1m
Strength -9%
C-D
5m
Strength -3%
C-D
15m
Strength +5%
Tail
1h
Strength +8%
Tail



If an instrument is active in the trend index but stop out conditions are true, NA will not place an order at this moment of time.

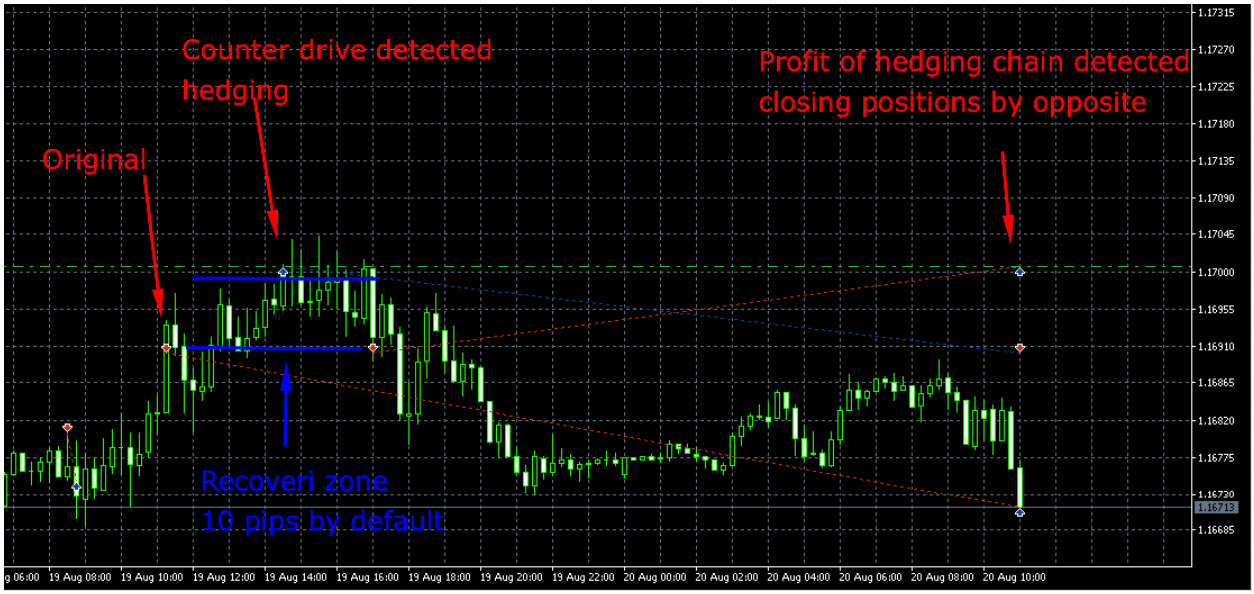
Map Symbols



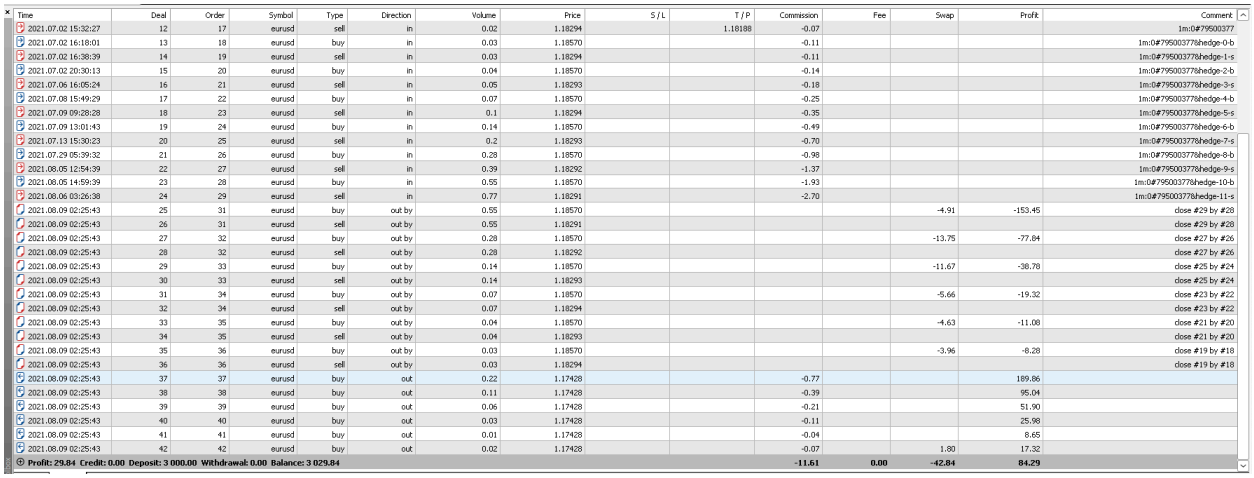
Gives users the ability to map instruments to specific broker instrument formats. Can be mapped one by one, or if the broker uses a specific suffix or prefix for all instruments, it can be set that way also.

Hedging mode

In general, this mode uses classic hedging logic with specific settings that users can change like: ‘Stop Out’ Condition (when to start hedge), ‘Minimal Stop Out recovery zone’ in pips for different timeframes and ‘Hedge multiplier’.



The general logic is simple - when the market reverses, we place an opposite position with higher size. NA does not use SL/TP for hedge positions, it summarizes profits and losses and closes the positions when profits are greater than losses. NA leaves ~0.04% of each profits for commissions. If the hedging chain is corrupted - one of the positions is closed manually for example, all the chain will be closed by the bot automatically. If the user uses the 'Use Stop Loss’ option in NA settings, SLs and TPs will be placed with shift behind expected close levels. Not using a static SL/TP was a decision to prevent SL/TP hits in cases of high spread that can cause losses.
We recommend not using high dedication of account risk for 1 instrument to leave free margin for hedging positions. 30-40% of account balance dedication and 10-12% for each instrument. For small positions hedging logic will work correctly, it will round up position size on each step and try to handle expected hedging multiplier value. Example of hedging positions for small orders:

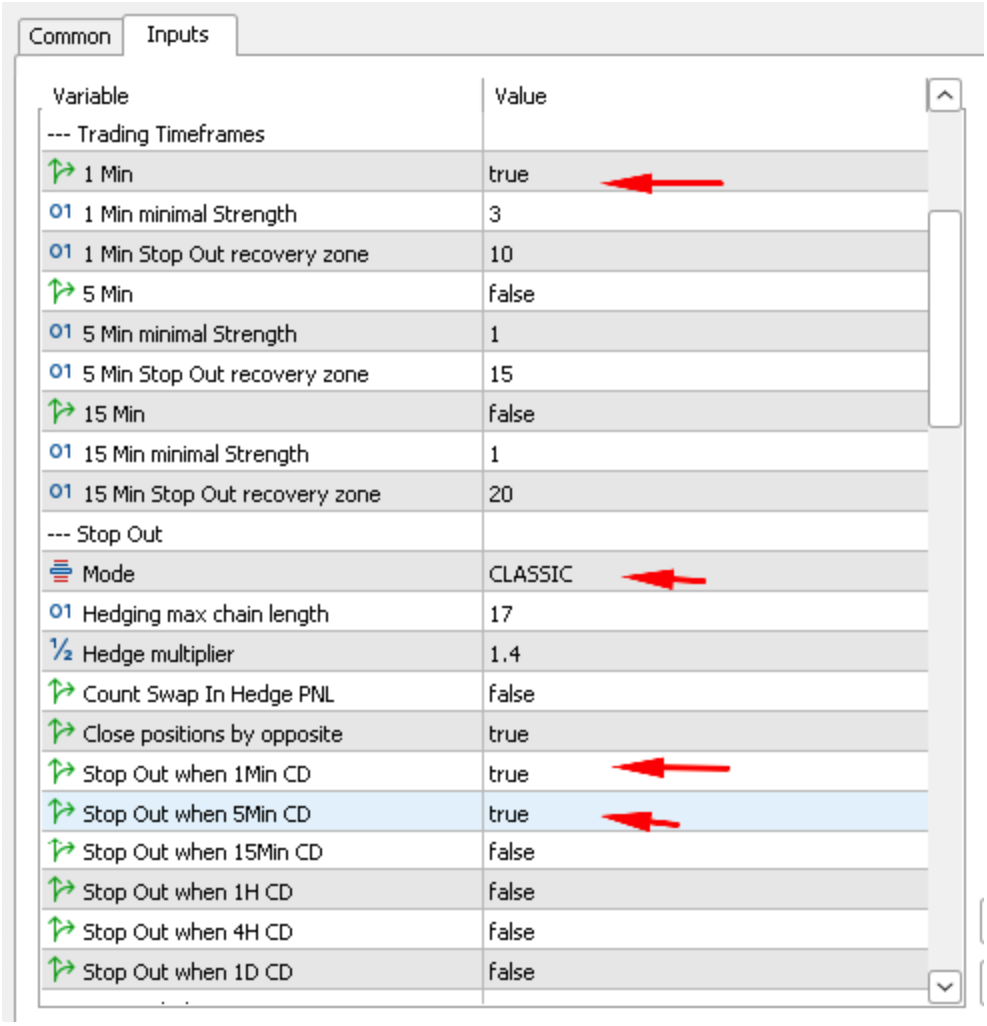


Time	Deal	Order	Symbol	Type	Direction	Volume	Price	S / L	T / P	Commission	Fee	Swap	Profit	Comment
2021.07.02 15:32:27	12	17	eurusd	sell	in	0.02	1.18294		1.18188	-0.07				1m:0#79500377
2021.07.02 16:18:01	13	18	eurusd	buy	in	0.03	1.18570			-0.11				1m:0#795003778hedge-0-b
2021.07.02 16:38:39	14	19	eurusd	sell	in	0.03	1.18294			-0.11				1m:0#795003778hedge-1-s
2021.07.02 20:30:13	15	20	eurusd	buy	in	0.04	1.18570			-0.14				1m:0#795003778hedge-2-b
2021.07.06 16:05:24	16	21	eurusd	sell	in	0.05	1.18293			-0.18				1m:0#795003778hedge-3-s
2021.07.08 15:49:29	17	22	eurusd	buy	in	0.07	1.18570			-0.25				1m:0#795003778hedge-4-b
2021.07.09 09:28:28	18	23	eurusd	sell	in	0.1	1.18294			-0.35				1m:0#795003778hedge-5-s
2021.07.09 13:01:43	19	24	eurusd	buy	in	0.14	1.18570			-0.49				1m:0#795003778hedge-6-b
2021.07.13 15:30:23	20	25	eurusd	sell	in	0.2	1.18293			-0.70				1m:0#795003778hedge-7-s
2021.07.29 05:39:32	21	26	eurusd	buy	in	0.28	1.18570			-0.98				1m:0#795003778hedge-8-b
2021.08.05 12:54:39	22	27	eurusd	sell	in	0.39	1.18292			-1.37				1m:0#795003778hedge-9-s
2021.08.05 14:59:39	23	28	eurusd	buy	in	0.55	1.18570			-1.93				1m:0#795003778hedge-10-b
2021.08.06 03:26:38	24	29	eurusd	sell	in	0.77	1.18291			-2.70				1m:0#795003778hedge-11-s
2021.08.09 02:25:43	25	31	eurusd	buy	out by	0.55	1.18570					-4.91	-153.45	close #29 by #28
2021.08.09 02:25:43	26	31	eurusd	sell	out by	0.55	1.18291							close #29 by #28
2021.08.09 02:25:43	27	32	eurusd	buy	out by	0.28	1.18570					-13.75	-77.84	close #27 by #26
2021.08.09 02:25:43	28	32	eurusd	sell	out by	0.28	1.18292							close #27 by #26
2021.08.09 02:25:43	29	33	eurusd	buy	out by	0.14	1.18570					-11.67	-38.78	close #25 by #24
2021.08.09 02:25:43	30	33	eurusd	sell	out by	0.14	1.18293							close #25 by #24
2021.08.09 02:25:43	31	34	eurusd	buy	out by	0.07	1.18570					-5.66	-19.32	close #23 by #22
2021.08.09 02:25:43	32	34	eurusd	sell	out by	0.07	1.18294							close #23 by #22
2021.08.09 02:25:43	33	35	eurusd	buy	out by	0.04	1.18570					-4.63	-11.08	close #21 by #20
2021.08.09 02:25:43	34	35	eurusd	sell	out by	0.04	1.18293							close #21 by #20
2021.08.09 02:25:43	35	36	eurusd	buy	out by	0.03	1.18570					-3.96	-8.28	close #19 by #18
2021.08.09 02:25:43	36	36	eurusd	sell	out by	0.03	1.18294							close #19 by #18
2021.08.09 02:25:43	37	37	eurusd	buy	out	0.22	1.17428			-0.77			189.86	
2021.08.09 02:25:43	38	38	eurusd	buy	out	0.11	1.17428			-0.39			95.04	
2021.08.09 02:25:43	39	39	eurusd	buy	out	0.06	1.17428			-0.21			51.90	
2021.08.09 02:25:43	40	40	eurusd	buy	out	0.03	1.17428			-0.11			25.98	
2021.08.09 02:25:43	41	41	eurusd	buy	out	0.01	1.17428			-0.04			8.65	
2021.08.09 02:25:43	42	42	eurusd	buy	out	0.02	1.17428			-0.07		1.80	17.32	
Profit: 29.84 Credit: 0.00 Deposit: 3 000.00 Withdrawal: 0.00 Balance: 3 029.84										**-11.61**	**0.00**	**-42.84**	**84.29**	

‘Minimal Stop Out recovery zone’ determines minimal shift between position’s open price and current price. For example if Stop Out conditions already true - but price hasn’t moved outside recovery zone, hedging will not start - this is prevent placing opposite positions too near to the original and cause price bouncing inside ‘zone’ and causing a long hedging chain

Classic mode

Using the same logic to determine stop out conditions as hedging mode - but instead of placing the opposite position, it just closes the original position in loss.The same ‘Stop Out’ Condition (when to close position), ‘Minimal Stop Out recovery zone’ in pips is applied to this mode. ‘Minimal Stop Out recovery zone’ gives some space to play out for position in this mode and possibly to return to expected trend. Can be used with small accounts that do not have enough margin to handle hedging. Recommended settings - use 1 Min band to trade and a combination of 1 Min CD + 5 Min CD for stop out. This combination gives a positive PNL during backtest.



Scalper mode

In SCALPER trading mode, limit orders are placed on the support or resistance bands based on the instrument's trend. Take profit (TP) is set at the level of the opposite band. The stop loss (SL) is calculated by measuring the distance between the open price and TP. If the market is in an uptrend, a buy order is placed on the support level with TP set at the resistance level. Conversely, if the market is in a downtrend, a sell order is placed on the resistance level with TP set at the support level. It is recommended to use this mode with small accounts and on 5-minute or 15-minute timeframes. This mode incorporates a "Stop Out" condition to prevent trading in counter-trending markets.


USDJPY, M1: US Dollar vs Japanese Yen
TP
BUY 0.01 at 148.010
SL


Search market
1m
USDJPY - USD vs JPY - Oanda
Breakfree Trading | Neural Mode
Trading Sessions
TP
R
N
Entry
S [7%]
SL
S 5M
1x
1x
148.222
148.184
148.163
148.139
148.115
148.105
148.070
148.056
148.032
148.018
147.974
147.950
147.920
147.879