/// Strat 13 Bot Info Doc by maxcalcroft

Preface:

- **This has been developed purely thanks to Krown and a love of trading. It is free but I do ask you follow the considerations below.**

- *I will be building more bots for the other strats in the future and possibly doing contract work for custom indicators or trading bots if there's interest*

Where to access bot:

''Insert link here once completed''
- Add to favourite indicators

How to set the bot up:

There are many variations you can make for the bot so please experiment. Anything changed in settings will affect how the alert fires and hence when orders are placed. The bot is very 'plug and play' as I tried to make it as simple to use as possible without going into Pinescript and coding but for more advanced use I would recommend studying features on Alertatron and understanding some Pinescript to get the most out of it.

/// IMPORTANT POINTS ///

- /// There are three recommended templates for settings based on trading preference but <u>results are not indicative of future performance</u>. As always adding a trend filter will increase performance in counter trend markets and in the long term.

- /// The base strategies did not perform well back at 16k using a static SL and TP without PMARP exit optimisation when market was sideways so be aware that settings will need changing and experimenting with over time

- /// Settings for leverage and amount should be changed for personal preference. Currently leverage is set to 2.85 for a max loss per trade of around 2% (Understand that leverage only needs changing if you are using 100% equity per trade in order to auto-compound, otherwise

use a fixed contract size and static leverage of 100 or 50x for example and work out your loss per trade that way) —— Details on how to input the amount you want to trade are found below

/// Templates

Best for Hit Rate and Profit Factor: (Ideal for leaving with limited interaction but less return over time) Jan 23-March 5

Stats: Net profit: **21.58**%, **91.67**% HR, **48** Trades, **7.932** Profit Factor, Average Trade Time: **2hrs, 55Mins**

- [x] Short
- [x] Only Confirmed Candles
- [x] No More Signals For # Bars | 2

Signal Marker | Shape ⌄

Short Bar Color | 🟥

PRICE

Price Source | close ⌄

VOLUME

MA Length | 20

MA Type | SMA ⌄

Multiplier | 0.9 ⓘ

MOVING AVERAGES

Source | close ⌄

			Length		Type	
☐	MA 1	🟨	Length	21	Type	EMA ⌄
☐	MA 2	🟩	Length	55	Type	EMA ⌄
☐	MA 3	🟦	Length	100	Type	EMA ⌄
☐	MA 4	🟪	Length	377	Type	EMA ⌄
☐	MA 5	🟥	Length	63	Type	EMA ⌄
☐	MA 6	🟦	Length	165	Type	EMA ⌄
☐	MA 7	⬜	Length	500	Type	EMA ⌄
☐	MA 8	🟧	Length	600	Type	EMA ⌄

Source [close ▾]   Basis Type [SMA ▾]

Length [13]   Lookback [252]

MA Type [SMA ▾]   MA Length [5]

PMAR ENTRY CONDITIONS

Source [close ▾]   Lookback [100]

PMAR Length [55]   MA Type [EMA ▾]

Signal MA Type [SMA ▾]   PMAR SignalLength [20]

PMARP EXIT CONDITIONS

Source [close ▾]   Lookback [350]

PMAR Length [20]   MA Type [VWMA ▾]

Signal MA Type [SMA ▾]   PMAR SignalLength [20]

DAYS OFF

☑ Days Off
☑ Sunday
☐ Monday
☑ Tuesday
☐ Wednesday
☐ Thursday
☐ Friday
☑ Saturday

TIME OFF

☐ Time Off

Time Off   [05:00 🕐] — [13:00 🕐]

☐ Price Above   MA 1 ⌄

☐ Price Below   MA 1 ⌄

☑ Volume Above   Mult ⌄   ⓘ

☑ MA 1 < MA 2

☐ MA 2 < MA 3

☐ MA 3 < MA 4

☑ BBWP Min [0]   Max [90]

☑ BBWP MA Direction   Up ⌄

Indicator....   Price M... ⌄

☑ PMAR   Above ⌄   [1.0005]

☐ PMAR Crossing MA   Down ⌄
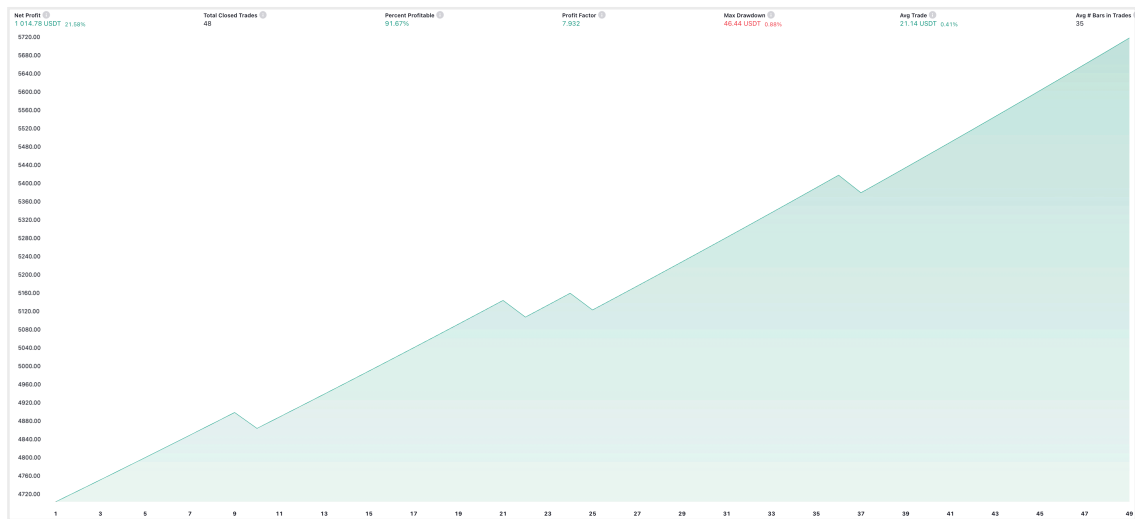
TREND FILTERS

☑ 1h Trend Filter ⓘ

☑ 3x4 Filter ⓘ

BOT EXIT PARAMETERS

☐ Use PMARP For Exit

PMARP Below: [15]

TP%   [0.49] ⓘ

SL%   [0.71] ⓘ

Best for Net Profit: (might not be viable in sideways or upside market) Jan 23-March 5

Stats: Net profit: **23.66**%, **85.29**% HR, **68** Trades, **4.001** Profit Factor, Average Trade time: **2hrs, 40 mins**

☑ Short

☑ Only Confirmed Candles

☑ No More Signals For # Bars   `2`

Signal Marker   `Shape ⌄`

Short Bar Color   ■

PRICE

Price Source   `close ⌄`

VOLUME

MA Length   `20`

MA Type   `SMA ⌄`

Multiplier   `1.5`   ⓘ

MOVING AVERAGES

Source   `close ⌄`

☐ MA 1   ■   Length `21`   Type `EMA ⌄`

☐ MA 2   ■   Length `55`   Type `EMA ⌄`

☐ MA 3   ■   Length `100`   Type `EMA ⌄`

☐ MA 4   ■   Length `377`   Type `EMA ⌄`

☐ MA 5   ■   Length `63`   Type `EMA ⌄`

☐ MA 6   ■   Length `165`   Type `EMA ⌄`

☐ MA 7   ☐   Length `500`   Type `EMA ⌄`

☐ MA 8   ■   Length `600`   Type `EMA ⌄`

Source [close ▾]   Basis Type [SMA ▾]

Length [13]   Lookback [252]

MA Type [SMA ▾]   MA Length [5]

PMAR ENTRY CONDITIONS

Source [close ▾]   Lookback [100]

PMAR Length [55]   MA Type [EMA ▾]

Signal MA Type [SMA ▾]   PMAR SignalLength [20]

PMARP EXIT CONDITIONS

Source [close ▾]   Lookback [350]

PMAR Length [20]   MA Type [VWMA ▾]

Signal MA Type [SMA ▾]   PMAR SignalLength [20]

DAYS OFF

☑ Days Off

☑ Sunday

☐ Monday

☑ Tuesday

☐ Wednesday

☐ Thursday

☐ Friday

☑ Saturday

TIME OFF

☐ Time Off

Time Off   [05:00 🕐] — [13:00 🕐]

SHORT CONDITIONS (AFFECTS WHEN SIGNAL FIRES)

☐ Price Above [MA 1 ⌄]

☐ Price Below [MA 1 ⌄]

☐ Volume Above [Mult ⌄] ⓘ

☑ MA 1 < MA 2

☐ MA 2 < MA 3

☐ MA 3 < MA 4

☑ BBWP Min [0] Max [90]

☑ BBWP MA Direction [Up ⌄]

Indicator.... [Price M... ⌄]

☑ PMAR [Above ⌄] [1.0005]

☐ PMAR Crossing MA [Down ⌄]

TREND FILTERS

☐ 1h Trend Filter ⓘ

☐ 3x4 Filter ⓘ

BOT EXIT PARAMETERS

☐ Use PMARP For Exit

PMARP Below: [15]

TP% [0.49] ⓘ

SL% [0.71] ⓘ

Net Profit	Total Closed Trades	Percent Profitable	Profit Factor	Max Drawdown	Avg Trade	Avg # Bars in Trades
1 112.48 USDT 23.66%	68	85.29%	4.001	82.45 USDT 1.54%	16.36 USDT 0.31%	32
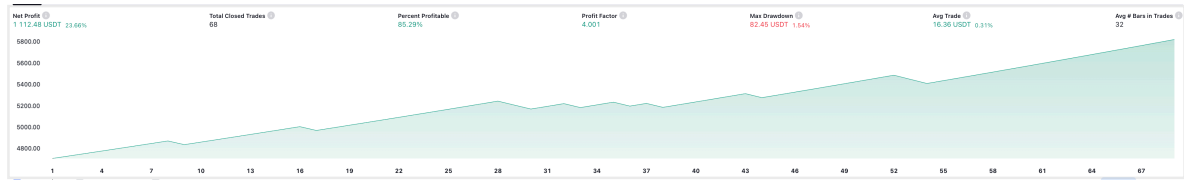
Best for sideways markets: 21 Nov - 23 Dec

Note: This was tested at 16k around Christmas for BTC. The templates above perform terribly during this time but using PMARP exit and accounting for lack of volatility the bot can still perform well)

Stats: Net profit: **3.47**%, **84.85**% HR, **33** Trades, **2.675** Profit Factor, Average Trade time: **70 mins**

- [ ] Price Above | MA 1 ▾
- [ ] Price Below | MA 1 ▾
- [x] Volume Above | Mult ▾ ⓘ
- [x] MA 1 < MA 2
- [ ] MA 2 < MA 3
- [ ] MA 3 < MA 4
- [ ] BBWP Min | 0 | Max | 90
- [x] BBWP MA Direction | Up ▾

Indicator.... | Price M... ▾

- [x] PMAR | Above ▾ | 1.001
- [ ] PMAR Crossing MA | Down ▾

TREND FILTERS

- [ ] 1h Trend Filter ⓘ
- [ ] 3x4 Filter ⓘ

BOT EXIT PARAMETERS

- [x] Use PMARP For Exit

PMARP Below: | 20

TP% | 0.21 ⓘ

SL% | 0.5 ⓘ

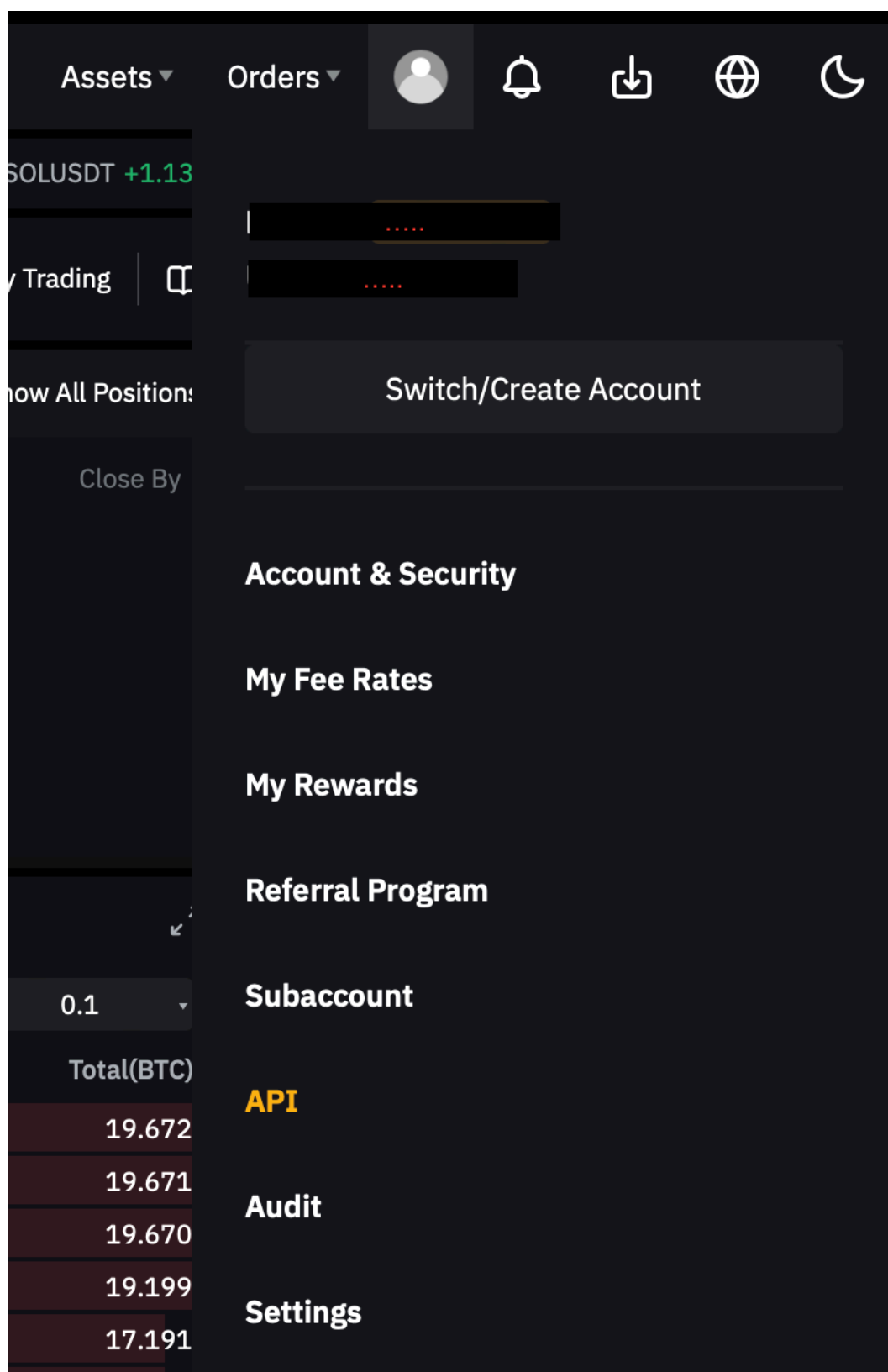| Net Profit	Total Closed Trades	Percent Profitable	Profit Factor	Max Drawdown	Avg Trade	Avg # Bars in Trades
347.29 USDT 3.47%	33	84.85%	2.676	179.66 USDT 1.79%	10.52 USDT 0.1%	14
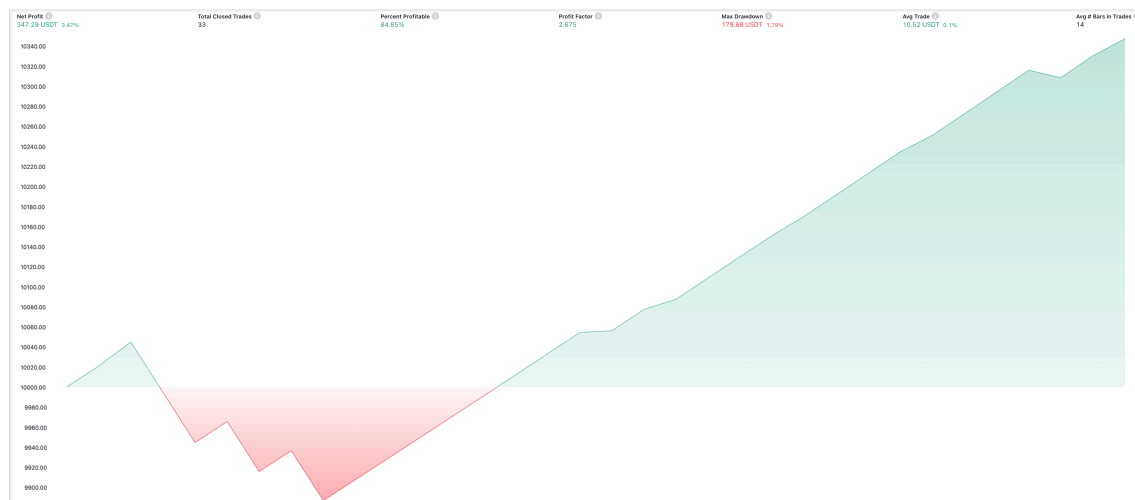
- **I would also recommend turning the bot off for economic events (pause the alert) and** limit its trading hours to waking hours using the 'time off' setting first so you can monitor its first few trades.

// How to get the bot running:

1. Go to alertatron.com and purchase the 29usd/month subscription
2. Go to your exchange and click API (using BYBIT as example)

Assets ▾   Orders ▾

SOLUSDT +1.13

Trading

ow All Positions

Close By

Switch/Create Account

Account & Security

My Fee Rates

My Rewards

Referral Program

Subaccount

API

Audit

Settings

0.1

Total(BTC)
19.672
19.671
19.670
19.199
17.191

3. Create a **System Generated API Key** and choose these settings below, also **WRITE DOWN API KEY AND SECRET**

Create New Key

API Key Usage

◯ API Transaction   ⦿ Connect to Third-Party Applications

Application Name ⓘ Only for the use of third-party channels, please confirm the authenticity of the third-party channels

Alertatron   ⌄

API Key Permissions
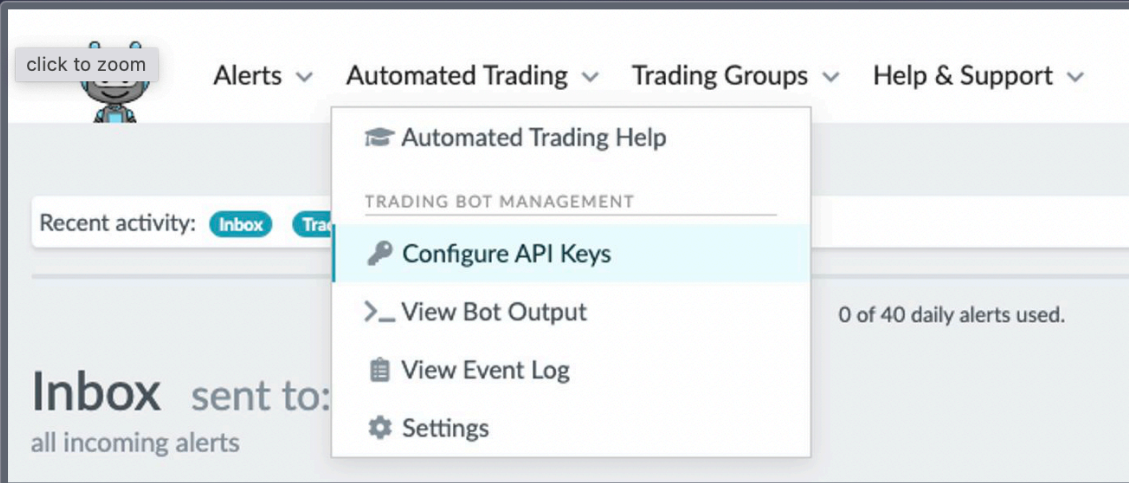
⦿ Read-Write   ◯ Read-Only

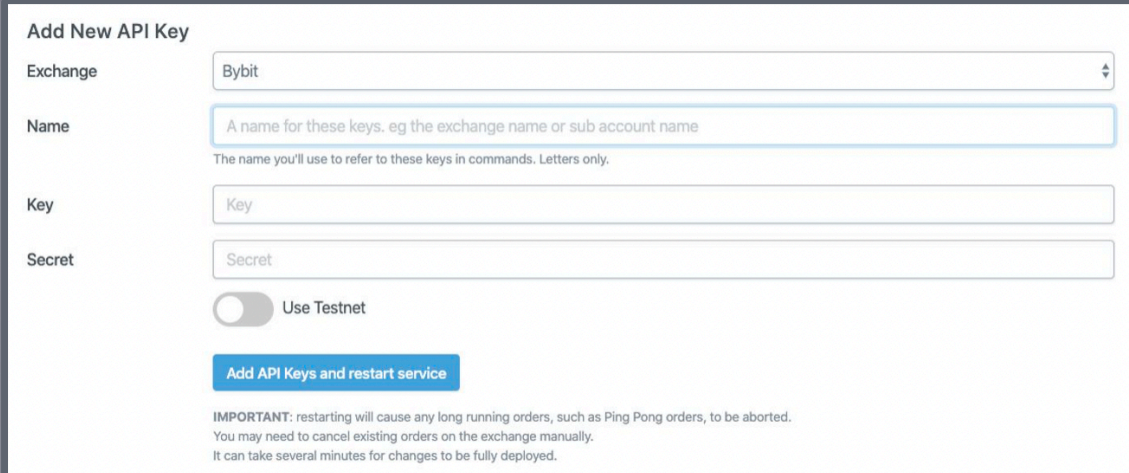| Type	☑	Permission	Read-Write
Contract	☑	Orders	Query order info; submit, modify or cancel orders (Derivatives)
	☑	Positions	Query positions info; modify margin balance, leverage and more (Derivatives)
USDC Contracts	☐	USDC Derivatives Trading	Query order and asset info; submit, modify or cancel orders (USDC Contracts)
Derivatives API V3	☑	Trade	Trade USDC Perpetual, USDT Perpetual and USDC Options Contracts using the Unified USD⑧ Derivatives Account
SPOT	☐	Trade	Query order info; submit or cancel orders (Spot)
Block Trade	☐	Block Trade ⓘ	Query order and asset info; submit orders or manage assets via the Block Trade API
Wallet	☐	Account Transfer	Transfer assets
	☐	Subaccount Transfer	Transfer assets between the Main Account and Subaccounts

Submit

4. Adding the keys to alertatron
- From the Automated Trading menu, choose Configure Api Keys. (see image below).
- Choose **Bybit** from the exchange list in the Add API Key form.
- **Give the keys a name. This name is how you will refer to this set of API keys when you send orders to Alertatron in the Alertatron Command Message field in the bot settings. It should be letters only.**
- Enter the API Key into the Key field.
- Enter the Private Key into the Secret field.
- If you created the API keys from a TestNet account, check the testnet option.
- Save the changes.

Choose _Configure Api Keys_ from the Alertatron menus.

5. Create an alert and set the **bot** as the condition. Add the message **{{strategy.order.alert_message}}** to the Message section. Other settings aren't necessary.
6. Go to I**ncoming alerts** on Alertatron and find your unique webhook URL and paste into the web hook URL text field (image of webhook address location below)

Edit Alert on BTCUSDT.P, 5m ⚠️   ✕

Settings **Notifications**

Condition   Strategy 13 (2, Shape, close, 20, S... ⌄   ❓

Expiration   April 2, 2023 at 18:04 ⌄

Alert name   Strat 13 BOT

Message   {{strategy.order.alert_message}}

You can use special placeholders such as
{{close}}, {{time}}, {{plot_0}}, etc. ❓

🗑️   Cancel   **Save**

7. **How the bot works and message implementation**

1. The bot has an entry signal that is triggered by parameters chosen in the bot settings.
2. That dictates when it creates an alert.
3. The alert has a message that can be edited in the 'Alertatron Command Message" field that is sent through the webhook to Alertatron where it interprets the message into commands allowing it

to place orders on your exchange.

The bot has certain settings that I have implemented for ease of use but if you want you can go in the Alertatron Message and change these. These settings are :

- Checking there isn't a position currently open
- Setting the leverage on the exchange
- Setting a waiting limit order 0.5usd above the entry signal price
- Only allowing that order to be valid for 20mins before cancelling it if it doesn't get filled
- Cancelling other orders if one is filled i.e cancelling TP limit order when SL is hit

/////////////////// I have made the inputs basic but there are options to do scaled orders, moving sl to breakeven, multiple tp's etc. ///////////////////

CONFIDENTIAL -REMOVED

Current Alert Message Contents: (To change any of this go into the above message box and edit the '*' asterisked sections below):**

CONFIDENTIAL -REMOVED

Advanced Entry (less fees but can get rejected and not filled):

This version will set a limit order and if maxOffset from the initial price is exceeded it will keep moving the order for the designated 'timeLimit' until it is filled. By using postOnly=true you won't pay taker fees but your order can be rejected if on the wrong side of the order book resulting in the bot not taking the trade.

CONFIDENTIAL -REMOVED

For PMARP Exit via bot:

- Certain parameters need to be changed if wanting to exit via PMARP.
- If this option is chosen by default the bot will exit based on whatever comes first (i.e if PMARP crosses below the threshold before price reaches the set TP level, it will exit on PMARP)
- If wanting to only exit on PMARP, delete 'limit(side = buy, amount = ***, offset=e***%, reduceOnly=true);' from the original message above.

CONFIDENTIAL -REMOVED

PMARP Exit Command:

This will exit when PMARP is less than the set threshold value on a limit order 0.5usd below the exit signal price. If wanting to exit on market order check Alertatron documentation on how to do so. By default, postOnly is set to false, I recommend this and reduceOnly being set to true as if price has surpassed your limit order after it has been placed it will be rejected and you will stay in the trade with no exit besides a stop loss. reduceOnly will also only allow the position to be closed and not let standalone buy orders be placed.

///////Explanations of how to set amount and offset are found here below but more info is available on Alertatron for advanced features///////

Example	Meaning (if on BitMEX XBTUSD)
amount=1000	Uses an amount of 1000 contracts
amount=50%	Will calculate the amount as a percentage of your balance/equity. For example, if your balance is 1 BTC and the current price is $10,000, 50% of 1 btc is 0.5 btc. 0.5 btc is worth $5,000. At $1 per contract, the order will be for 5,000 contracts.
amount=50%%	Similar to above, only will use 50% of your **available** balance/equity. Equity already locked up in positions and pending orders will not be considered.
amount=50%p	Will work out 50% of your **position size** and use that as the amount. The p stands for Position Size. This calculation rounds *up* to the nearest order size step.
amount=50%b	Same as 50% - the b stands for Balance
amount=50%a	Same as 50%% - the a stands for Available Balance

offset required number, defaults to 1%

Calculates the price as an offset from the current price, or average entry price. Positive values always go in the most logical direction... For a buy order or stop sell order, +offsets are to lower prices. For a sell or stop buy, +offsets are to higher prices. Negative offsets are permitted, but may often result in the exchange rejecting the orders - be aware of how the order book on an exchange works. For an asset quoted in USD (eg BTCUSD), offset can be given in the following ways:-

Example	Meaning (assuming asset priced in USD)
offset=50	$50 from the current price.
offset=1%	1% from the current price.
offset=e50	$50 from the average entry price. (with no position, or in a market without positions, $50 from current price)
offset=e1%	1% away from the average entry.
offset=@50000	At the absolute price of $50,000, regardless of what the current price is.

// Backtesting functions

The bot has the inbuilt strategy tester attached. By changing settings in the bot

you will notice how the values for profit factor, hit rate etc. change. Please experiment with this to see if you find ways of optimising the bot for the given market environment.

Settings in the properties tab such as Initial capital do not change how much the bot trades with, only backtesting numbers. To change how much the bot trades with, alter the 'amount' in the Alertatron message field.

Enjoy :)