

Expert Advisor Parameters Guide
Dynamic Programming Solutions Corporation
www.MetaTraderProgrammer.com

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How To Use This Manual

This manual documents the various parameters used in all expert advisors developed by Dynamic Programming Solutions Corp. This is a generic parameters guide - an EA may not have all the features and parameters listed on this document. On the other hand, not all parameters found in expert advisors can be found on this manual. The amount of parameters present in an expert advisor would depend on the strategy coded on it, as well as the type of service selected (Standard or Premium).

Order Parameters

The following parameters are used for order processing:

- **lotsize** – the volume of each order opened by the EA.
- **stoploss** – the effective stoploss value of each order of an EA. It is expressed as a pip distance of the stoploss price from the entry price.
- **takeprofit** – the effective takeprofit value of each order of an EA. It is expressed as a pip distance of the takeprofit price from the entry price.
- **_slippage_open** – the maximum allowed amount of deviation (in pips) of the preferred opening price from the latest available price, when the EA is opening orders. If the slippage exceeds the amount specified in this parameter, the order will not be executed.
- **_slippage_close** – the maximum allowed amount of deviation (in pips) of the preferred close price from the latest available price, when the EA is closing orders. If the slippage exceeds the amount specified in this parameter, the order will not be closed.
- **expiration_seconds** – the expiration of pending orders expressed in seconds (from the date the pending order was opened).
- **order_comment** – a field custom comment that can be used to label the orders opened by the EA.



You can specify an order comment to be able to easily identify the orders opened by the EA on the terminal.

- **_magic** – a unique identifier of an expert advisor attached on the chart.



Always set different magic numbers to EAs you attach on the charts. When two or more expert advisors share the same magic number, it means that those expert advisors are allowed to modify and close each others' orders!



All orders manually opened are automatically assigned with a magic number of 0. Any expert advisor assigned with the same magic number is allowed to modify and close manually opened orders.

- **_orderbymarket** – (true or false) set this parameter to true when the broker being used does not accept stop orders at order execution. This means that these types of brokers will only accept orders with 0 stoploss and 0 takeprofit. The order can be modified after the order has been successfully opened.



*To easily identify whether or not your broker allows setting of stoploss and takeprofit at order entry, open a new trade window. If the fields for stoploss and takeprofit are greyed out, then the broker does not allow it. Set **_orderbymarket** to true.*

Indicator Parameters

The parameters and parameter names for indicators used by an EA may vary depending on the type of indicator(s) used. However, they can be generally classified according to the following variables:

- **bar** – the indicator shift; the starting bar for calculations.
- **timeframe** – the timeframe to for indicator calculations (expressed in minutes). A value of 0 indicates the current timeframe (chart timeframe).



If more than one timeframe is used in the logic of an EA, they are usually designated as tf1, tf2, tf3, etc.

- **period** – the period to consider on indicator calculations.
- **method** – the method used on calculations (some indicators only), e.g. simple, exponential, smoothed, etc.
- **applied_price** – the price used on calculations (some indicators only) e.g. open price, close price, etc.

Trade Signal Management

The following parameters are used for the management of trade signals:

- **reverse_strategy** – enables/disables reverse strategy (true or false). When activated, the EA will buy on a sell signal, and sell on a buy signal.
- **trade_on_start** – enables/disables trading upon loading the EA (true or false). When activated, the EA will start trading (buy or sell) using trade signals upon loading. When deactivated, the EA will wait for a trend reversal before landing its first trade.
- **trade_only_signal_change** – enables/disables trading only on signal change (true or false). When activated, the EA will only execute trades for each trend reversal. When deactivated, the EA is allowed to open positions in the middle of a trend.
- **enableclose** – enables/disables closing of all orders that oppose the current signal (true or false).
- **openafterclose** – enables/disables opening of an opposite order when a certain order was closed by the EA (true or false).
- **trade_only_firsttick** – enables/disables trading only on first tick of a bar. When activated, the EA will only trade at the start of the bar. When deactivated, the EA is allowed to execute orders regardless of whether the current bar has just opened or about to close.
- **signal_enabled** – enables/disables the signals given by the indicator. The name of the indicator is often inserted on the name of the external parameter (e.g. `signal_macd_enabled`, `signal_rsi_enabled`, etc.). When activated, the indicator is used for the evaluation of trading signals. When deactivated, the indicator signals will be ignored by the expert advisor.

Trailingstop Parameters (Stoploss)

The following parameters are used for implementing trailingstop:

- **breakevenat** – when the unrealized profit (in pips) of an order meets or exceeds this amount, the order stoploss will be set to breakeven.
- **breakeven_profit** (premium package) – when the unrealized profit (in pips) of an order meets or exceeds this amount, the order stoploss will be set to the entry price + *breakeven_profit* pips.
- **trailingstop** – the effective stoploss value of an order for each trailing done on the stoploss.
- **trailingstop_activate** – the minimum unrealized profit required for an order in order for the EA to start trailing its stoploss.
- **trailingstop_step** – the minimum distance (in pips) for trailing. The distance is measured from the current available price to the price where the last trailing of the stoploss was done.
- **stoptrailing** – when the unrealized profit (in pips) of an order meets or exceeds this amount, the trailing of the stoploss will be deactivated.

Trailingstop Parameters (Takeprofit)

The following parameters are used for trailing the takeprofit value for each order:

- **trailingtp** – the effective takeprofit value of an order for each trailing done on the takeprofit.
- **trailingtp_activate** – the minimum unrealized profit required for an order in order for the EA to start trailing its takeprofit.
- **trailingtp_step** – the minimum distance (in pips) for trailing. The distance is measured from the current available price to the price where the last trailing of the takeprofit was done.
- **stoptrailing_tp** – when the unrealized profit (in pips) of an order meets or exceeds this amount, the trailing of the takeprofit will be deactivated.

Trading Time Filters

The following parameters are used to schedule the activation/deactivation of an EA:

- **starthour** – represents the hour to activate the EA (in combination with starthour)
- **startminute** – represents the minute to activate the EA (in combination with starthour)
- **endhour** - represents the hour to deactivate the EA (in combination with endminute)
- **endminute** - represents the minute to deactivate the EA (in combination with endhour)
- **TradeOnFriday** – enables/disables trading on fridays (true or false).



Depending on the EA logic, some days can also be chosen to be excluded from trading, e.g. TradeOnMonday, TradeOnTuesday, etc.

Order Limits

The following parameters set limits on the amount and/or types of orders opened by the EA:

- **long_enabled** – enables/disables EA from opening long positions (true or false).
- **short_enabled** - enables/disables EA from opening short positions (true or false).
- **maxorders** – the maximum allowable amount of active orders on the chart. The cap only applies to the orders opened by the EA (according to its magic number).
- **oneperbar** – enables/disables opening a maximum of one order per bar on the chart (true or false). When activated, the EA will start opening additional orders on a bar after the first one, even if there are strong signals to trade. When deactivated, the EA is allowed to open an unlimited number of orders in a single bar on the chart.

Money Management

The following are the parameters used for money management:

- **money_management** – specifies the money management mode to use.



Parameters for the different money management modes follow a certain prefix. Mode 1 parameters will always have the mm1 prefix; mode 2 parameters will have mm2; and mm3 for mode 3.

- **lotsize** – when money_management is 0, no money management mode is going to be used. Rather, the EA will simply use the lotsize parameter to determine the volume for each order.
- **mm1_riskpercent** – when money_management is equal to 1, this parameter represents the percentage of the total deposit to risk on each trade. The amount of lots to risk is automatically calculated from the risk percent amount (e.g. risk 2% of total account deposit for each trade).
- **mm2_ref_balance, mm2_ref_lot** – when money_management is equal to 2, the volume of each order would be *mm2_ref_lot* lots for every *mm2_ref_balance* (in the deposit currency) balance on the account (e.g. 0.1 lot for every \$10000 on the account).
- **mm3_risk_amount** – when money_management is equal to 3, the lot size of each order will be calculated according to the exact amount (in the deposit currency) the trader wishes to risk per trade (e.g. risk \$250 for each order).

Stealth

The following parameters are used for implementing virtual stops:

- **stealth_sl** – virtual stoploss value for each order.
- **stealth_tp** – virtual takeprofit value for each order.

Miscellaneous Parameters

The following are the parameters that are used in situational cases only. More often than not, they are best left to their default values

- **_sleep_ok** – processing delay between order requests (required by broker).
- **_sleep_err** - processing delay between order requests after the broker has rejected the previous one (required by broker).

How an EA Identifies the Bars on the Chart.

Expert advisors, as well as indicators, identify each bar on the chart by assigning numbers to them. The candles are numbered 0, 1, 2, 3, 4... until it counts the last bar on the chart. However, the counting is being done in the reverse order – 0 is used to mark the unformed bar, 1 for the previous bar, etc.

It is crucial to understand this so users of expert advisors would be able to identify which bars are being considered by the EA in its calculations. For example, if we have an EA using a simple moving average with a period of 14 and *bar=1*, the EA uses the last formed bar as the starting bar for calculations, then count 14 bars back to identify the ending bar for calculations.

Setting *bar=0*

When you set *bar=0*, the unformed bar will be considered in indicator calculations. Since the prices for the unformed bar are not yet final (high, low, close), the indicator outputs tend to fluctuate on that bar when its applied price is not yet final. Thus, this would cause the signals to repaint on the current bar. Signals that came while the bar is forming may not be the same when the bar has finally closed.

Frequently Asked Questions

The EA executes only a few orders, and misses a lot of signals. What should I first do?

Make sure that the *maxorders* parameter is not preventing the EA from executing additional orders. Also, make sure if *long_enabled*, and *short_enabled* are both set to true.

There is a signal, but the EA executes trades one bar late?

Change the *bar* parameter value from 1 to 0, but be wary of false signals.

I want the EA to trade only on signal reversals.

Set *trade_only_signal_change* to true

The EA is not opening a position at trend reversals.

Set *open_after_close* to true.

I want my stoploss and takeprofit hidden from the broker.

If you have stealth parameters (*stealth_sl* and *stealth_tp*), use them instead of the standard *stoploss* and *takeprofit* parameters.

Can I only activate stealth stoploss and keep my normal takeprofit?

Yes. Stealth for T/P and S/L are activated separately. They are activated by giving them a value greater than 0, while setting the value of their standard counterpart to 0 (e.g. set *stoploss*=0, and *stealth_sl*=5 or any value greater than 0, in order to activate virtual stoploss).

I want the EA to only modify and close orders I manually opened. What should I do?

Set *magic*=0 and *maxorders*=0.

Getting Support

In the case of unlisted parameters, or if you encounter issues with the parameters not discussed in this document and do not know as to how to use them, please contact us at support@metatraderprogrammer.com.