

Grid EA details (to be coded for MT4)

General		This is a grid trading EA. When entry conditions are met the EA will place pending orders at grid levels which are either calculated automatically or input manually.		
		Please use the same names for the variables in the code as in the description below. Provide the MQL code		
<p>In the upper right corner of the chart please print the status of EA:</p> <ul style="list-style-type: none"> <li>- MainTimeFrame -</li> <li>- SlowTimeFrame -</li> <li>- Order Types – (stop, limit or stop and limit)</li> <li>- Increment – (pips or ATR)</li> <li>- Calculated increment – (in pips)</li> <li>- Max Open Positions – (from Item 5)</li> <li>- Lot Size – ( from Item 6)</li> <li>- Lot Size Increase – ( from Item 7)</li> <li>- Take Profit Pips – ( from Item 8)</li> <li>- Stop Loss – (from Item 9)</li> <li>- Trailing Stop – ( from Item 10)</li> <li>- Current trend - (UP or DOWN)</li> <li>- Open Positions – (provide the total number of open positions here)</li> <li>- Open Positions profit – (this is the profit of all currently open positions)</li> <li>- Closed Positions profit – this is the total profit of all closed positions since the last entry condition appeared</li> </ul>				
Please include the TrendMagic indicator in the code of the EA				
There will be one Stop and One Limit order at any time as long as entry conditions are present				
INDICATORS USED				
	INDICATOR NAME	Time Frame	INDICATOR ABBREVIATION ( please use the same in your code)	
	Moving Average	MainTimeFrame	ma	
	MTF stochastic	SlowTime Frame	stocmain, stocsignal, stocLevel	
	TrendMagic	MainTimeFrame	tm,tm1	
	MACD	MainTimeFrame	macd, macd1, macdsignal, macdsignal1	
	ZigZag	MainTimeFrame	zzTop0, zzTop1, zzTop2, zzBot0, zzBot1, zzBot2	
	X-BarsFractals	MainTimeFrame	frTop0, frTop1, frTop2, frBot0, frBot1, frBot2	
	HekenAshi	MainTimeFrame	ha	
	MTF HeikenAshi	SlowTimeFrame	stfha	
VARIABLES				
	NAME	Options	Default	Details
1	MainTimeFrame	All Time Frames available in MT4	1HR	I need the TimeFrames to be selectable so I can test and optimize the EA on 1 min chart on open prices
2	SlowTimeFrame	All Time Frames available in MT4	Daily	This will be used for determining trend direction
3	Order Types	Stop/Limit/Stop and Limit	Stop and Limit	-if Stop – the EA will place only stop orders in direction of the trend -if Limit – the EA will place only limit order in direction of the trend -if Stop and Limit – the EA will place both stop and limit orders in direction of the trend
4	Increment	Pips/ATR	13	If Pips => This is the distance in pips between orders. If ATR => The distance in pips between orders is the ATR but not less than the distance in pips specified here, i.e if ATR < increment in pips - place the order at the increment distance. If ATR > increment in pips – place the order at the ATR distance  For long positions – all pending orders MUST be above the tm line. DO NOT place Pending orders below the tm line For short positions – all pending orders MUST be below the tm line. DO NOT place Pending orders above the tm line
5	MaxOpenPositions	Integer	10	If MaxOpenPositions is reached – delete all pending orders and do not place new orders
6	LotSize		0.01	
7	LotSizeIncrease%		13	This increase applies only to limit orders. The size of every new limit order at a new lever should be increased with this percent.
8	TakeProfitPips	Pips/ATR	21	If Pips => the take profit is in pips If ATR => Take profit = ATR*atrXtp <b>Each position will have its own Take profit</b>
	atrXtp		2	This is the ATR multiplier for take profit
9	StopLoss	NONE/ZigZag/HA/Auto		If StopLoss = NONE => no stop loss If StopLoss = ZigZag: => For long positions – the bottom of the last completed ZigZag => For Short positions – the top of the last completed ZigZag If StopLoss = HA:

				<p>=&gt; For Long position – the low of the last completed HeikenAshi on the slow Time Frame</p> <p>=&gt; For Short positions – the High of the last completed HeikenAshi on the Slow Time Frame</p> <p>If StopLoss = Auto:</p> <p>=&gt; For Long Positions – stop loss is the higher of the bottom of the last completed zigzag on the main time frame and the low of the last completed HeikenAshi on the slowTimeFrame</p> <p>=&gt;For Short Positions – stop lost is the lower of the top of the last completed zigzag on the main time frame and the high of the last completed HeikenAshi on the slowTimeFrame</p> <p><b>A completed ZiggZag is a zigzag that has a zigzag formed in the opposite direction</b></p> <p><b>All positions will have a common stop loss</b></p> <p><b>A zigzag top or bottom can be used for stop loss only if the price has exceeded the last top or bottom of the zigzag – see the illustration below</b></p>
10	TrailingStop	Pips/haCandle/ATR/ Fractal		<p>If Trailing Stop = pips =&gt; trailing stop is in pips</p> <p>If Trailing Stop = haCandle =&gt; trailing stop is High or Low of HeikenAshi Candles on the main time frame</p> <p>If Trailing Stop = ATR =&gt; trailing stop is the ATR*atrXts. The ATR trailing stop MUST be calculated from the High and Low of the candle, NOT from the close of the candle, i.e atrTrailingStop = Low – ATR*atrXts for long positions and atrTrailingSTop = High + ATR*atrXts for short positions. Trailing will start only after the ATR trailing stop is higher (for long positions) or lower (for short positions) than the open price</p> <p>If Trailing Stop = Fractal =&gt; trailing stop is Top or Bottom Fractals on the main time frame Trailing will start only after the trailing stop is above (for long positions) or below (for short positions) the open price of the position</p> <p><b>TRAILING STOP IS FOR THE INDIVIDUAL POSITION</b></p>
11	atrXts	double	1.0	This is a multiplier for the ATR trailing stop
12	TrailingPips		10	Trailing will start after the position is in profit at least the trailing pips
13	TrailingHA		2	<p>Trailing stop will be the High or Low of the HA candle specified here (in this example the trailing will be the high or low of the 2<sup>nd</sup> HA candle)</p> <p>For Long positions - Trailing will start only after the low of the 2<sup>nd</sup> haCandle is higher than the open price</p> <p>For Short Positions – trailing will start only after the high of the 2<sup>nd</sup> haCandle is lower than the open price</p>
14	TrailingFractals		2	<p>Trailing will be the top or bottom fractal specified here (in this example the trailing will be the top or bottom of the second fractal to the left of current price)</p> <p>For Long positions – Trailing will start only after the second bottom fractal is higher than the open price</p> <p>For Short positions – trailing will start only after the second top fractal is lower than the open price</p>
15	fastMAperiod		144	Used for MACD and for Moving Average
16	slowMAperiod		233	Used for MACD
17	macdSignalPeriod		21	Used for MACD
18	stocK		13	Used for stochastic on the Slow Time Frame
19	stocD		2	
20	stocSlowing		3	
21	atrPeriod		5	
22	atrX	double	3	This is an ATR multiplier for TrendMagic
23	zzDepth		12	
24	zzDeviation		5	
25	zzBackstep		3	
26	frLeftSide		2	
27	frRightSide		2	

Criteria	Trend Direction	NOTES
ma > ma1 && stocmain > stocsignal && stocmain – stocsignal >= stocmain1 – stocsignal1 && Close(main time frame) > ma && Close(main time frame) > tm && MACD > macdSignal && macdSignal > macdSignal1	UP	All pending orders MUST be above the tm line
ma < ma1 && stocmain < stocsignal && stocsignal – stocmain >= stocsignal1 – stocmain1 && Close(main time frame) < ma && Close( main time frame ) < tm &&	DOWN	All pending order MUST be below the tm line

MACD < macdSignal && macdSignal < macdSignal1		

How it works: (the example below is for long positions and order types Stop and Limit with the default settings. Reverse the logic for short positions)

If Trend direction = UP the EA will place BuyStop order 13 pips above the current price and BuyLimit order 13 Pips below the current price. If price moves down 13 pips and the BuyLimit is filled, place a new BuyLimit order 13 pips below the open position and move the BuyStop order 13 pips lower. Repeat the process every time a new position is filled till the MaxOpenPositions is reached

If the price moves up 13 pips the BuyStop order is filled, place a new BuyStop order 13 pips above and move the BuyLimit order 13 pips higher. Repeat the process every time a new positions is filled till the MaxOpenPosition is reached

