Grid EA details (to be coded for MT4)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | General Concept: | | This EA is a grid EA. The EA will place BuyStop/SellStop Pending Orders when  Price (Bid/Ask) enters the zone formed on both sides of a complete ZigZag Top or Bottom( see details below) | | |
|  | |  | |
| When the entry criteria is met the EA will place BuyStop and SellStop pending orders on both sides of the ZeroLine (see below). When position is opened on any of the levels of the grid the EA will compensate the position on the opposite side of the grid in a way that the Profit Goal is always reached if the price turns around in the opposite direction. | | |
| Please use the same names for the variables as in the description below | | | | | | |
| In the upper right corner of the chart please print the status of EA , all the variables from the table below and the current Profit/Loss | | | | | | |
|  | | VARIABLES | | | | |
|  | | NAME | | Options | Default | Details |
| 1 | | zzTime Frame | | All time frames | 1Hr | This the Time Frame for ZigZag. It is necessary to have this variable so I can test the EA on 1 min chart. Use Default Values for ZigZag |
| 2 | | StocTimeFrame | | All Time Frames | 1Day | This is the time frame for stochastic, which will be used to manage the orders when certain conditions occur |
| 2A | | stocK | |  | 13 |  |
| 2B | | stocD | |  | 2 |  |
| 2C | | stocSlowiing | |  | 3 |  |
| 2D | | stocPrice | |  | Low/High |  |
| 3 | | Trigger Level Width  (Fig.1) | | Pips (NOT Points) | 5 | This is a zone created on both sides (up on down) of the trigger level. If the price enters the zone but it does reach the trigger level, the EA will be triggered when the price starts **exiting** the trigger zone |
| 4 | | Increment  (Fig.2) | | Pips(NOT Points) | 0 | This is the distance between the grid levels.  If Increment = 0 the EA will compute the increment automatically based on the criteria below – See Fig. 2 and Fig. 2A |
| 4A | | Min. Increment/Spread ratio | | Double | 3 | If the calculated increment is smaller than Spread\*(Min. Increment/Spread ratio) then Increment = Spread\*Min. Increment/Spread Ratio |
| 5 | | Distance from ZeroLine Options | | Pips (NOT Points)/% | % | This is the distance from ZeroLine to Level 1  - If Distance from ZeroLine = 0, Level 1 is at a distance from ZeroLine = Increment  -If % - the distance is to be automatically calculated in pips as a % of the distance from ZeroLine to the TakeProfit/StopLoss level |
| 6 | | Distance from ZeroLine | |  | 10 |
| 7 | | Levels | | Integer | 3 | The number of Grid Levels on each side of ZeroLine |
| 8 | | Grid Width Multiplier | | 0-1 ( double) | 0.89 | DO NOT allow values > 1 to be entered here |
| 9 | | IPO (Initial Pending Order ) Lots | |  | 0 | If IPO Lots = 0, calculate lots automatically as described below.  If IPO Lots > 0, use this value. If Lot Distribution(11) = Progressive the value in this field is for Level 1 only. Calculate the value of the lots on the remaining levels according to the description below  If IPO Lots > 0 ignore #12 and calculate IPG (12) as the total profit that would be made if the price went from ZeroLine to TP/SL without cycling |
| 10 | | Max. IPO Lots | |  | 1 | If IPO Lots above = 0 and the calculated lots Exceed this number limit the calculated lots to this value. If Lot distribution = progressive – this limit applies to Level 1 lots only |
| 11 | | Lot Distribution | | Linear/Progressive | Progressive | If Linear – the IPO lots on each level are the same  If Progressive – the profit from each level is the same |
| 12 | | Initial Profit Goal  (IPG) | | $/% | 0.1% | If Profit is in $, this is the profit goal  If Profit is in %, calculate the profit in Dollars as a % of the Available Equity. The EA will close all open positions and delete all pending orders when the profit goal is reached, regardless whether TP/SL is hit only if number of cycles(14) = 0. |
| 13 | | Profit goal Reduction per Cycle (PRC)% | | % | 20% | Percent reduction in profit after Number of cycles with zero PRC exceeded |
| 14 | | Number of cycles with zero PRC  (FIG. 3) | | Integer | 3 | After this number of cycles the profit goal will be reduced with the PRC every time the price crosses Level 1 of the grid from the opposite side |
| 15 | | Compensation logic  (FIG. 4) | | 1,2,3 | 1 | See Fig. 4 for details on compensation logic 1, 2 and 3 |
| 16 | | Max number of lots | |  | 20 | This is the total volume (lots) for all open positions (not including Pending orders. |
| 17 | | Emergency Actions | | 1/2 |  | 1.When max number of lots is exceeded delete all pending orders, close all open positions that are in profit and fully hedge the remaining losing positions and put a flashing sign on the screen “Max. Number of Lots Exceeded – FULL Hedging” |
|  | |  | 2.When Max Number of lots is exceeded, delete all pending orders, close all profitable positions and close all positions going against the stochastic, i.e. If stocMain > stocSignal close all short positions and only leave the long positions open. If stocMain < stocSignal close all long positions and only leave the short positions. Put a flashing sign on the screen “Max. Number of Lots Exceeded – Attention needed” |
|  | | Grid AutoRestart | | True/false | True | If True – the grid will restart at the next trigger level, if false – the EA will not start a new grid at the next trigger level. If “False” option is chosen while the EA is active the EA will keep manage all open positions and pending order on the currently active grid till the grid is closed |
|  | |  | |  |  |  |
|  | |  | |  |  |  |
|  | |  | |  |  |  |
| Some DETAILS | | | | | | |
|  | How to calculate increment automatically  ( See Fig.2 and Fig2A for visual illustration) | | 1. Calculate the distance in pips between the ZeroLine and the next LOWER ZigZag Top or Bottom 2. Calculate the distance in pips between the ZeroLine and the next HIGHER ZigZag Top or Bottom 3. Take the smaller distance in pips from the calculations in 1 and 2 and multiply by GridWidthMultiplier - the result is your GridWidth 4. A. If Distance to ZeroLine = 0 -> Increment = GridWidth/(Levels + 1)   B. If Distance to ZeroLine > 0 -> Increment = (GridWidth-Distance to ZeroLine)/(Levels+1) | | | |