Futures Scalper Documentation

Overview:

The "Futures Scalper" job allows the user to trade specified futures contracts around user-defined scalp and profit intervals. The job works independently to generate new orders after every trade execution. Security features are included that allow the user to specify both the range to operate within and the maximum net position permitted before the job will automatically begin working a one-sided market only.

After an initial fill, the "Futures Scalper" job will place new buy & sell orders above and below the fill price. New orders that add to the established position are placed at the scalp interval, while new orders with position-closing effect are placed at the profit target interval. A user-configurable smoothing parameter allows the "Futures Scalper" to compute a "true price" point in realtime—this "true price" involves a double-weighting of both volume-at-price and time-at-price. The algo enhances the profitability of transient, small-scale deviations away from the "true price" by dynamically expanding and contracting intervals at appropriate times.

The "Futures Scalper" job also contains logic to widen out intervals by a user-defined multiplier in the case of a significant move in price. By allowing the user to set a "move duration" and a "move size" for each contract, the job will automatically apply a multiplier if the future moves greater than the "move size" within the specified "move duration". The job's parameters will return to their normal state once the market returns to normal conditions.

Main grid:

	instr	orderQty	lowLimit	highLimit	scalpIncr	profitTarget	active	moveInterval	moveSize	scalpMult	profitMult	moveDuration	maxNetPosition
DELETE							☐						
ADD							☐						
1	ZN;F;;;MAR14;;	0.0	0.0	0.0	1.0	2.0	☐	1.0	1.0	1.0	1.0	1.0	0.0
2	ZB;F;;;JUN14;;	1.0	100.0	200.0	2.0	3.0	☑	5.0	3.0	2.0	3.0	5.0	10.0

The main grid contains the information about what futures will use the gamma scalper and what settings each future will use.

Columns:

   instr: This defines which future will use the settings in the row. There should be only one future per row.

   orderQty: The volume that we will work on each side.

   highLimit: The highest price we are willing to submit orders at for this future.

   lowLimit: The lowest price we are willing to submit orders at for this future.

   scalpIncr: The amount we move our BUY/SELL order when we are filled on that side.

   profitTarget: The amount we move our BUY/SELL order when we are hit on the OPPOSITE side.

   active: This checkbox deactivates and resets the all orders for this future.

   moveInterval: The length of a window of time in which to detect large price moves.

   moveSize: The threshold in ticks used to determine what constitutes a large price move.

   scalpMult: The amount that we will multiply our scalpIncr when a large price move is detected.

   profitMult: The amount that we will multiply our profitTarget when a large price move is detected.

   moveDuration: The length of time in which we will apply the above two multipliers after detecting a large price move.

<u>Adding and Deleting Rows:</u>

In the grid, the user is able to add and delete rows as needed. To add a row, simply enter the settings you want for the new row in the row that is marked "ADD". Any columns that are left blank will be filled in with default values designed to not cause immediate action (e.g. volumes of zero).

To delete a row, simply enter the identifier of the target row into the row marked "DELETE". The identifier is simply the value in the far left (unlabeled) column. This value will be an integer automatically assigned by the job.

Configuration:

Name	Description	Value
instruments	instruments on which to listen	ZN;F;;;;;&ZF;F;;;;;&ZB;F;;;;;
job_name	Main grid will be named "hedgers_[grid_name]"	
verbosity	Log verbosity	1

Relevant settings unique to this job:

> instruments: These are the instruments are relevant to the job. Using this variable can increase job performance by reducing the market messages that come in. If blank, nothing is excluded.

> job_name: This allows you to change the name of the Main Grid. If empty, the name will default to "Prioritize". Any value entered will be appended to the default name with an underscore (e.g. enter "MyName" and the Main Grid will be named "Priorize_MyName"). This also affects what the quoting preferences will be saved as, so you can use this to maintain separate settings for different situations.

> verbosity: This controls how much information will be printed to the log. 1 is default, 0 is very little, 3 is maximum.

> maxTrades: The job will close itself after this many trades.