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INTRODUCTION

Expanding Grid:

EG104 EA, originally ExpandGrid, is a collection of grid styles that have been optimized by intense tests, results from demos and real accounts and results from studies and parameter variations. It is delivered with the default parameters selected from the best EA performance results, so the trader does not need to change them to use the EA, just drop it to the chart, enable the style and let it play. This EA will be updated periodically and the parameter defaults may be optimized with better results.

EG104 (EG) claim a well-funded account, big drawdowns may be seen time to time. On its best test result, tested for the last 11 years, the maximum drawdown was 26K, for a total profit of 153K, one pair only. (See Image)

Symmetry 022 Test: EURUSD (Euro vs US Dollar) annual return.

Start_Lot_Qty=0.01; Grid_Increments=0; Grid_Factor=0; MoneyTakeProfit=0; BreakevenLevel=5; Initial Deposit: 50,000.00

Year	Profit Factor	Maximal drawdown	Total net profit
2005	2.08	5,397.30 (10.79%)	17,519.59
2006	1.85	7,242.22 (14.38%)	14,583.32
2007	1.54	8,067.08 (13.37%)	10,703.75
2008	1.40	22,480.31 (34.97%)	21,092.06
2009	1.42	5,033.57 (7.75%)	17,291.27
2010	1.33	12,744.62 (20.00%)	14,105.77
2011	1.47	5,095.31 (7.84%)	18,293.28
2012	1.30	14,000.52 (25.33%)	10,049.94
2013	1.33	10,213.37 (20.42%)	10,678.07
2014	1.38	25,867.87 (51.20%)	8,003.15
2015	1.38	4,106.76 (7.21%)	10,965.47

It has been found, during demoing EG and by users of forexfactory.com forum that a management of styles during news releases may increase profitability, decrease risk and salvage small accounts. (for more info read [Expanding Grid](#))

The idea behind EG is to create a grid above and below price at an optimal pips increments, open a cycle and target one grid level. That it is. If the start lot quantity is 0.10 on EURUSD and grid level is 10 pips, then grid target is \$10.00. If the trade goes south, EG will use different styles to accumulate positions and average down or reverse the breakeven point and then target its original goal of \$10.00. If at a preset level, the target is not reached, EG will set the cycle to a closure mode targeting the breakeven point. After a cycle is closed, EG will start a new cycle.

This EA works with its default values out of the box, but flexibility has always been a priority during developing it. It means the trader may change default values and use different styles simultaneously. By using start/end times the EA may run one style during active sessions and a different style during sleeping sessions, it may run styles in parallel or interlaced and with its own set of parameters. The trader is able, by combining these styles, to create a well complex algorithm no one created before. Its flexibility creates its unlimited potential by itself or by the trader's imagination.

As summary, there are two types of styles, stop order style and limit order style. It has been found that when the market is trading normally or in a range environment, limit orders style works better in a grid (buy below price, sell above price) and when the market is trending or moving fast and far up and down away of regular movements, stop orders work better. (Buy above price, sell below price).

Stop order style reverse the breakeven point multiplying the opposite quantity by a factor (multiplier), limit order style accumulates at the original trade direction averaging down the breakeven point by multiplying the last order quantity by a factor (multiplier). There are styles that uses a static grid and others use a grid where the center moves as new orders are executed. Combining a stop order style with a limit order style, with a moving grid, creates a very interesting scenario. I challenge you to test it. (See EG Instructions for description of styles and how to use them).

For USA individual traders, the only style FIFO compliant is **scalperGrid**, all others style grids are based on martingale methods and all of them hedge positions, they are not FIFO compliant.

I do continue testing and demoing this EA with the goal of finding the smaller drawdown and a way to make it smart enough to identify when the market is normally trading or is reacting to news releases, then the EA should be able to swap limit orders to stop orders styles automatically.

I do recommend checking the [post 1](#) periodically and always check for the file uploaded date and compare it with your copy, also, when the change is significant, I do increase the version level. It is also recommended for you to keep the older copy in case you want to go back on any release.

To have files organized and to not confuse releases, I will upload EA files to post 1 only.

You all are welcome to this thread and allowed to post comments here, and it is also advised that EG has commercial intentions, reason it is in the commercial area of this forum.

Active traders who post ideas or comments and show demo explores based on ExpandGrid may receive an unlocked version of it on any of the giveaway I may promote, just private message me and I will revise it. Note I must be able to see lot quantities on the explorer.

Risk disclosure: This EA is designed as instructional and illustration purposes only and it should be tested and demoed only. If you trade it live, you are doing so at your own risk and I am NOT TAKING LIABILITY if you lose your money.

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GENERAL INFORMATION

ExpandGrid (EG) does not open pending orders and does not use stop or target values when placing orders.

This is work in progress documentation. Please re-download it when upload date changes.

Common Parameters

MagicNumber: Set magic number to a value greater than zero to enable the style. MagicNumber is used to identify styles. It must be a different value for each style.

StartLotQty: Is the initial order lot quantity, additional orders will use a multiple of this value. Grid target is this value times the grid size in pips. Smaller as possible is recommended. Default is 0.01.

Grid_Increments: the size of the grid in pips. If this value is zero, expandGrid (EG) will calculate the grid size using daily ATR values, divided by Grid_Factor. If Grid_Increments and Grid_Factor are used, Grid_Increments will take precedence.

Grid_Factor: a value from 0 to 12. It is used to calculate the grid size. A small value increases the grid size and do open fewer orders, biggest values decrease grid size and scalp more. I see it as a scalping intensity level. When it is zero, expandGrid will use my best tested values automatically. If Grid_Increments and Grid_Factor are used, Grid_Increments will take precedence.

StartTimeServer/EndServerTime: ExpandGrid will not open new positions outside the time specified. EG will run in closure mode after EndServerTime. Time is in server value.

TakeProfit: I do recommend keeping this value as zero (default). Set it to 0.01 for closure modes.

CONTINUE: It will open new grid cycle after targeted, if this parameter is set to false, the EA will stops the grid after all the positions closes. expandGrid will continue managing opened positions.

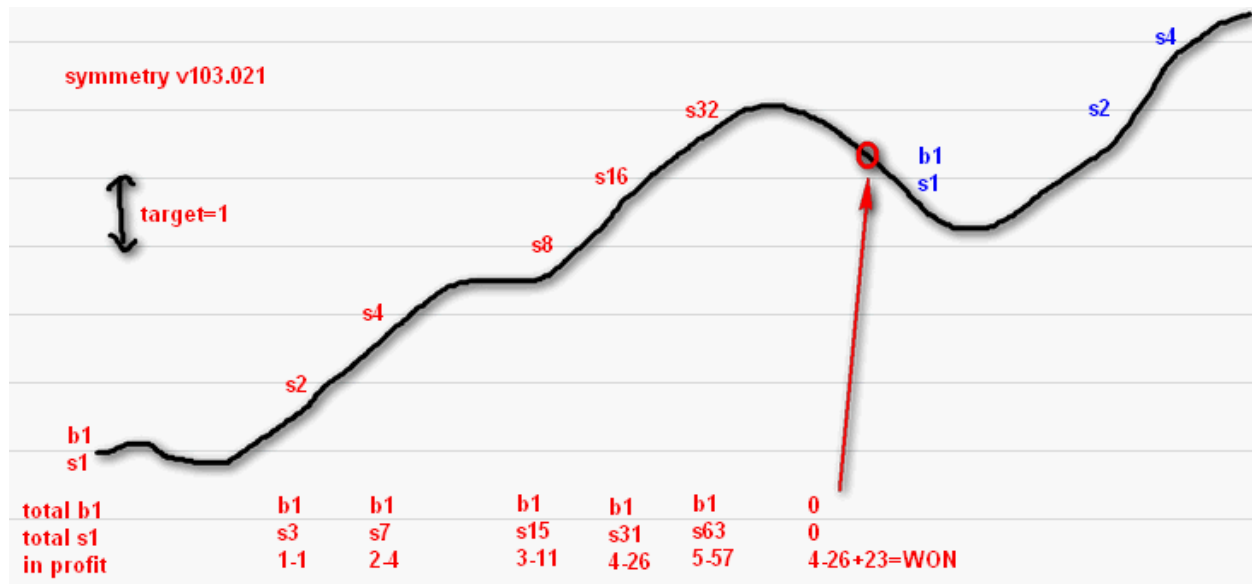
Trade Styles

To enable styles, set MagicNumber parameter greater than zero. You must use different magic number per style if you want to activate multi styles.

Symmetry: Limit Order Style

The EA will plot a channel above and below the last executed order with the center on the last order price. The center of the grid will move as new orders are being executed. It will buy and sell at the same time. If price move down EG will open long positions multiplying the last long quantity by OrderMultiplier parameter keeping the short position if TakeProfitAtLevel=false. If price moves up, it will sell by multiplying the last sell quantity and keeping the buy position if TakeProfitAtLevel=false. Target is the first pullback to a grid level.

If TakeProfitAtLevel=true, the EA will close buy wining positions at grid levels above price, and sell positions below price.



ScalperGrid: Limit Order Style

ScalperGrid style is FIFO compliant if executed with default TakeProfit=0 parameter. It is well suitable for US traders who are not allowed to hedge positions. This style does not hedge (TakeProfit=0) but it will martingale. Well-funded account is needed here.

First and at all, it is not possible to back test it on MT4 with reliable results, tick data is not available there for testing. A third party provider is needed to test it. You may test it just to check its functionality. Demoing it first is highly recommended.

ScalperGrid is based on symmetry style, if the initial position does not target, it will buy when market is going down and it will sell when market is going up multiplying the last order quantity by gOrderMultiplier parameter.

The default value of the multiplier is 2, increasing this value will target quickly and will increase profit factor, on the other hand, it will require more capital and you may get the margin call.

scalperGrid will target small profits and repeat the cycle again. It likes many cycles on a single day. That is scalp. (not high frequency trading yet). The EA will target the StartLotQty*10 (ten times the initial lot quantity, minimum is 0.20). Example, if StartLotQty is 0.10, target will be \$1.00. Changing TakeProfit parameter will override this criterion. Note that if you increase target to more than grid increments then it may hedge and then it becomes not FIFO compliant.

For micro forex accounts, you must decrease the target using TakeProfit parameter, for 1K lot micro, minimum lot is 0.1, target should be 0.01 (1 or two cents).

It is recommended to use Grid_Factor of 5 or less, greater values will open much more orders and you will get the margin call quickly. scalperGrid start opening only one position. It does not starts hedged as symmetry does.

scalperGrid closes at the small target and reopen a new position, more of the times at the same direction. Don't ask here why not to keep the previous position open, exposure is the main reason. Share the money with the broker and you will be OK. Try to take all the money for you and then you will lose it all.

The center of the grid moves as it execute new orders. Grid is dynamic, it is not a channel.

scalperGrid needs a broker that allow scalping. it may place more than thousand orders per symbol per day.

mChannel: Stop Order Style

EG will plot a channel, the grid does not expand and the center does not move. It will buy above the channel bringing up the long quantity to mChannelMultiplier of short quantity; it will sell below the channel to bring up the short quantity to mChannelMultiplier of long quantity. See [Post 75](#)

FloppyChannel: Stop Order Style

FloppyChannel (FC) is an aggressive style, the idea is to buy and sell at the same time, same quantity, then at the first grid, close the wining position and the set to closure mode the losing position. It multiplies the losing position by multiplier parameter and trade on the direction of the move.

Example: Let's assume we are using default parameters and we just change StartLotQty to 0.10. The EA will buy 0.1 lot and sell 0.1 lot at 1.0870, grid increments of 10 will set the top blue line at 1.0880 and the bottom red line at 1.0860. If price goes up to 1.0880, the EA will close the buy order for 10 pips profit and then will buy 0.4 lots (0.1 losing qty per multiplier of 4) and set target to 0.01. The idea is to close it as soon as possible.

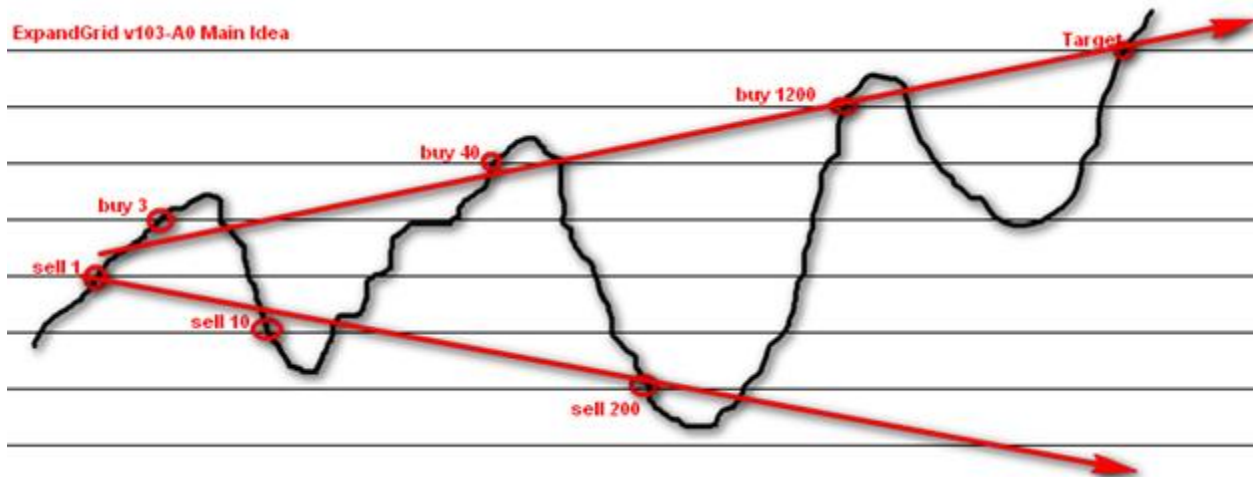
After the set closes, it will start over.

If parameter TakeAndClose=false, the EA will not set the losing position to closure mode, it will target one grid level value.

This style moves the center of the grid as new orders are executed.

sExpandGrid: Stop Order Style

Will plot a grid above the higher buy order and below the lowers sell order. The grid will expand and the center will not move. This style will buy above multiplying the short quantity by the grid levels between the lowest sell order to the highest buy order, vice versa for short. See [Post 4](#) for more details.



Manual: Multiple Manual Order Style

When all MagicNumbers are set to zero the manual style will be activated. To pause grid or to manually place orders using lines. (See lines feature)

Closure Mode

Closure mode is used to close all orders at breakeven and then stop opening new cycles. Closure mode will continue opening positions to average existing cycle.

Steps:

1. Set TakeProfit =0.01 or less than zero if you accepting a small loss.
2. Set CONTINUE=false

To set closure mode to all existing charts, set closure=1 in global variables (F3)

Global Variables

Hit F3 to manage global variables.

closure=1 It will set all the charts in closure mode. Changing it to zero or deleting it will resume trading.

LineTrader Feature Usage

Draw a horizontal line on the chart at the desired level, and then Name it as: (case sensitive, line will change color if activated)

takeProfit --it Will close all the positions at profit. Not all traders.

closeAll ----it Will close all positions. It can be used either for target or stop.

neutralize -it will make long quantity equal to short quantity. Good for indecision stages.

targetBuy -it will close all long positions.

targetSell -it will close all short positions.

buyStop ---it will buy stop. Quantity must be entered on Description.

sellStop ---it will sell stop. Quantity must be entered on Description.

buyLimit --it will buy limit. Quantity must be entered on Description.

sellLimit ---it will sell limit. Quantity must be entered on Description.

Change Log

12/30/15 v104.024

- Flexibility. All styles has been separated into they own set of parameters. It will allow unlimited possibilities.

12/8/2015 v103.22

symmetry2 style. It open and close positions only if a grid line is touched. Duplicate sells and close buys when a top line is touched, duplicate buys and close sells when a bottom line is touched. Like symmetry, it keeps at least one long and one short position.

I do recommend trading it with default values. Note that grid size is been increased here.

Changes:

FloppyChannel now multiply quantities by four instead of six, default parameters are recommended. it open long and short at the same time, like symmetry, it targets one position and then try to break even the other. Reason why target is set to 0.10.

Multi 2 is now one set of symmetry (not symmetry2) and one set of FloppyChannel

Multi 4 has been deleted.

Now the default style is symmetry2. so far it has been the best profit factor/drawdowns results. see test below.

11/18/2015 v103.021

- Symmetry style optimized, maximum drawdown 33K
- Symmetry accumulates, do not partially close orders.

Contact Info

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