Twins Grid System
User Guide

Twins Grid System is a powerful and flexible tool for experienced trader. The system is consist of 2 full grid: Grid A and Grid B, each full grid contains 4 basic grid: BuyLimits Grid, SellLimits Grid, BuyStops Grid and SellStops Grid. There are 31 system parameters , 22 parameters for each basic grid. It's able to create various kinds of grid strategies.

Ⅰ. Features

(1)Some grid strategies need two grids to work together, while MT4 can only test one EA at a time. So these strategies can't be back tested. Twins Grid System solves the problem.

(2)Divide a full grid into 4 basic grids, each has 22 parameters to be tweaked, provide great flexibility for creating a variety of grid strategies.

Ⅱ.Parameters description

(1)System parameters

The system parameters effect on the whole grid system.

Parameter Name	Default Value	Description	Note
5-digit quotes	True	If this product works on 3- and 5-digit quotes , choose true.	

Parameter Name	Default Value	Description	Note
Magic Number	888	EA uses 2 magic number, "Magic Number" for Grid A, "Magic Number+1" for Grid B.	EA recognize orders by Magic Number and comment. So please do not partial close order, otherwise the order comments will be destroyed.
Strategy Name	Grid	Strategy name is used to distinguish orders placed under current set from other sets or other EA. It shows in comment, which can be used to recognize orders.Can not longer than 6 characters for 6 number price,for example GBPUSD-"1.24069"; not longer than 5 characters for 7 number price , for example DJ30-"20591.00"; etc ...	
Display	True	Display EA status on the chart.	
Grids A	True	Run or pause Grids A.	
Grids B	True	Run or pause Grids B.	
Grids Depth	1	Grid levels beyond the price.	
Money mode	Float_money	"Float_money（% percentage of equity）" or "Fixed_money"	Can choose one only.
Allotted money in currency	0	How much money allotted to this strategy.	
Allotted money in percentage （%）	50	Allot 50％ of the equity to this strategy.	
Lots mode	Fixed lots	"Fixed_lot" or "Floated_lot"	Can choose one only.
Fixed lots	0.01	Use fixed 0.01 lot	
Float_lots Per 10 thousand	0.1	Every 10000 place an order of 0.1 lot.	
Max lots per order	0	Max lots that single order can use. 0 means disable.	
Trailing_step in pips	3	In trailing stop, the StopLoss will be modified every 3 pips when the price forward. 0 or negative number means disable.	
Pips Market Effect	3	In case of placing order by market price (not pending order), if there's a gap within 3 pips, place order at market price, if the gap is more than 3 pips, place pending order.	Just leave it as default if you don't know what's the meaning.
Max profit in percentage	20	When the system has profit more than 20% of allocated money, shutdown and restart after "Minutes wake up since Profit shutdown". 0 means disable.	If more than one way of system shutdown are set , the system

Parameter Name	Default Value	Description	Note
Max loss in percentage	20	When the system has loss more than 20% of allocated money, shutdown and restart after "Minutes wake up since Loss shutdown". 0 means disable.	will shutdown in the way that first reached. The result may not precisely be the same as your set due to slippage or latency.
Max profit in currency	0	When the system has profit more than this value, shutdown and restart after "Minutes wake up since Profit shutdown". 0 means disable.	
Max loss in currency	0	When the system has loss more than this value,shutdown and restart after "Minutes wake up since Loss shutdown". 0 means disable.	
Max single winning/losing pips	0	If single order has winning or losing pips over this value, the system will shutdown and restart after "Minutes Wake Up In single pips shutdown" . 0 means disable.	
Kill all now	false	Shutdown the system right now , will not restart.	
Minutes wake up since Profit shutdown	600	If the system shutdown by "Max profit in percentage" or "Max profit in currency" , it will restart after this value.	0 means restart immediately.
Minutes wake up since Loss shutdown	2880	If the system shutdown by "Max loss in percentage" or "Max loss in currency" , it will restart after this value.	
Minutes Wake Up In single pips shutdown	1440	If the system shutdown by "Max single winning/losing pips" , it will restart after this value.	
〖+〗 CCI Time Frame	1 Hour	Time frame the CCI filter will use.	
CCI Period	18	Period the CCI filter will use	
CCI applied price	Close price	Choose **Close/ Open/ High/ Low/ Median/ Typical/ Weighted** price.	
CCI upper	50	If CCI is larger than **"upper"** value ,market is defined as BULL; smaller than **"lower"** value, market is BEAR; between the 2 values, market is shocking.	
CCI lower	-50		
CCI time moment	After_bar_closed	Choose **"real_time"** or **"after_bar_closed"**	

(2)Basic grid parameters

Eight basic grids have similar parameters, let's take grid BuyLimits A for example.

The basic grid " BuyLimits A " is part of full grid " Grids A ", it place BuyLimit order only.

Parameter Name	Default Value	Description	Note
Enable BuyLimits A	true	Run or pause BuyLimits A.	
pips Area_Upper	1000	Basic grid will not place order in the area that is 1000 pips **higher** than start price. This value can be 0 or negative.	Start price is the price when basic grid is enabled, it shows in trade comment.
pips Area_Lower	1000	Basic grid will not place order in the area that is 1000 pips **lower** than start price.This value can be 0 or negative.	
pips Activate	0	"0" means activate basic grid right now; "50" means activate basic grid when market price is 50 pips higher than start price, "-50" means 50 pips lower than start price.	
loss Limit Pause	0	When losing positions are more than this value, basic grid will stop placing new order ,existing orders will remain. 0 means disable.	
pips Interval Prices	15	Place order always 15 pips away from market price. If the value set to 0, means place order at market price.	
Grid size	30	distance between orders	Due to slippage, the result will not be exactly as the same as your set.
Take Profit In Pips	300	0 means disable.	
Stop Loss In Pips	150	0 means disable.	
profit_protect Mode	off	Choose **off/ fixed_protect/ trailing_protect**.	
pips Activate Protect	90	When the order has profit more than 90 pips，start profit protect .Choose **pips Fixed_Protect/ pips Trailing_Protect.**	

Parameter Name	Default Value	Description	Note
pips Fixed_Protect	10	When profit protect is activated, protect 10 pips profit, will not trail the price.	The value can't be larger than "pips Activate Protect".
pips Trailing_Protect	60	Trailing StopLoss 60 pips away from market price.	
multiple Of First Level Lots	1	First level order use base_ lot_ size when this value is "1"; if the value set to "2", use 2 times of the base_ lot_ size; and "0.5" means half of the base_ lot_ size.	The lot size calculated by system is **base_ lot_ size**.
lots Growth_Method	step	Choose **step** or **multiple**. **Step** means increase or decrease lot size with fixed value based on first level order lot size; **multiple** means increase or decrease by times. For BUYSTOP/SELLSTOP grids, if price moves in the **same** direction of the first level order, the lot size of next level will increase/decrease; if price moves in the **opposite** direction of the first level order, the lot size will not change. For BUYLIMIT/SELLLIMIT grid, if price moves in the **same** direction of the first level order, the lot size of next level will not change; if price moves in the **opposite** direction of the first level order, the lot size will increase/decrease. If the decreasing lot size is smaller than minimum lot size allowed by broker, use minimum lot size. If the increasing lot size is larger than "max Lots Per Order" of the system parameters , use "max Lots Per Order".	Take **SELLSTOP** grid for example, if lot size of the first level order is 0.5, "Grid size" is 10, "lots Growth_Method" choose **multiple** and value is 0.8 : If the first level order is placed at price 125.30, then at 125.20, the lot size is 0.5*0.8=0.4; at 125.10, lot size is 0.5*0.8^2=0.32; etc..... And at 125.40, 125.50 ,125.60,.... the lot size will be the same as the first level (0.5), for they are in the **opposite** direction of the first level order.
growth Value	0	For example, if "Fixed lot" is chosen , and set to 0.5 lot, "multiple Of First Level Lots" is set to 0.6, then the lot size of the first level order is 0.5*0.6=0.3 If "lots Growth_method" choose Step, value "0" means disable; "0.05" means lot size of next level is 0.3+0.05=0.35; "-0.05" means lot size of next level is 0.3-0.05= 0.25 If "lots Growth_method" choose Multiple, value "0" means use minimum lot size allowed by broker; "2" means lot size of next level is 0.3×2=0.6；"0.8" means lot size of next level is 0.3×0.8=0.24	Lot size is calculated by **levels** , not by prior orders, because prior orders maybe stopped by CCI filter.
use First level Lot Size as Step value	false	If choose "true" , when "lots Growth_Method" choose **step** ,use first level lot size as step value.	

Parameter Name	Default Value	Description	Note
		For example , first level lot size is 0.3, then lot size of next level is 0.3+0.3=0.6	
Pause in Bull_Market	false	Stop placing new order if the CCI filter defines the market as Bull.	
Pause in Bear_Market	false	Stop placing new order if the CCI filter defines the market as Bear.	
Pause in Shocking_Market	false	Stop placing new order if the CCI filter defines the market as Shocking.	
kill All Now	false	Trades and orders of this basic grid will be closed if choose "true" .	The basic grid won't restart itself after shutdown, it will restart with the system.
pips from first level to Kill All	0	"0" means disable this function. "500" means when market price is 500 pips higher than the first level price, shutdown this basic grid. "-500" means shutdown basic grid when market price is 500 pips lower than first level price.	

Attention ：

1.Do not confuse "start price" and "first level price". "Start price " is the market price when basic grid is enabled, it shows in the comment."First level price" is the price of first level order.

2.Increase/Decrease of lot size is based on level ,not on prior order. Let's take BUYLIMIT grid for example, if "Grid size" is 10, "lots Growth_Method" choose multiple and value is 2, "Pause in Bear_Market" choose true, first level order is placed at 126.00 with 0.01 lot . Suppose the price moved downward until 125.60, and CCI filter defined as Bear Market, no orders were placed from 125.90 to 125.70 . Now the price is 125.60, 4 levels away from 126.00 , so the lot size is 0.01*2^4=0.16

III. Create strategies

Twins Grid System is not an automatic cash machine, you need to set the parameters carefully before trading. This EA has more than 200 parameters, it's able to create most kinds of grid strategies. Let's begin from simple ones .

(1)Hedge losing position

If you sold 1 lot , then the price moves against you, you can place BuyStop grid to hedge the losing position. Below is parameters for your reference:

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Fixed lots: 0.05 ;

Minutes wake up since Profit shutdown: 99999 ;*(so you have enough time to close the EA manually)*

BuyStops A:

Grid size: 10 ; take Profit In Pips : 0 ; stopLoss In Pips : 150 ; profit_protect Mode : fixed_protect ; pips Activate Protect : 90 ; pips Fixed_Protect : 10 ;

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If the price keeps moving upward, buy orders of 0.05 lot will accumulate and bypass the lot size of short position(1 lot) , and finally cover the loss . If the price moved upward, then downward , because "loss Limit Pause" had set to "10" with

"stoploss" of 150 pips , so max losing position is 10*0.05=0.5 lot . If the price keeps moving downward ,you can reach breakeven at last .

Below is back test result of simulating hedge losing position, You can find detailed report and set file in attachment .

(2) News breakout

You can place breakout grids on both sides of the price before the moment that big news or important data is released. Parameters below for your reference:

max Profit In Percentage: 5 ;

BuyStops A :

pips Area_Upper : 1000 ;pips Area_Lower : 0 ;pips Interval Prices : 15 ; Grid size :15 ; take Profit In Pips : 0 ; stopLoss In Pips : 30 ; profit_protect Mode : fixed_protect ; pips Activate Protect : 90 ; pips Fixed_Protect : 10 ; lots Growth_Method : multiple ; growth Value ： 0.8
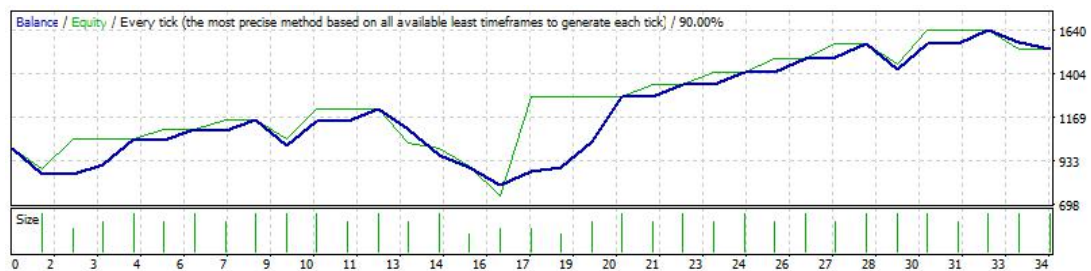
SellStops A:

pips Area_Upper : 0 ;pips Area_Lower : 1000 ;

The other parameters are the same as BuyStops A.

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Below is back test result of non-farm day of Dec. 2016, You can find detailed report and set file in attachment .

Note : you should start the EA just minutes before the news or data release, and close the EA after the result comes out despite of winning or losing .

(3) Trend pyramid

This strategy has good performance in trend market , and will lose in range market. It does not care which direction the price will move to .

Parameters below for your reference:

max Profit In Percentage : 6 ; Max single winning/losing pips : 900 ; 〖+〗 cciTimeFrame : 4 Hour ;

BuyLimits A:

loss Limit Pause : 1 ;pips Interval Prices : 25 ; Grid size :

50 ;take Profit In Pips: 0 ; stopLoss In Pips : 150 ; profit_protect Mode : fixed_protect ; Pause in Bear_Market : ture ; other parameters leave as default.

SellLimits A：

Pause in Bull_Market : ture ; Pause in Bear_Market : false ; other parameters are the same as BuyLimits A.
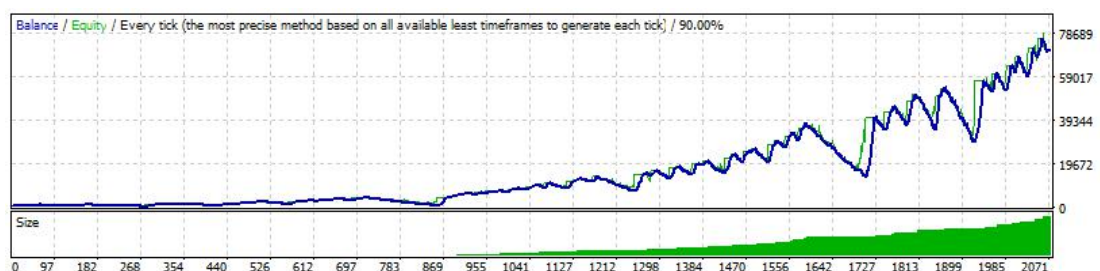
BuyStops A:

loss Limit Pause : 0 ;Pause in Bear_Market : ture ; Pause in Shocking_Market : ture ; other parameters are the same as BuyLimits A.

Sellstops A:

Pause in Bull_Market : ture ; other parameters are the same as BuyStops A.

Back test result of GBPJPY_2015-2016 as below, or see the details in myfxbook:

http://www.myfxbook.com/strategies/twins-grid-system-trend-strategy/114834

Balance increased 70 times in 2 years , Maximal drawdown 42.35%, Relative drawdown 60.21% . Drawdown is big when the market is "flat" .

What will happen if we change some parameter values as below:

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max Profit In Percentage : 20 ; max Loss In Percentage : 20 ; Max single winning/losing pips :1000 ; CCI Period : 24 ; CCI Upper : 70 ; CCI Lower : -70 ;

BuyLimits A:

pips Interval Prices : 35 ; Grid size : 70 ; profit_protect Mode : off ; other parameters no change.

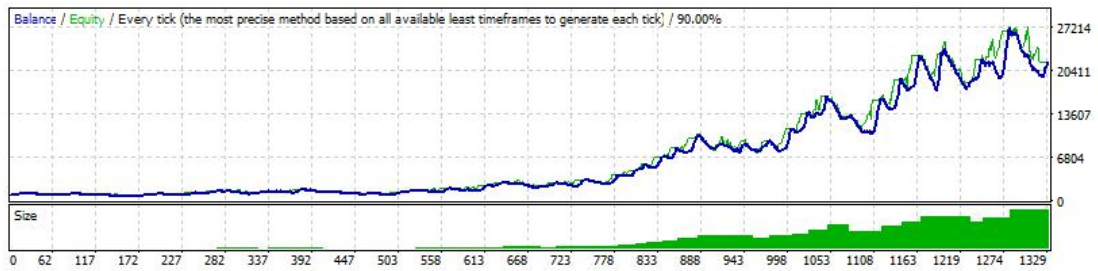**SellLimits A:**

Same change as BuyLimits A .

BuyStops A:

pips Interval Prices : 35 ; Grid size : 70 ; profit_protect Mode : trailing_protect ; pips Trailing_Protect : 45 ; other parameters no change.

SellStops A:

Same change as BuyStops A.

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Back test result :

Balance increased 20 times , Maximal drawdown 28.75%, Relative drawdown 45.53% . Both profit and risk decrease.

You can find detailed reports and set files of above 2 back tests in attachment .

(4) Range

When the trend pyramid strategy keeps losing, usually the market is in range. You can pause the trend pyramid strategy and place a range strategy like this :

max Profit In Percentage: 10 ; max Loss In Percentage : 40 ; Max single winning/losing pips : 400 ; 〖 + 〗 cciTimeFrame : 5 minutes ; CCI Period ： 48 ; CCI Applied Price : Weighted price ; CCI Upper : 80 ; CCI Lower : -80
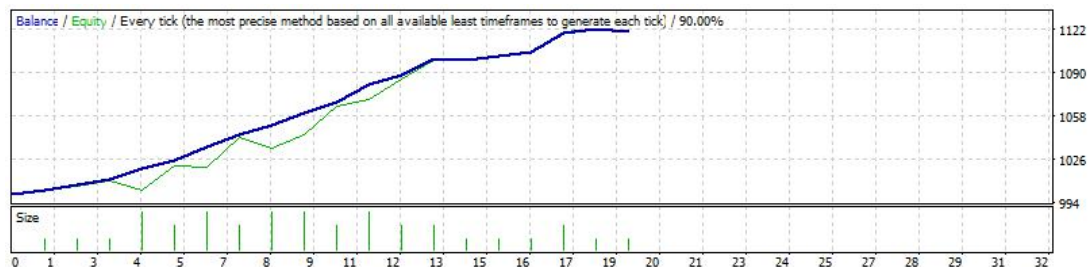
BuyLimits A:

pips Area_Upper : 0 ; pips Area_Lower : 200 ; loss Limit Pause : 3 ; pips Interval Prices : 35 ; Grid size : 70 ; take Profit In Pips : 0 ; stopLoss In Pips : 0 ; profit_protect Mode : trailing_protect ; pips Activate Protect : 60 ; pips Trailing_Protect : 30 ; lots Growth_Method : step ; use First

level Lot Size as Step value : true ; Pause in Bear_Market : true

SellLimits A:

pips Area_Upper : 200 ; pips Area_Lower : 0 ; Pause in Bull_Market : true ; other parameters are the same as BuyLimits A.

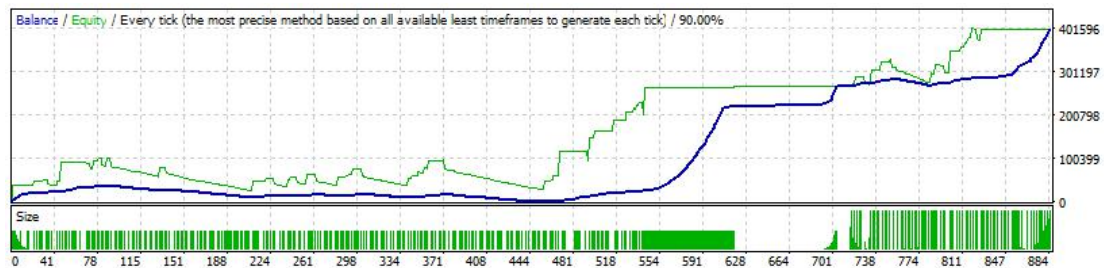Below is back test result of GBPJPY_2016.10.1011.02 , You can find detailed reports and set files in attachment .

Drawdown is small(6.67%) , because the market is "flat". If the price moves out of the range , you should shutdown this strategy to avoid big loss.

Ⅳ. Semi-automatic trading

It's not recommended that leaving the EA run for a long time alone. You'd better watch on the market, judge trend or range, and take the right strategy.

You needn't make a precise distinction between trend and range- it's difficult to do that. A rough distinction works. Grid strategy is created for dealing with uncertainty, using grid strategy correctly can enlarge your profit and reduce loss.

You can make achievement as following or even better, if you're an experienced trader.

It's a simulation of EA&manual mixed trading . You can find detailed report and set file in attachment .

Ⅴ. Advisement

(1) If you have 5000 for trading, deposit 1000 every time. Once your account is doubled , withdraw your deposition and use profit for trading.

(2) Use a cent account to practice this EA before real trading.

(3) Back test in every tick model is slow , because this EA has many parameters to be processed. You can test in control points model or open price model on period M1 first. Once you found a strategy is profitable , test it in every tick model again .

Happy trading !