



Grid Harvester 2.6 instruction (02-04-2014) by Grzegorz Korycki

Grid harvester was created to support my manual trading and to extract trending markets. It works especially good on cross-pairs on forex, as they have draw-down patterns that can be very beneficial.

0. Easy Mode – easy and fast optimizations without deep knowledge!

Grid Harvester has lot of options, **but it can be also used with default options with minor optimizations**. Generally there are few options you need to change/optimize and I will describe them here. You can see more detailed descriptions below that part. (see by the numbers)

1.1 Next transaction – general direction of the trend – user has to decide that.

4.1 Scale of the grid – each pair has different drawdown sizes in pips while trending (include in optimization)

6.2 Money management balance – the amount of money required to be on the account (if non-micro account it has to be x10 more, see detailed description) – (include in optimization)

10.5 Stop Loss at equity percentage – default is 0 (off) so it means maximum profit, but can wipe account if the trend changes! If you want to enable Equity based stop loss the mm_balance also has to be higher. So if you want stop loss – include in the optimization!

Generally this 3-4 factors need to be modified for optimizing on a new pair. Example:

Set values:

1.1 next transaction – select direction of the trend

10.5 stop_loss – set manually how much equity you want to be protected, and then optimize values above

Optimized values: (only examples, you may widen/shorten the range)

4.1 scale => start 0.1 end 4.0, step 0.1

6.2 mm_balance => start 100, end 5000, step 100

Remember to optimize with fast_mode = TRUE (7.3 point) – it will speed up entire process by many times!!!

If you have many options to optimize you may try 1M opening prices instead of Every tick. Final optimizations and tests require EVERY TICK!

MQL5 cloud also makes tests much faster, yet it requires payments for its usage.

1. Manual Trading Mode

<input type="checkbox"/> _____ Manual Trading Mode _____	____ Manual Trading Mode ____
<input type="checkbox"/> Next transaction	Buy mode
<input type="checkbox"/> Close current transaction	false
<input type="checkbox"/> Wait after closing transaction (in seconds)	180
<input type="checkbox"/> how many automatic transactions. 1 for single, -1 for infinite;	-1
<input type="checkbox"/> - - - - -	
<input type="checkbox"/> -- DESCRIPTION: For manual trading - for single transaction	
<input type="checkbox"/> -- throw it on the chart with desired mode. (buy or sell)	
<input type="checkbox"/> -- Then access script settings and turn the "Next transaction"	
<input type="checkbox"/> -- mode to "No action". That means that the next transaction	
<input type="checkbox"/> -- will not be done until you change the mode to Buy or Sell	
<input type="checkbox"/> -- again.	

1.1 Next transaction

Direction of the trend In the manual mode.

1.2 Close current transaction

If you want to manually close trades at some point turn that option to TRUE. All positions will be closed even if they are not profitable or did not reach TAKE PROFIT.

1.3 Wait after closing transaction (in seconds)

Wait certain amount of seconds (default 180) after closing the transactions for example by Take Profit factor.

1.4 How many automatic transactions. 1 for single, -1 for infinite;

How many transactions will be performed (default -1 => infinite). If changed the number of transactions will be limited to entered number, then the script will stop.

2. Start price

<input type="checkbox"/> _____ Start Price _____	____ Start Price ____
<input type="checkbox"/> Start trading price min and max enabled	false
<input type="checkbox"/> Trade only when higher than	0.0
<input type="checkbox"/> Trade only if lower than	0.0
<input type="checkbox"/> Stop trading price	false
<input type="checkbox"/> Trade only when higher than	0.0
<input type="checkbox"/> - - - - -	
<input type="checkbox"/> - - DESCRIPTION: These values can lock opening new basket	
<input type="checkbox"/> - - inside price range. Whenever price is out of range it will	
<input type="checkbox"/> - - stop opening new trades after taking profit or loss if set.	
<input type="checkbox"/> - - - - -	

2.1 Start trading price min and max enabled

If enabled, the trading will only take place when value is within set price bracket.

2.2 Trade only when higher than

2.3 Trade only if lower than

Minimum and maximum price between the script will trade. Requires 2.1 option to be set to TRUE.

2.4 Stop trading price

Stop EA completely when desired price is reached.

3. Lot and Take Profit

Variable	Value
<input type="checkbox"/> _____ Lot and Take Profit _____	____ Lot and Take Profit _____
<input type="checkbox"/> Lot size	0.01
<input type="checkbox"/> Automatic non-micro account lot and Money Management multiply	false
<input type="checkbox"/> Profit in pips per position	43.0
<input type="checkbox"/> point of profit increase per position opened	0.9
<input type="checkbox"/> point of profit increase per lot opened	0.0
<input type="checkbox"/> - - - - -	
<input type="checkbox"/> - - DESCRIPTION: If operating on non-micro account you can use	
<input type="checkbox"/> - - modethat automatically adjusts money management and lot	
<input type="checkbox"/> - - size values. You can do that manually by multiplying	
<input type="checkbox"/> - - MM balance and lot size. Profit is set in pips. (0.0001	
<input type="checkbox"/> - - or 0.01) For each open position or lot you can add certain	
<input type="checkbox"/> - - value to take profit value. (the bigger the basket - the	
<input type="checkbox"/> - - bigger TP)	

3.1 Lot size

Default lot size. This value can be manifolded by Money Management or grid multiplier.

3.2 Automatic non-micro account lot and Money Management multiply

This option is for 0.1 lot accounts. This option if set to TRUE will automatically increase lot size and Money Management Balance factors so it works with non-micro account. Note that if this option is set true, you need to have Money management value times 10. So if MM_balance is set to 1700, you need to have 17000 on the account (for example of US DOLLARS or US CENTS).

You can achieve same result by increasing lot for example from 0.01 to 0.10 and mm balance from 1700 to 17000.

3.3 Profit in pips per position

Take profit in pips (0.0001 for pairs like GBPUSD or 0.01 for pairs with less amount of digits after the dot like GBPJPY). 43 pips means it will close all positions if average position + 43 pips is reached.

3.4 Point of profit increase per position opened

How much should the EA increase Take Profit factor after each opened grid position.

Example: if it is set to 0.9 and Profit 43 and there is only 1 grid position opened the Take Profit=43, if 2 Take Profit=43.9, if 3 Take Profit=44.8 and so on.

3.5 Point of profit increase per lot opened

The same as 3.4 but if position 2. has more 2x more lots than base position it TP=44.8 after 2 opened grid positions. Can be used together with 3.4 (if used together it will add TP and both bonuses after each opened position)

4. Grid Scale

<input type="checkbox"/> _____ Grid Scale _____	_____ Grid Scale _____
<input type="checkbox"/> Scale of the grid (1-no scale)	0.99
<input type="checkbox"/> Bitcoin scale of the grid	false
<input type="checkbox"/> Bitcoin scale base balance	250.0
<input type="checkbox"/> How many weeks to check for max price	50
<input type="checkbox"/> Bitcoin scale of lot size (greater max course => bigger lot)	false
<input type="checkbox"/> Scale also the profit factor	false
<input type="checkbox"/> - - - - -	
<input type="checkbox"/> - - DESCRIPTION: allowing to scale take profit (also by ATR	
<input type="checkbox"/> - - if enabled)	

4.1 Scale of the grid (1-no scale)

Scale the grid positions. So if 2. position is 20 pips away, 3. position 45 pips away and SCALE=2.0, then 2. position will be 40 pips and 3. position 90 pips away. If value of SCALE=0.5 in that case => 2. position 10 pips away 3. position 45 pips away.

4.2 „Bitcoin scale” of the grid

If set to true the scale will vary depending on the current course. This option is useful when there are big course changes (like price drops 4x or 8x). It is not very useful on FOREX market as moves there are minimal and require big leverage.

4.3 „Bitcoin scale” blance

It means if we set it to 250, and the price goes to 500, the additional scale factor will be 2.0, at 1500 it will be 6.0, at 2000 8.0 and so on. This factor is determined by maximum price, so if the price falls form 2000 to 800 it will still work with 8.0x multipler. To avoid that change option 4.4. It does not collide with 4.1 and can work together with that option.

4.4 How many weeks to check max price.

Works together with 4.2 and 4.3 options. It determines how many weeks behind should maximum price be determined.

4.5 Bitcoin scale of lot size (EXPERIMENTAL! Use at your own risk)

Experimental option that requires a lot of testing

4.6 Scale also the profit factor

Scale the prifit factor by scale factor (4.1)

5. Trailing Step

<input type="checkbox"/> _____ Trailing Step _____	____ Trailing Step ____
<input type="checkbox"/> Trailing Step (0 off, 1 on)	false
<input type="checkbox"/> Trailing Step Percentage	70.0
<input type="checkbox"/> Minimum basked size fr TS activation	6
<input type="checkbox"/> - - - - -	
<input type="checkbox"/> - - DESCRIPTION: Trailing stop for big baskets.	
<input type="checkbox"/> - - use 60-80% for trailing stop value. This value refers to	
<input type="checkbox"/> - - percentage of the maximum equity-balance profit that will	
<input type="checkbox"/> - - close the trailing step.	

5.1 Trailing Step

If set to TRUE it enables the percentage trailing step option.

5.2 Trailing Step Percentage

Percentage amount that will make TS done. Example: if take profit 43 is reached and TS kicks in, and then falls to 70% of that value (30.1) the transaction is going to be closed. If take profit 43 is reached but course raises to 100 pips, and then goes back to 70% of that value (70 pips) the transaction/s will be closed.

5.3 Minimum basket size fr TS activation

Minimum grid positions opened for Trailing Step activation. TS makes sense usually with bigger basket as each opened position multiples potential profit.

6. Money Management

<input type="checkbox"/> Money Management	Money Management
<input type="checkbox"/> Money management activated	true
<input type="checkbox"/> Money management base ballance	1700.0
<input type="checkbox"/> - - - - -	
<input type="checkbox"/> - - DESCRIPTION: Base ballance for money management. If you	
<input type="checkbox"/> - - have 5x more balance, lot size will be multiplied by 5x	

6.1 Money management activated

If set to TRUE it enables the MM. If sat to FALSE there will be fixed lot size.

6.2 Money management base ballance

Base balance for money management. If set to 1700 and you have 6800usd on account it will automatically increase lot size by 4x.

It is also the minimum required money on account (for example in US DOLLARS or US CENTS on cent account). The value is pretty high so i advice using CENT (other name for it NANO) accounts, that way instead of 1700usd/17000usd you will need only 17usd/170usd to start (depending on minimum lot size). Take under consideration that if option 3.2 is TRUE your minimum money on account has to be 10x more (as your minimum lot is 10x greater – not 0.01 but 0.1). Examples:

mm_balance (6.2) = 1700 ; lot_size (3.1) = 0.01

a) Normal 0.1 lot account => minimum money 17000usd (3.2 option TRUE)

b) Micro 0.01 lot account => minimum money 1700usd (3.2 option FALSE)

c) Cent 0.1 lot account (like Robofox pro-cent) => minimum money 17000us cents (3.2 option TRUE)

d) Cent 0.01 lot account (like Apari-forex nano account) => minimum money 1700 us cents (3.2 option FALSE)

I strongly advice using Robofox Pro-Cent accounts as they have identical spreads to their normal accounts.

Alpari-forex.ru accounts have pretty big spreads, yet they require least money to invest! (like 20 bucks)

7. Graphics

Graphics	Graphics
<input type="checkbox"/> Enable Graphics	true
<input type="checkbox"/> Line size	2
<input type="checkbox"/> Fast Mode (Enable for optimization); also disables GFX	false
<input type="checkbox"/> - WARNING: Optimize with FAST MODE ON!! -	
<input type="checkbox"/> - - - - -	
<input type="checkbox"/> - - DESCRIPTION: Graphics are showing levels and drawdowns	
<input type="checkbox"/> - - at current levels (after pointing on that line)	

7.1 Enable Graphics

If set to FALSE disables the graphics drawn on the chart. Requires FAST_MODE to be off!

7.2 Line size

How thick the lines drawn should be.

7.3 Fast Mode (Enable for optimization); also disables GFX

turn this option to TRUE to speed up tests and optimizations to the maximum. Needs to be set to FALSE to see the graphics.

8. Atr

<input type="checkbox"/> _____ Atr _____	__ Atr __
<input type="checkbox"/> Enable ATR for scale of the grid	false
<input type="checkbox"/> ATR Period	10
<input type="checkbox"/> ATR Timeframe	8 Hours
<input type="checkbox"/> ATR normal	1.0
<input type="checkbox"/> - - - - -	
<input type="checkbox"/> - - DESCRIPTION: use ATR normal to set the relative ATR value	
<input type="checkbox"/> - - to which scale mechanism will relate to.	

8.1 Enable ATR for scale of the grid

If set to TRUE the grid is scaled depending on current ATR. ATR measures current volatility of the index. That way grid is tightened when the volatility is low and is being expanded when it is high.

8.2 ATR Period

Period factor of the ATR indicator.

8.3 ATR Timeframe

Timeframe of the ATR indicator.

8.4 ATR normal

The ATR value that scale will be =1.0. So if it is set to 1.0, then when atr is 0.33, scale by atr will be =0.33. If atr is 1.3, the scale of ATR factor will be =1.3.

9. Grid

<input type="checkbox"/> _____ Grid _____	_____ Grid _____
<input type="checkbox"/> Lots same size as 01	false
<input type="checkbox"/> Number of positions (max. 20)	10
<input type="checkbox"/> Lot 01 multiplier	1
<input type="checkbox"/> Lot 02 pip distance	18
<input type="checkbox"/> Lot 02 multiplier	1
<input type="checkbox"/> Lot 03 pip distance	41
<input type="checkbox"/> Lot 03 multiplier	1
<input type="checkbox"/> Lot 04 pip distance	83
<input type="checkbox"/> Lot 04 multiplier	2
<input type="checkbox"/> - - - - -	
<input type="checkbox"/> - - DESCRIPTION: Grid positions and their sizes.	
<input type="checkbox"/> - - My favourite 10-position grid is set by default.	
<input type="checkbox"/> - - Pips can be scaled by Scale Value or ATR if enabled.	
<input type="checkbox"/> - - Each lot value is a multiplier of Base Lot.	
<input type="checkbox"/> - - Warning: They can multiplied more by money managment	
<input type="checkbox"/> - - is enabled!	

9.1 Number of positions (max. 20)

Number of active grid positions (1-20)

9.2 Lot 01 multiplier

multiplier of base lot. Can be also additionaly multiplied if money management option (6.1) is TRUE.

9.3 Lot 02 pip distance

distance form first opened position in PIPS. Can be scaled by scale factor (4.1) or bitcoin scale factor (4.2) or by ATR (8.1)

10. Stop Out

<input type="checkbox"/> _____ Stop Out _____	Stop Out _____
<input type="checkbox"/> Position stop Loss on	false
<input type="checkbox"/> Stop Loss at grid position (2-20) - fixed	20
<input type="checkbox"/> Stop Loss by currency	false
<input type="checkbox"/> Use of account funds (in currency), then stop loss	100
<input type="checkbox"/> Stop Loss at equity percentage (0-99), 0 for off	0.0
<input type="checkbox"/> Block trading after Stop Out (script will be stopped if TRUE)	true
<input type="checkbox"/> - - - - -	
<input type="checkbox"/> - - DESCRIPTION: set grid position that will be the stop loss	
<input type="checkbox"/> - - instead (1-20) or/and set equity-based stop loss	
<input type="checkbox"/> - - (setting it to 75 will stop out at 75% balance - equity)	

10.1 Position stop Loss on

If true convert selected position to stop loss position – it is being marked by white line on the graphics chart.

10.2 Stop Loss at grid position (2-20)

Select which grid position will be treated as stop loss position (related to 10.1)

10.3 Stop loss by currency

if set to TRUE you can set amount of currency the EA can use. After losing selected amount Stop loss will kick in.

10.4 Use of account funds (in currency), then stop loss

After losing selected amount Stop loss will kick in. Requires 10.3 option to be set to TRUE.

10.5 Stop Loss at equity percentage (0-99), 0 for off

Equity based stop loss to protect percentage of equity. If set to 90% then if the Equity/Balance ratio drops to 90% the Stop Loss will kick in

10.6 Block trading after Stop Out.

If any of the selected stop losses will be enabled and this option set to TRUE the entire EA will be stopped to prevent future losses, so that user can make decision about further actions

11. Automated mode

Tester	<input type="checkbox"/> [EXPERT MODE] [EXPERT MODE] [EXPERT MODE]	[EXPERT MODE] [EXPERT MOD
	<input type="checkbox"/> Automated Trading Mode [ALPHA]	Automated Trading Mode [ALPH
	<input type="checkbox"/> ---	These are RAW settings. You have
	<input type="checkbox"/> Next transaction	[OFF]
	<input type="checkbox"/> ---	--- Trend MA crossovers ---
	<input type="checkbox"/> MA crossovers ON/OFF	true
	<input type="checkbox"/> - - -	
	<input type="checkbox"/> Moving Average Period	1 Day
	<input type="checkbox"/> Fast Moving Average	3
	<input type="checkbox"/> Fast Moving Average Mode	Exponential
	<input type="checkbox"/> Slow Moving Average	8
	<input type="checkbox"/> Slow Moving Average Mode	Exponential
	<input type="checkbox"/> Min pips difference between MAs to treat as a trend	0.05
	<input type="checkbox"/> Max pips difference between MAs to treat as a trend	99999.0
	<input type="checkbox"/> Close on opposite Trend	OFF
	<input type="checkbox"/> - - -	
	<input type="checkbox"/> Secondary MA crossovers ON/OFF	false
	<input type="checkbox"/> Moving Average Period (Secondary)	1 Day
	<input type="checkbox"/> Fast Moving Average (Secondary)	8
	<input type="checkbox"/> Fast Moving Average Mode (Secondary)	Exponential
Tester	<input type="checkbox"/> Slow Moving Average (Secondary)	21
	<input type="checkbox"/> Slow Moving Average Mode (Secondary)	Exponential
	<input type="checkbox"/> Min pips difference between MAs to treat as a trend (Secondary)	0.05
	<input type="checkbox"/> Max pips difference between MAs to treat as a trend (Secondary)	99999.0
	<input type="checkbox"/> Close on opposite Secondary Trend	OFF
	<input type="checkbox"/> - - -	
	<input type="checkbox"/> Entry Moving Average	false
	<input type="checkbox"/> Entry Moving Average	6
	<input type="checkbox"/> Entry Moving Average Mode	Simple
	<input type="checkbox"/> Max pips distance from Entry MA	3.5
Tester	<input type="checkbox"/> Min pips distance from Entry MA (also can be minus)	0.0
	<input type="checkbox"/> Close Moving Average (dynamic stop loss)	false
	<input type="checkbox"/> Close Moving Average	50
	<input type="checkbox"/> Close Moving Average Mode	Simple
	<input type="checkbox"/> Max pips distance from Close MA	1.0
	<input type="checkbox"/> - - -	
	<input type="checkbox"/> Stop the script if Close MA reached	false
	<input type="checkbox"/> - - -	
	<input type="checkbox"/> ENABLE ADX	false
	<input type="checkbox"/> ADX Period	7
	<input type="checkbox"/> Use ADX Wilder instead of ADX	false
	<input type="checkbox"/> ADX Timeframe	1 Week
	<input type="checkbox"/> Minimum ADX	20
	<input type="checkbox"/> - - -	
	<input type="checkbox"/> ENABLE ADX 2	false
	<input type="checkbox"/> ADX 2 Period	7
	<input type="checkbox"/> Use ADX 2 Wilder instead of ADX 2	false
	<input type="checkbox"/> ADX 2 Timeframe	1 Week
	<input type="checkbox"/> Minimum ADX 2	20
Tester	<input type="checkbox"/> - - -	
	<input type="checkbox"/> Enable MACD Filter	false
	<input type="checkbox"/> MACD Timeframe	4 Hours
	<input type="checkbox"/> macd_fast	12
	<input type="checkbox"/> macd_slow	26
	<input type="checkbox"/> macd_sma	9
	<input type="checkbox"/> min_macd	0.001
	<input type="checkbox"/> - - -	
	<input type="checkbox"/> Allow Buy	true
	<input type="checkbox"/> Allow Sell	true

Automated mode is still in TESTING phase, so use it at your own risk!

Remember to use BACK-TESTS first! Also if you are not sure use it on DEMO account after that :). **The EA is designed to work with CENT accounts. Working on non-cent accounts may require larger amount of money on account!**