



www.EA-X2.com

Expert Name: Correlation_Hedge

HOW DOES IT WORK :

The Correlation Hedge, is an Expert Advisor based on hedging 2 different pairs, using the pairs correlation to determine the enter of a trade.

Using this strategy, you have your both operations hedged all the time, collecting your profit from the *swap* or from the trade itself.

Please be aware that the trades can last 1 day, a week, or even a month to be completed.

WHAT IS CORRELATION?

Before continuing the explanation of the EA, you must know what the *correlation* is in order to place good trades with good currency pairs.

Defining Correlation

The reason for the interdependence of currency pairs is easy to see: if you were trading the British pound against the Japanese yen (GBP/JPY pair), for example, you are actually trading a kind of derivative of the GBP/USD and USD/JPY pairs; therefore, GBP/JPY must be somewhat correlated to one if not both of these other currency pairs. However, the interdependence among currencies stems from more than the simple fact that they are in pairs. While some currency pairs will move in tandem, other currency pairs may move in opposite directions, which is in essence the result of more complex forces.

Correlation, in the financial world, is the statistical measure of the relationship between two securities. The **correlation coefficient** ranges between -1 and +1 (sometimes can be expressed as -100 and +100). A correlation of +1 (*positive correlation*) implies that the two currency pairs will move in the same direction 100% of the time. A correlation of -1 (*negative correlation*) implies the two currency pairs will move in the opposite direction 100% of the time. A correlation of zero implies that the relationship between the currency pairs is completely random.

Correlations Do Change



It is clear then that correlations do change, which makes following the shift in correlations even more important. Sentiment and global economic factors are very dynamic and can even change on a daily basis. Strong correlations today might not be in line with the longer-term correlation between two currency pairs. That is why taking a look at the six-month trailing correlation is also very important. This provides a clearer perspective on the average six-month relationship between the two currency pairs, which tends to be more accurate. Correlations change for a variety of reasons, the most common of which include diverging monetary policies, a certain currency pair's sensitivity to commodity prices, as well as unique economic and political factors.¹

What the Correlation Hedge EA does is find a correlation value (positive or negative, depending the pair) *from .93 up to 1.0* to enter the trade. By doing this you will be sure that when you enter a trade is **the right moment**, since correlation is very strong, and then you just have to wait until the correlation drops at your favor (profit in pips) or the swap fill your profit.

HOW TO CALCULATE THE CORRELATION?

There are 2 forms to calculate correlation, manual way or automated way.

MANUAL WAY

To calculate a simple correlation, just use a spreadsheet, like Microsoft Excel. Many charting packages allow you to download historical daily currency prices, which you can then transport into Excel. In Excel, just use the correlation function, which is =CORREL(range 1, range 2). The one-year, six-, three- and one-month trailing readings give the most comprehensive view of the similarities and differences in correlation over time; however, you can decide for yourself which or how many of these readings you want to analyze.

Here is the correlation-calculation process reviewed step by step:

¹ (Using Currency Correlations To Your Advantage, May 19, 2005 | By [Kathy Lien](#), Chief Strategist, FXCM)



1. Get the pricing data for your two currency pairs; say they are GBP/USD and USD/JPY
2. Make two individual columns, each labeled with one of these pairs. Then fill in the columns with the past daily prices that occurred for each pair over the time period you are analyzing
3. At the bottom of the one of the columns, in an empty slot, type in =CORREL(
4. Highlight all of the data in one of the pricing columns; you should get a range of cells in the formula box.
5. Type in comma
6. Repeat steps 3-5 for the other currency
7. Close the formula so that it looks like =CORREL(A1:A50,B1:B50)
8. The number that is produced represents the correlation between the two currency pairs

AUTOMATED WAY

Just visit www.mataf.net/en/analysis-correlation.htm or use the internal indicator of the EA.

WHAT IS THE SWAP?

Another very important part of this EA and system is the *swap*.

The *swap* is a debit or credit paid or earned as a reflection of the varying interest rates applicable to currency pairs. When trading the USD/JPY for example, swap interest rates will be determined based on the interest rates of the countries represented by this pair. Depending on whether you are long or short and which country has higher interest rates, you may be, charged or credited interest. Essentially, when a trader holds a position over night they are subject to the interest rates applicable to the currency pair they are trading. 'Swap' is also commonly referred to as 'rollover rates'.

When are the swap rates calculated?

Swap rates are calculated daily at 4:59 EST. Trades that have been opened before 4:59 EST and held open past this time will be subject to swap rates.

Try to trade on Wednesday. Why?



Many brokers, like www.interbankfx.com make their swap rates tripled on Wednesday at 4:59 EST., so place your traces before this time.²

In conclusion, you will have always a positive and a negative swap in your positions, if these are hold for more than a day.

To know how much you will be charged, just chat or visit your broker website and check the swap rates. The EA don't need this value, since it will calculate it automatically.

SWAP IMPORTANCE

As we stated before, the swap is the second most important part of this strategy.

Lets suppose you have checked the correlation of several pairs, and found that the EUR/USD and the USD/CHF have a strong negative correlation, then, you decide to hedge EUR/USD and USD/CHF, making a buy/buy trade. You expect to have profit from the trade, buying EUR/USD and buying USD/CHF.

As you will check it, these currencies have a very strong negative correlation, but a lot of the EUR/USD have a greater value than 1 lot of the USD/CHF³. If everything goes as you expected, you will have profit from the movement of both currencies, until the EUR/USD moves more than the USD/CHF; but you, and nobody, knows what is going to happen with these currencies.

So if the EUR/USD (which you bought) is going short (exactly the opposite), and the USD/CHF (which you bought) is going short (exactly the opposite), then you will have a negative floating balance.

What is the solution for this problem?. The SWAP.

The swap rates for these pairs at the date you placed your trade, in Interbank FX, using a mini account were:

²www.interbankfx.com/swap_rates.php

³ The value of a pip move in the EURUSD is \$10 for a lot, while the value of a pip move in USDCHF is \$8.34 for the same number of units.



Symbol	Buy	Sell
EUR/USD	\$-.75	\$.60
USD/CHF	\$.94	\$-1.19

As you look at this, you will see that you have a negative swap over the EUR/USD, and a positive swap over the USD/CHF, then just make the following math:

$$\text{Total Swap} = (\text{EUR/USD swap}) + (\text{USD/CHF swap})$$

$$\text{Total Swap} = (-.75) + (.94)$$

$$\text{Total Swap} = +.19$$

Sooner or later, your positive swap will start to generate interest at your favor, and your "losing" trade will become a positive one (this could take a long time, so be patient. ***This is the reason why you should have a very good money management:***

13491253	2007.01.19	12:00	buy	2.15	eurusdm	1.2961	0.0000	0.0000	1.2971	0.00	0.00	-8.45	21.50
13491255	2007.01.19	12:00	buy	3.48	usdchfm	1.2493	0.0000	0.0000	1.2466	0.00	0.00	20.69	-75.37

CONCLUSION: ONLY TRADE PAIRS WITH POSITIVE TOTAL SWAP!

WHAT PAIRS TO TRADE?

Once you've understood what correlation is, you are ready to trade, so here are the best pairs to trade under positive (pairs move in the same direction, so *option type* is a **buy/sell** or a **sell/buy**), and negative correlation (pairs move in different direction "mirror currencies", so *option type* is a **buy/buy** or a **sell/sell**).

Positive correlation (+80 up to +100) is highlighted **green**
 Negative correlation (-80 up to -100) is highlighted **red**

IMPORTANT: Since the correlation is always changing, check it constantly. The following pairs are the most stable ones.



100 Days

—	EUR-USD	USD-JPY	GBP-USD	USD-CHF	USD-CAD	AUD-USD	EUR-JPY	EUR-CHF	GBP-JPY
EUR-USD	-	60-	95+	96-	47+	86+	72+	04+	58+
USD-JPY	60-	-	45-	76+	07+	49-	12+	65+	27+
GBP-USD	95+	45-	-	87-	48+	87+	79+	17+	74+
USD-CHF	96-	76+	87-	-	29-	79-	53-	24+	37-
USD-CAD	47+	07+	48+	29-	-	53+	64+	60+	57+
AUD-USD	86+	49-	87+	79-	53+	-	64+	16+	57+
EUR-JPY	72+	12+	79+	53-	64+	64+	-	61+	94+
EUR-CHF	04+	65+	17+	24+	60+	16+	61+	-	68+
GBP-JPY	58+	27+	74+	37-	57+	57+	94+	68+	-
CHF-JPY	85+	12-	87+	73-	52+	70+	95+	32+	85+
EUR-GBP	16+	46-	16-	28-	04-	01-	20-	44-	52-
NZD-USD	47+	31+	62+	25-	60+	47+	85+	74+	91+
EUR-NZD	10+	73-	10-	32-	37-	02+	51-	81-	66-
AUD-JPY	50+	23+	61+	29-	64+	73+	81+	69+	84+
EUR-AUD	26+	20-	16+	32-	11-	26-	15+	24-	02+
EUR-CAD	91+	39-	88+	80-	78+	84+	79+	30+	66+
GBP-CHF	08-	65+	19+	31+	35+	10+	45+	82+	70+
XAU-USD	66+	74-	57+	73-	21+	76+	19+	30-	06+

Any pair from 80 to 89 (positive or negative correlation) is **trade with reserve; could be dangerous.**

Any pair from 90 to 100 (positive or negative correlation) is **perfect to be trade.**



Suggested pair with lot/size relation to have a "perfect hedge":

EUR/USD w/ USD/CHF (buy/buy operation)

Before using these pairs, check their correlation and swap!; Never trade more than 2 hedged trades in your account!.

SETTINGS

Please, be aware that before doing any changes in the settings, **you must first try these new settings on a demo account.**

This EA, works on two pairs at the same time. In order to do this you must open 2 graphics, one for each pair and attach the EA *only to one graphic.*

TIME FRAME: 1 Hour Time Frame.

PAIRS: You can trade any pair with correlation over +/- 80 (see chart above). Suggested and tested pairs are:

EUR/USD w/ USD/CHF

You can use this EA any hedged pairs that you want as long as they have positive swap and their correlation is above .80 (positive or negative). So far we have achieve the best results with EURUSD USDCHF, but you can also try the EA with EURUSD/AUDUSD (sell/buy trade, positive correlation) or with the GBPJPY/CHFJPY (buy/sell trade, positive correlation).

In order to use your EA you must input these values:

Your_Name = "input name";

Your_Email = "input mail";

Pairs_to_trade = "in UPPERCASE. Put the exact name of the chart";

_Input_Pair1_name = "in UPPERCASE.";

data_a = "EUR";

data_b = "USD";



```
_Input_Pair2_name = "in UPPERCASE.";
```

```
data_c = "USD";
```

```
data_d = "CHF";
```

You **must** use the exact name of the pairs that appear on your graphic taking out the "/" character. Some accounts are displayed as follow: EUR/USDm, then you **must** input *EURUSD* and set *AccountUse_m=true*

data_a + data_b = to the full name of the pair1

data_b + data_c = to the full name of the pair2

If you enter more or less than 3 characters in the data field, the EA will display this alert:

"Wrong pair length data !!"

If you enter in the data field a name of a currency that EXIST on your MT4 but is not displayed in the market watch window, the EA will display this alert:

"Enable all Pairs on Market Watch Window"

If you enter in the data field a name of a pair that DOESN'T EXIST on your MT4, the EA will display this alert:

"The selected Pair(s) does not exist!"

```
Operation_type = "type buy or sell";
```

```
Operation1="buy";
```

```
Operation2="buy";
```

Type the name (buy or sell) of the desired operation.

- If Correlation is + (positive, pairs move in the same direction), operation **must be buy/sell**.
- If Correlation is - (negative, pairs move in opposite direction), operation **must be buy/buy**.



```
Type_your_MT4_Comission = "0 = no comission";
```

```
Commission1=0.0;
```

```
Commission2=0.0;
```

Type your Brokers commission **if apply**. Ask your Broker if it charges you any extra commission besides the swap and the spread. If no commission is charged, leave the value as 0.

```
Profit_in_USD = "(profit*lots)*10";
```

```
Profit=2.5;
```

Input your desired profit. The profit is displayed in USD, and calculated this way:

Desired profit*lot size of Pair1*10

*Anything under 5 is acceptable and low risk. **Suggested 2.5**. The bigger the profit, the longer the trade will take to be completed.*

```
SetNewOrders=true;
```

If true, the EA will continue to place orders after you have profit. If false, the EA will not place any order after you have a profit order.

```
Correlation_Parameters = "select true/false values";
```

```
CorrelationIsPositive=false;
```

If CorrelationIsPositive is *true*, the EA will trade pairs **ONLY** with positive correlation (like the GBPJPY CHFJPY).

If CorrelationIsPositive is *false*, the EA will trade pairs **ONLY** with negative correlation (like the EURUSD USDCHF).

```
Inverse_Entry=false;
```

If Inverse_Entry is *false*, the EA will trade **ONLY** when the correlation is close to 1.0 (positive or negative correlation, depending if CorrelationIsPositive is *true* or *false*)



If Inverse_Entry is *true*, the EA will trade **ONLY** when the correlation is in a low range and with good possibilities to become stable (positive or negative correlation, depending if CorrelationIsPositive is *true* or *false*)

What is the difference?

If Inverse_Entry is *false*, then you are trading with the normal correlation strategy, and you will have more trades, but they will last longer to close.

If Inverse_Entry is *true*, then you are trading with the inverse correlation strategy, and you will have less trades than with the normal strategy, but they will close faster.

Which one is better?

That depends in your trading style. We like the Inverse_Entry=true, since trades are closed faster so you are reducing the possibility of a drawdown, but of course since trades are closed faster, you gain less swap. The final word is up to you.

Can you use the 2 entry at the same time?

Yes, but if you do this, then, you will have to reduce the risk.

For Inverse_Entry=true, set a risk of 3.5
For Inverse_Entry=false, set a risk of 1.5

Also consider that you **will always have a floating balance in your account.**

If you use the inverse entry and the normal entry, aren't they compensating?

No, since the trades won't be open at the same time, neither with the same price or the same correlation value.

Money_Managment = "If true, then LOTS values are disabled";

Lot1=1.0;



Input the lot size of *Pair1*. This function will only work if you disable UseMM. The amounts of lots to be trade for the second pair, will be the one that result multiplying Lot1 * RatioPair

UseMM=true;

If true, the EA will manage the amount of lots to be trade. **We strongly recommend set this variable in true;** among other benefits, the EA won't let you overtrade, reducing substantially the risk of a margin call.

Set it only to false only if you understand what you are doing, and you want to trade manually!

Risk=5

The risk is the % of your account you want to risk in each trade. 5% is the recommended value for trading only one the EURUSD/USDCHF.

If you plan to trade this EA along with the **Trade the Cable** please take a look at the next chart:

	% of Risk
1 Hedged pair	5%
1 Hedged pair and Trade the Cable	3 % Hedge EA and 3% Trade the Cable
1 Hedged pair and 2 Trade the Cable	3 % Hedge EA and 2.5% each Trade the Cable

Account_settings= "Input settings";

AccountIsMini=false

This variable will only function if *UseMM=true*. If *AccountIsMini=true*, the EA will determine the correct value of the lots to be traded in a mini account.

AccountUse_m=true;



If you use a mini account and a broker (like IBFX), that name their pairs as *EURUSDm*, set this option *true*, and the EA will add an *m* to each pair.

If you set this option true and your broker doesn't add the m in the pair name, you won't have any trades. The same will apply if you set this option false and your broker uses the m in their pairs.

`MicroLots=true;`

Some brokers allow the use of microlots. A micro lot is a lot that uses 2 decimal points like 1.25 lots. A normal lot is a lot that will use only one decimal point like 1.30 lots. ***This EA will perform A LOT BETTER IF YOU USE A BROKER THAT ALLOW MICROLOTS.***

If true, the EA will open the trades using microlots (regarding if the account is Standard or Mini). If false, the EA will open the trades without using microlots (regarding if the account is Standard or Mini).

IMPORTANT: IF YOU SELECT MICROLOTS=TRUE AND YOUR BROKER DOESN'T ALLOW MICROLOTS THE EA WON'T PLACE ANY TRADES.

`MagicNumber=66558811;`

The magic number, is the number that uses this EA to identify its own trades. If you want to use this EA along with another EA, input any number of 5-7 digits. Be sure to have a different magic number on each EA.

You should ***ONLY HEDGE THE EURUSD/USDCHF. Don't hedge any other pairs at the same time.***

ABOUT YOUR ACCOUNT

- 1) You must trade using *UseMM=true*.**
- 2) This EA will run properly only with the following account settings:**

- If you have less than 50k, use a mini account, any leverage (we suggest to use a 1:200 leverage)**



- If you have more than 50k, use a standard account, leverage (we suggest to use a 1:100 leverage)

3) The EA will run with any broker, but the performance will be better if your broker accepts micro lots.

The reason of these settings is, since you are using decimal numbers as your ratio, you will need to trade full micro lots in order to have the most accurate ratio according to your account.

If you want to set your own lot sizes –we won't recommend it- use 1 lot of the base currency with a mini account (leverage 1:200), or .1 lot of the base currency with a standard (leverage 1:100) account for each 5000 usd. Never use a higher leverage. The higher the leverage, the easier it will kill your account. **Please contact us before trading manually.**

IF YOU HAVE ANY QUESTION, PLEASE EMAIL US BEFORE GOING LIVE/DEMO, WE WILL GLADLY ANSWER ANY EMAIL.

SETTINGS CONFIRMATION

Please, always double check your settings before trading live. This EA will display all your settings over the chart window, check them in order to know you input the right settings. Please be sure your chart looks like this one:

```
USDCHFm,Daily 1.2286 1.2286 1.2279 1.2280 www.ea-x2.com Correlation Hedge EA-X2_Correlation Hedge v3.41 b ©
CH 3.41 NEGATIVE/INVERSE ENTRY
Trading Data:
EURUSDm || Lot(s) = 0.89 || Swap = -0.605 || Pip Value = 1 USD || Lot(s) value = 0.89 USD
USDCHFm || Lot(s) = 1.47 || Swap = 0.89 || Pip Value = 0.81 USD || Lot(s) value = 1.19 USD
Global Swap = 0.77 USD || Operation type = buy /buy
Expected Profit = 22.25 USD || Floating Profit is = 0 USD
Account Balance = 5003.21 USD || Correlation = -0.8807
EA Magic Number = 2 || Risk = 2.5 || Ratio = 1.6549
```



WHEN TO USE THE EA

You can use this EA 24/7. Don't worry about economic releases.

ABOUT THE SUPPORT AND OTHER EA

We are totally determined to help you succeed in the FOREX bossiness. For that we will provide you full support by email (lvlfast@hotmail.com). We usually answer all the emails the same day you send them, but it can take up to 2 days for us to answer all of them. We won't provide you settings for any EA that is not our, and we won't suggest you to use any other EA that is not our with the ones you bought from us. The reason for this is that we don't know how the other EA will work and how much margin they need to be stable; so if you use another EA you along with ours, you are doing that under your own risk.

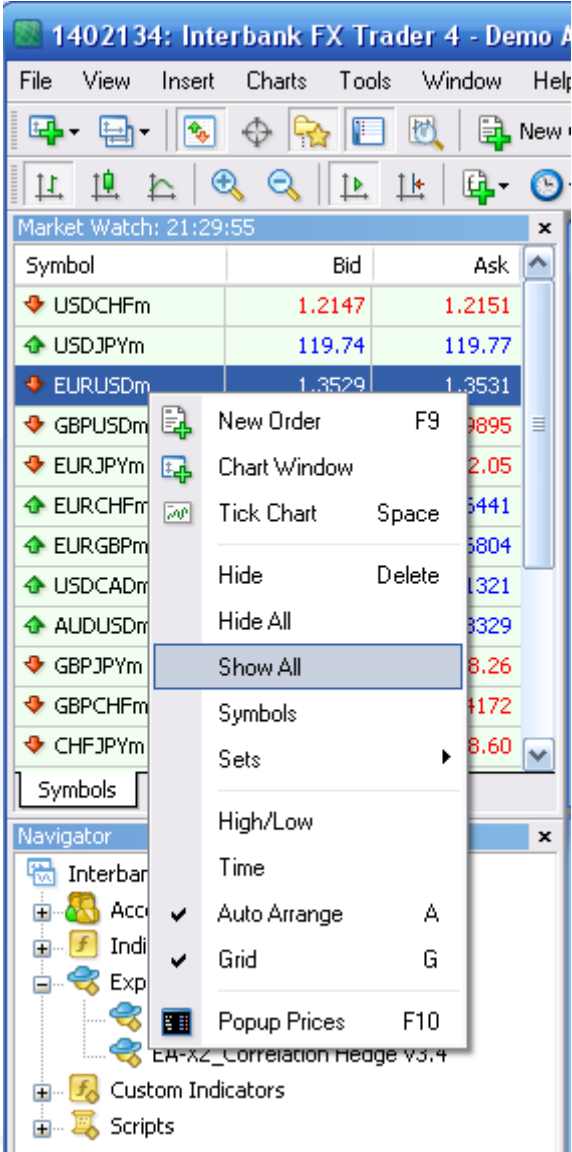
TROUBLESHOOTING

Before contacting us, be sure you have checked the following settings, since they are the most common mistakes:

- A) You have the latest version of MT4 (including updates)
- B) You should ONLY have attached the EA to one graphic (EURUSD)
- C) You have set the names of the pairs correctly
- D) ***If your broker requires a "m" like interbank FX for mini accounts, be sure to set true the Account_Use_m feature***
- E) If you are trading MORE THAN ONE HEDGED PAIR, be sure to have different magic numbers in both EA
- F) If you are trading with a broker that doesn't allow micro lots, be sure to have this option set to *false*

G) Be sure to have shown all the pairs in your market watch window. If you don't have shown all the pairs, you won't have any trades. To show all the pairs, just right click over the market watch window, and select "show all".

Be sure to have the Market Watch window shown ALL THE TIME IN YOUR MT4.



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CLUES TO SUCCESS:

- It's OK not to trade
- Skilled traders never enter a trade without an entry and exit strategy. They know exactly when and where to cut their losses as well as taking profits.
 - Skilled traders never hope, pray or wish that their stock would go up. They understand that when they are wrong they are wrong and the best thing to do is cut their losses short.
 - Skilled traders never trade with their emotions. They don't allow themselves to get caught up in the latest and greatest investment hype.
 - Skilled traders always have one goal in mind: To preserve their capital at all costs. They do this by never taking on too large of a position. A good rule of thumb to adhere to is never use more than 3-5% of your funds on any one trade. This way in the worst-case scenario the stock could drop to zero and your account would not be severely affected.
 - Skilled traders never get too greedy. There is an old saying that "Pigs get fed and hogs get slaughtered". These traders don't try to make one big trade that will turn them into instant millionaires. They don't try to hit home runs, instead they understand that it is better to keep hitting singles and making smaller consistent profits.
 - Skilled traders listen to no one else's opinion concerning the market or particular trade they are in.



Brokers

Here is a list of MT4 Brokers. We use for live trading Interbank FX. The reason for us to choose this broker is that the broker is in the US, their server GMT is 0 (London time) and accept standard/mini/micro lots. Also FXDD and Velocity 4x have the same bases (except from the GMT which each broker uses it own). Please understand we don't have any preference for any broker, so please feel free to choose any one you like:

Admiral Investments and Securities Ltd. <http://www.forextrade.ru/>
Alpari Ltd. <http://www.alpari-idc.com/>
Bull Trend Brokerage <http://www.bulltrend-bg.com/>
Financial Network Worldwide Ltd. <http://www.forexservice.net/>
Forex Global Investment LLC <http://www.forexgi.com/>
Forex Ltd. <http://www.forexua.com/>
FXDirectDealer <http://fxdd.com/>
FX-Pro Ltd. <http://www.fx-pro.com/>
Integral Bank <http://www.fxintegral.com.ua/>
Interbank FX <http://www.interbankfx.com/>
KVB Kunlun New Zealand Limited <http://www.kvbkunlun.com/>
MIG Investments Group LLC <http://www.miginvest.com/>
Neuimex <http://neuimex.com/>
Neurex <http://www.neurex.de/>
Performance Forex GmbH <http://www.eforex-asia.com/>
Real Trade Ltd. <http://www.realtrade.lv/>
Teletrade D.J. International Consulting Ltd. <http://www.teletrade.ru/>
Velocity4x <http://velocity4x.com/>
X-Trade Sp. z o.o. <http://www.x-trade.biz/>

FINAL NOTE TO RETURNING CUSTOMERS

Since you already bought this EA, now you are eligible to buy the **Trade the cable** or the **Safe News** at a special price, or you can ask for the **Bokers Nightmare** or the **Massive Attack** Experts Advisors, wich are not for public sell, they are available only to returning customers. Please contact us as www.ea-x2.com, or at lvlfast@hotmail.com (email or msn). If you want to skype us you can find us under the nick of *forexea* (please e-mail us fist to set up time and date for the conversation.)



IMPORTANT ADVICE

Use this EA at least for a month on a demo account. Don't use this EA until you feel comfortable with its method, and you have understood it.

Please, leave the EA work alone. Don't touch it. This EA knows when to open or close a trade without any human intervention.

Always remember that an Expert Advisor is a TOOL TO TRADE FOREX. The responsibility to use it or not, and when to do so is yours. A minimum of knowledge of the FOREX market is required to make better decisions.

The use of the EA is only permitted to its owner (name is described on the compiled code), any abuse in its use, sharing or copying the EA without written permit will be prosecuted.

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