**TRENDLINE EA WITH PRECISE MONEY MANAGEMENT**

This trendline EA will have the following settings

Start Time: 00:00

Stop Time: 00:00

Time Filter: True/False

Trade Offset (pips):

Trade: Buy/Sell

Risk%:

Manual Lots:

Risk Management: True/False

Max Spread (pips):

SL (pips):

TP1: 1XSL, 1.5XSL, 2XSL, 2.5XSL, 3XSL, 4XSL, 5XSL

TP1%:

TP2: 1XSL, 1.5XSL, 2XSL, 2.5XSL, 3XSL, 4XSL, 5XSL

Breakeven: 0.5XSL, 1XSL, 1.5XSL, 2XSL

Breakeven Plus (pips):

Screen Alert: True/False

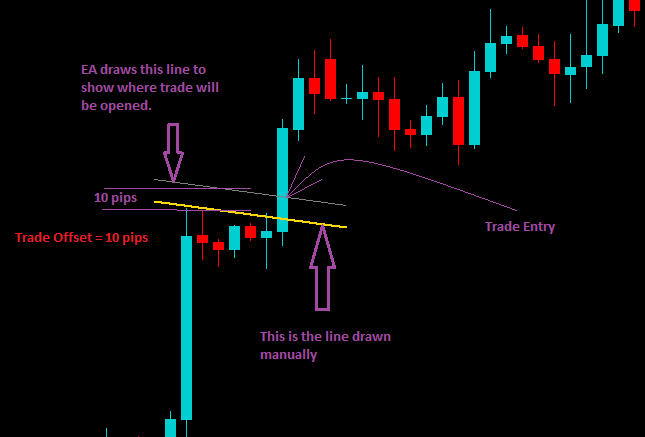
Push Notification: True/False

I will draw the trendline manually and the EA will open trade when price crosses the trendline. The Trade Offset is how far the EA will open the trade from the trendline. The trendline will draw a 2nd line to show where the EA will open trade. Since the 2 lines will be parallel to each other the number of pips between them will stay the same, the angle of the trendline will also be the same between the 2 trendlines.

SL and TP will be placed based on the trade entry point.

Here is an example.

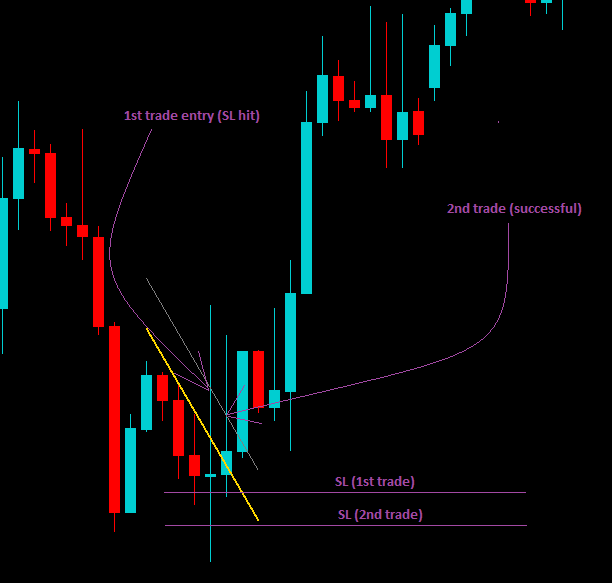
In this example trade setting Trade Offset = 10 pips, Trade = BUY. So EA will draw another trade entry trendline 10 pips above the manually drawn trendline.



EA will open only ONE trade at a time. So if trade is open and price crosses trendline again EA will NOT open another trade!

However if SL is hit and price crosses trendline the EA can open another trade.

Here is an example;



The EA will calculate TP depending on the size of the SL.

Here is an example;

EA settings

SL: 15 pips

TP: 2.5XSL

Breakeven: 1.5XSL

So the EA will set TP at 2.5 x 15 = 37.5 = 38 pips.

EA will set TP = 38 pips from where trade was entered.

The EA will move SL to breakeven when trade has successfully moved 23 pips (1.5 x 15) in profit.

EA will close % of trade as specified in TP1 setting.

For example;

TP1: 1XSL

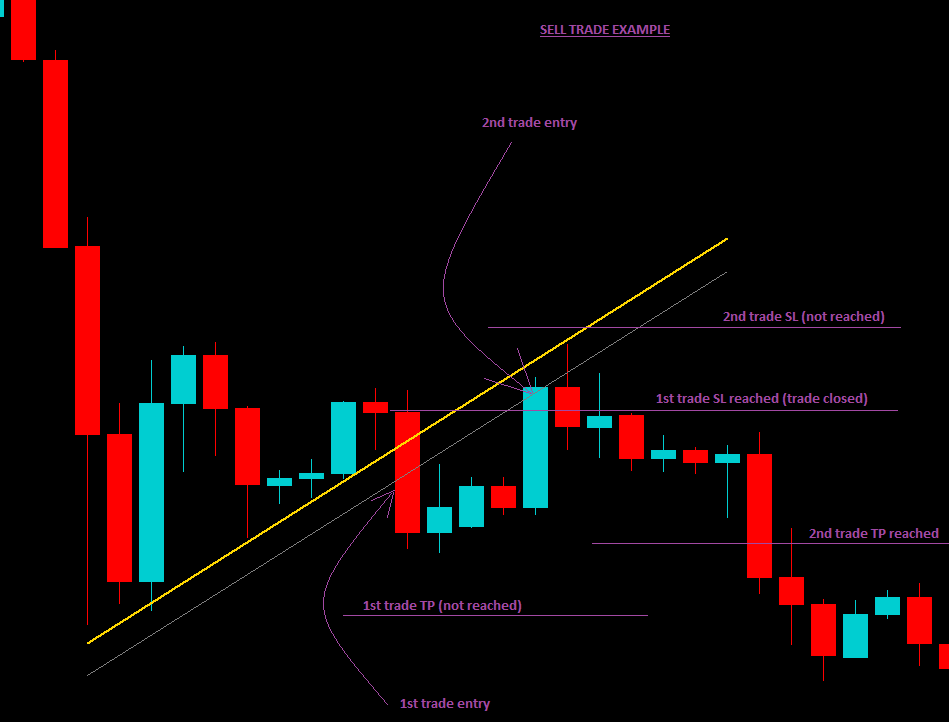
TP1%: 50%

SL= 20 pips

Lots: 0.07

Since TP1 = 1XSL = 20 pips, so when trade is 20 pips in profit EA will close 0.07 x 0.5 = 0.035 = 0.04 lots at 20 pips of profit. Always round up the lots if 4th decimal is >0.005. For example 0.034 = 0.03 lots, 0.126 = 0.13 lots.

Here is a sell trade example;



HOW TO CALCULATE LOTS AND RISK

This EA will use PRECISE risk percentage to determine the number of lots to be opened for each trade.

This will involve some calculations since different currency pairs have different pip value per lot

The formula for determining the number of lots to be opened is;

Lots = Money at Risk/(Pips at Risk X Pip Value for 1 standard lot)

Money at risk will be determined by the amount of equity

Let us assume the forex account equity = USD$2000

Let’s assume the amount to be risked per trade = 1%

Therefore Money at Risk = $20 per trade

Pips at risk will be determined by the SL, for example if SL = 33pips

Then Pips at Risk = 33 pips

Determining the pip value requires calculation and the table below provides the formula for the 28 currency pairs that will be traded by the EA. No other currency pairs will be traded.

Since this will be a USD account, all the pairs that have USD to the right have a $10 per pip for 1 standard lot.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| EURUSD | $10 per Standard Lot |  | USDCHF | $10/USDCHF Rate |
| AUDUSD |  | EURCHF |
| NZDUSD |  | GBPCHF |
| GBPUSD |  | NZDCHF |
|  |  |  | AUDCHF |
| USDCAD | $10/USDCAD rate |  | CADCHF |
| EURCAD |  |  |  |
| GBPCAD |  | EURNZD | $10/USDNZD Rate \*\* |
| NZDCAD |  | GBPNZD |
| AUDCAD |  | AUDNZD |
|  |  |  |  |  |
| USDJPY | ($10/USDJPY Rate) X100 |  | EURAUD | $10/USDAUD Rate \*\* |
| EURJPY |  | GBPAUD |
| GBPJPY |  |  |  |
| NZDJPY |  | EURGBP | $10/USDGBP Rate \*\* |
| AUDJPY |  |  |  |
| CADJPY |  |  |  |
| CHFJPY |  |  |  |

\*\* Note that these currency pairs are inverted, for example USDNZD instead of NZDUSD and USDGBP instead of GBPUSD, USDAUD instead of AUDUSD.

Let’s do some examples and see how it works!

EA will run only on attached chart. In this example EA is attached to NZDUSD chart. The forex account has an equity of USD$2000

These are the EA settings;

Risk = 1%

SL = 24 pips

TP1 = 2.0XSL

TP1% = 50%

TP2 = 4.0XSL

Once there is a valid Trade Entry the EA will calculate 1% risk to determine the number of lots.

1% of $2000 = $20

Formula for determining number of lots = Amount of money risked/(SL in pips X pip value for 1 standard lot)

Pip Value for NZDUSD = $10 (From table above)

Lots = $20/(24 X $10) = 0.08

So EA will open trade with 0.08 lots, SL = 24 pips, TP1 = 48 pips (2.0XSL)

At 48pips of profit EA will close 0.04 lots (TP1% = 50%)

The remaining 0.04lots will close at 96 pips (4.0XSL)

Here is another example;

EA will run only on attached chart. In this example EA is attached to USDJPY chart. The forex account has an equity of USD$2340

Trade: Buy

Risk = 1.5%

SL = 44 pips

TP1 = 2.0XSL

TP1% = 75%

TP2 = 3.0XSL

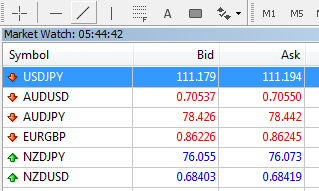
Since candle triggered Buy trade EA has to calculate number of lots

1.5% of $2340 = 35.1 = $35 (Round off to the nearest whole number)

EA also has to calculate pip value of USDJPY

From table above we need the current USDJPY Rate

**FOR ALL PAIRS THAT NEED CURRENT RATE TO CALCULATE NUMBER OF LOTS PLEASE USE THE CURRENT ASK PRICE ON MT4!**



So for our example the current USDJPY ask price showing on chart = 111.194

So Pip Value = ($10/111.194) X 100 = $8.99 for each standard lot (Using formula from table above)

Formula for determining number of lots = Amount of money risked/(SL in pips X pip value for 1 standard lot)

SL = 44 pips

TP1 = 2.0XSL = 2 x 44 = 88 pips

TP1% = 75%

TP2 = 3.0XSL = 3 x 44 = 132 pips

Lots = $35/(44pips X $8.99) = 0.088 = 0.09 Lots

At 88 pips of profit EA will close 0.09 x 75% = 0.0675 = 0.07 lots

The remaining 0.02 lots will close at 132 pips profit.

Here is another example

Trendline (TL) on AUDCHF for SELL trade

EA will run only on attached chart. In this example EA is attached to AUDCHF chart. The forex account has an equity of USD$4205

Risk = 2.0% = 2% of 4205 = 84.1 = $84

SL = 20 pips

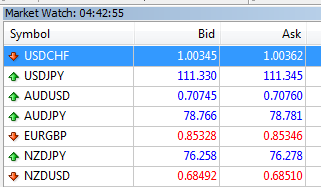
TP1 = 3.0XSL = 3 x 20 = 60 pips

TP1% = 25%

TP2 = 6.0XSL = 6 x 20pips = 120 pips

Next the EA will calculate number of lots

Pip Value = $10/(Current USDCHF Ask Price) using the formula in the table above



Pip Value = $10/1.00362 = $9.963 lots = $9.96 per standard lot

Lots = 84/(20 X 9.96) = 0.421 = 0.42 lots

At 60 pips of profit EA will close (25% of 0.42) = 0.105 = 0.11 lots

The remaining 0.31 lots will close at 120 pips of profit.

Here is another example

Trendline (TL) on GBPNZD for BUY trade

EA will run only on attached chart. In this example EA is attached to GBPNZD chart. The forex account has an equity of USD$3329

Risk = 1% = 1% of 3329 = 33.29 = $33

SL = 102 pips

TP1 = 2.0XSL = 2 X 102 = 204 pips

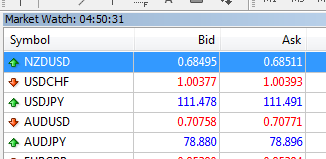
TP1% = 50%

TP2 = 8.0XSL = 8 X 102 = 816 pips

EA has to calculate the Pip Value

From the table provided Pip Value of GBNZD = $10/USDNZD Rate

**PLEASE NOTE WE HAVE NZDUSD AND NOT USDNZD THEREFORE WE HAVE TO INVERT NZDUSD TO GET THE VALUE OF USDNZD!**



From MT4 the current ASK rate of NZDUSD = 0.68511

Therefore USDNZD = 1/0.68511 = 1.45962

Further, the Pip Value of GBPNZD = $10/USDNZD Rate = $10/1.45962 = $6.85 per standard lot

So now we can calculate the number of lots

Formula for determining number of lots = Amount of money risked/(SL in pips X pip value for 1 standard lot)

Lots = $33/ (102 pips x $6.85) = 0.047 = 0.05 lots

At 204 pips of profit EA will close (50% of 0.05 lots) = 0.025 = 0.03 lots

The remaining 0.02 lots will close at 816 pips of profit.

Here is another example

Trendline (TL) on EURGBP for BUY trade

EA will run only on attached chart. In this example EA is attached to EURGBP chart. The forex account has an equity of USD$1536

Risk = 2% = 2% of 1536 = 30.72 = $31 (Round off to the nearest dollar)

SL = 36 pips

TP1 = 2.0XSL = 72 pips

TP1% = 75%

TP2 = 3.0XSL = 108 pips

EA will calculate Pip Value, from table provided Pip Value of EURGBP = $10/USDGBP Value

Let’s assume the current ASK value of GBPUSD on MT4 = 1.26460

Therefore USDGBP = 1/1.2646 = 0.79076

Pip Value of EURGBP = $10/0.79076 = 12.646 = $12.65 per standard lot

Therefore Lots = 31/(36 X 12.65) = 0.068 = 0.07 lots

At 72 pips of profit EA will close (75% X 0.07) = 0.053 = 0.05 lots

The remaining 0.02 lots will close at 108 pips of profit.

Here is the final example

Trendline (TL) on EURAUD for SELL trade

EA will run only on attached chart. In this example EA is attached to EURAUD chart. The forex account has an equity of USD$3125

EA Settings:

SL = 65 pips

TP1 = 2.5XSL = 2.5 X 65 = 162.5 = 163 pips

TP2 = 4XSL = 260 pips

TP1% = 50%

Risk = 3% = 3% of 3125 = 93.75 = $94 (Round to the nearest dollar)

From table above Pip Value for EURAUD = $10/USDAUD Rate

(Assuming current AUDUSD ask rate on MT4 is 0.70514), then USDAUD = 1/0.70514 = 1.41816

Therefore Pips Value of EURAUD = $10/1.41816 = $7.05

Lots = $94/(65 X 7.05) = 0.20512 = 0.21 lots

At 163 pips of profit EA will close (50% of 0.21 lots) = 0.105 = 0.11 lots

The Remaining 0.1 lots will close at 260 pips

IT IS IMPORTANT FOR THE EA TO CALCULATE THE LOT SIZE CORRECTLY OTHERWISE THE EA WILL NOT WORK AS INTENDED.

OTHER EA SETTINGS

Time Filter: If set to False the EA will trade anytime it is attached to a chart, when True EA will only trade between Start and Stop times

Manual Lots: When Risk Management is set to false then Risk% setting will not apply and EA will trade using manual Lots, when True EA will follow Risk%

Max Spread (pips), if current spread exceeds this setting then EA will not open trade for that currency pair

Breakeven Plus: EA will move SL to breakeven plus the pips on this setting, for example if Breakeven Plus = 2 then SL will be moved 2 pips above trade entry.

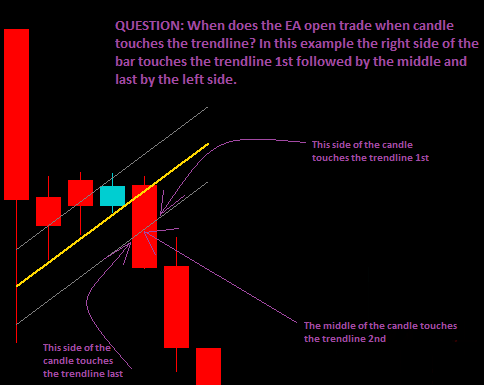
ALERTS

When trade is opened EA will display and/or send notification with the message “EURUSD Buy Trade Opened” for a BUY trade, or “AUDCHF Sell Trade Opened” for a SELL trade.

When spread is too high to open trade display and/or send notification with the message “GBPNZD Spread too high!”

QUESTION FOR YOU

Please answer this question for me.



IF YOU HAVE ANY SUGGESTIONS ON HOW TO MAKE THE EA BETTER AND STILL ACHIEVE THE SAME (OR BETTER) RESULTS PLEASE LET ME KNOW.

THANK YOU!