David's 4H Trendline auto-trading robot by Steve Hopwood

The purpose of this robot is to trade David486's H4 trendline scalping strategy.

Traders new to David's trading system cannot learn about it from this robot or this thread. You **must** go to http://www.forexfactory.com/showthread.php?t=244741 to learn to trade the system manually.

There are a couple of indicators used by the trend-detection functions. These are in the 'required indicators' zip file.

Starting the robot
When you fire up the robot, it attempts to draw a trend line off which to trade. You can define the trend yourself, or leave it up to the robot. See the Inputs section for details.

You will see the trendline appear on screen as soon as the first tick hits the chart. This line is fully configurable, so the robot will go to sleep for 2 minutes to give you time to adjust the trendline if you do not like what you see. If you need to make adjustments:

1. Disable experts
2. Adjust the trendline
3. Re-start experts

DO NOT EVER EVER EVER ADJUST THE TRENDLINE MANUALLY WITHOUT DISABLING EXPERTS FIRST. You could easily trigger a trade you do not want.

The robot tries to make sure that it draws an unpierced trendline. I am not absolutely certain that the code for this is correct, so make sure the trendline is the one you want the bot to work with.

Sequence of events
The robot:

1. Looks for the trendline named in the TrendLineName input. If it does not find one and there is no open trade, attempts to draw one.
2. Monitors the market for a touch of the trendline and sends the appropriate trade. At this point it:
    - changes the colour of the trendline, so you can still see it on screen. You will find it is renamed, so the robot can start again when the trade closes.
    - Manges the trade when in profit.
    - Monitors for the need to operate the 1.1.3.3 Recovery system.
3. Manages the open trade once in profit.
4. Starts again at no 1 when the trade/trades are closed.

1.1.3.3 Recovery
This is a stunning concept from the fertile brain of Nanningbob. The idea is to allow trades to close at an overall breakeven by 'scaling in' as the move continues against us initially, then eventually retraces.

- Bob's trading is based on waiting for a trend to reach the stage at which it is about to retrace, then jumping on the contra-trend – or for a retrace to end and the original trend resume. Traders often do not know, and never care, which is which.
- David's trading is based on identifying the end of a retrace as it hits the trend line.

Both are based on this simple concept: prices rise; then they fall; then they rise again; then they fall again..... This means that both trading methods kick in once a substantial move is starting to run out of steam. Even if the move continues, it *will* run out of steam eventually and retrace.

The 1.1.3.3 in the title of the Recovery program represent trading levels:

- The first '1' is the Level 1 (L1) initial trade.
- The second '1' is the Level 2 (L2) first recovery trade.
- The first '3' is the Level 3 (L3) recovery trade at x3 the initial lot size.
- The second '3' is the Level 4 (L4) recovery trade at x3 the initial lot size.

This is not hedging; nor is it Martingale. Trades are taken in the direction of the initial trade, in anticipation of the inevitable retrace. Here is the sequence of events, in a full run against us:

1. robot takes the L1 trade, and draws the re-entry line at ReEntryLinePips away from the trade opening price.
2. If the move continues and reaches the re-entry line, the robot takes a second trade (L2).
    - lot size is the same as the L1 trade. You will notice that the robot moves the take-profit values to allow the pair to close at breakeven following a resumption of the trend. One trade will close in profit, one in loss. The result will be much better than merely allowing the L1 trade to hit its stop.
    - The bot draws a fresh re-entry line.
3. If the move continues and reaches the new re-entry line, the robot takes a third trade (L3).
    - lot size is that of the L1 trade x 3. You will notice that the robot moves the take-profit values to allow the basket to close at breakeven following a resumption of the trend.
    - The bot draws a fresh re-entry line.
4. If the move continues and reaches the new re-entry line, the robot takes a third trade (L3).
    - lot size is that of the L1 trade x 3. You will notice that the robot moves the take-profit values to allow the basket to close at breakeven following a resumption of the trend.
    - The bot draws a fresh re-entry line.
    - At this point, the robot suspends itself and allows the user to manage the trades manually.

The Recovery goes further when traded manually. In the event the newest re-entry line is breeched, the L1 trade is close and the process starts again with the old L2 as the new L1. At any subsequent stage, the oldest trade in the basket is closed, so it can never contain more than 4 trades.

Please note: Once Recovery is in progress, the individual-trade management facilities become redundant. A*ll* that matters is getting out of the loosing position at breakeven, so the individual-trade management functions are not called.

This is a lot to get your head around, but is much easier to understand if you trade Bob's system – and you should. You really, *really* should.

Inputs

Enter pips inputs in 'proper' pips; the robot automatically adjusts to x digit criminal accounts.

Notice the zero **MagicNumber** input and blank **TradeComment**. This is to give your criminal as little information as possible about what you are doing should you take this robot live; the moment you use a magic number, or a regular trade comment, the crim will know you are using a trading robot and take steps against it if you are profitable.

The downside of a zero-value magic number is this; *any* robot trading *any* system will regard the trade as its own, so live trading of this robot should be on an account dedicated to it. If you want to trade different systems/robots on the same account, then each one must have its own magic number.

A few of the inputs might need some explanation:

- **General inputs:**
  - **CriminalIsECN:** set this to true if your criminal insists on you sending stops and tp's after sending the market order. And then change your criminal; this is a blatant attempt to separate you from your cash. The circumstances that allow this to happen only need to arise once; you are an idiot if you fall for it.
  - **ReEntryLinePips:** the distance from the trade open price to start the 1.1.3.3 Recovery process.
- **Trend line inputs:** make some educated guesses.
- **Take Profit and stop loss choices:** there are two of these. Choose 1 only – there is no idiot checking in this code.
  - **TakeProfit:** a 'hard' tp; not recommended.
  - **Atr-based take profit:** this allows you to use Atr (Average True Range) to calculate a take-profit trade exit. If you do not understand Atr, Google it to discover what it does.
  - **MinimumTargetinPips:** the smallest tp you will accept. If the Atr tp methods result in a smaller tp than required, the robot will adjust to this minimum.
  - **EmergencyStopLoss:** this is set very high to reflect that it is only for use in the face of utter catastrophe. 1.1.3.3 Recovery should make its use irrelevant, but better to have it in place just in case.
- **Trend detection :** see the separate section below.
- **Trade management module:** read the mptm user guide for details about this; follow the link in my signature to find the thread.
- **Trading hours:** these allow you to specify accurate trading hours – pre and post midday. These work in you own computer's local time. Therefore, if you only want to trade European hours, then enter the times the markets open and close **where you are in your own local time.** Don't even *consider* sending me pm's about this; your ban from my threads will be automatic and irrevocable.

Trend detection module

You can specify the trend manually, by setting:

- **AutoDetectTrend** to false, then setting either
- **TrendIsUp** or **TrendIsDown** to true.

If you set **AutoDetectTrend** to true, then the robot will ascertain the trend according to you

choice of method.

There are a number of ways of coding trend-spotting. My favourite is the D1, 21 period Rsi but that is just me. Trading will only take place if the trend-spotting function decides the market is trending and not ranging.

Choose the trend direction module or combination of modules that is specified in the trading module descriptions, or that suits you best if there is a choice. I suggest you use just one, but you can use a combination. If you use a combination and there is a clash of results, the robot will show the trend is 'confused' and will not trade at all. If you are confused, leave the defaults in place until the fog clears from your mind.

For each of the trend direction filters, there is a time frame for you to set – RsiTf and so on. To make the indi read the current time frame, leave this set to 0. If you want the robot trading a lower time frame, say the M15, but measuring the trend on a higher time frame, say the D1 then set the input to the higher time frame in minutes. These are the values:

- D1: 1440;
- W1: 10080
- MN1: 40320

The trend-detection methods available to you are:

Rsi: bot will return a trend description based on these values:

- Rsi > 55: trend is up
- Rsi < 45: trend is down
- Rsi is in between 45 and 55: market is ranging

Atr: works like this:

- 20 period Atr: D1 time frame (you can change this).
- The trend level is determined by Atr * 2.
- Take the opening price 10 days/candles ago.
- Compare this with the current price:
  - market is twice Atr higher than at open ten days/candles ago: trend is rising.
  - market is twice Atr lower than at open ten days/candles ago: trend is falling.
  - market is < twice Atr higher/lower than at open ten days/candles ago: market is ranging.

Adx: there is no substitute for understanding how this works, so if this brief description does not enlighten you sufficiently, then you need to do more research.

- The solid line shows whether there is a trend in place. It **does not** indicate the trend direction.
  - If the solid line is rising, there is a trend in place.
  - If the solid line is falling or moving sideways, there is no trend. The market is ranging.
  - If the Adx value is >=35, there is every chance that the market has reached a significant high/low.
- The two dashed lines show the *direction* of the trend:
  - +DI shows the number of times the price has risen within the period the indi is using for its calculation.
  - -DI shows the number of times the price has fallen within the period the indi

is using for its calculation.

- The indi shows a rising trend when:
  - Adx is rising
  - +DI > -DI
- The indi shows a falling trend when:
  - Adx is rising
  - -DI > +DI

LSMA: we are indebted to MrPips for this. The easiest way to see what it does is to drag it onto a chart and look. Look in the Indicators zip file.

Disclaimer

YOU USE THIS ROBOT AT YOUR OWN RISK

A lot of people lose a lot of money trading forex. Most people lose *all* their account deposit within anything from a few days to a few months.

This robot does not guarantee success in your trading.

Read, mark, learn and inwardly digest this:

- A trading robot is only ever 90% as good as the system it trades, at best.
- If the trading system is rubbish, so is the robot that trades it.
- You should *never* use a trading robot without having traded the system manually, live and successfully first.

Good luck. You are going to need it.