

THV v3 Expert Advisor



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THV expert advisor is based on the THV trading system which has been developed by Cobraforex.

THV trading system basic rules:

Long signal:

Price is above coral.

Price is above ichimoku cloud.

Fast trix is above slow trix.

Fast and slow trix go upwards. Optionally, fast trix is above zero.

Short signal:

Price is below coral.

Price is below ichimoku cloud.

Fast trix is below slow trix.

Fast and slow trix go downwards. Optionally, fast trix is below zero.

Exits:

When fast trix changes color (or imax cross) and/or price touches a known good resistance/support level.

Entries and exits:

An entry is valid if all conditions are met at the same time. Exits are handled by the rule that whatever comes first closes the trade. Indicator based exits are valid only once, so as an example if an exit signal of iMaxCross occurs, this triggers a partial exit. If the next signal that occurs is MTFIchimokuDot1 which is again indicator based, it is ignored. Exit signals by S/R, daily pivot or psych level touch have not this limitation.

The settings can take a 3 digit value. The first digit indicates if the setting refers to entry and/or exit. The second digit is used for entries and the third one for exits. They can take 2 values, 0 for unclosed candle and 1 for a closed candle. First digit can take the following values:

0 means it is not used for entry and exit.

1 means it is used for entry only.

2 means it is used for exit only.

3 means it is used for entry and exit.

PriceCrossCoral: Entry and exit if price is above (long) / below (short) coral.

CrossCoralPips: When the above setting is used, this setting will define how many pips price should be above/below coral. If the above setting is not used, this setting is also ignored.

For example, when PriceCrossCoral = 100 and CrossCoralPips = 10, For EA to consider a valid signal the Price has to be at least 10 pips above / below the coral for long / short respectively.

PriceCrossIchimoku: Entry and exit if price is above (long) / below (short) ichimoku cloud.

MinCrossIchimokuPips: When the above setting is used, specify how many pips price should be above/below ichimoku cloud. If the above setting is not used, this setting is also ignored.

MaxCrossIchimokuPips: Price should not be beyond ichimoku cloud plus the defined pips. If it is set to 0 this condition is not taken into account.

For example, when PriceCrossIchimoku = 100, MinCrossIchimokuPips = 5 and MaxCrossIchimokuPips = 10, for the EA to consider a valid signal the price has to be minimum 5 pips and a maximum of 10 pips, above / below the ichimoku cloud for long / short respectively. MaxCrossIchimokuPips could be used to avoid late entries, where there has been a fast run up.

FastSlowTrixCross: Fast trix should be above / below slow trix for long / short signal.

FastTrixDirection: Fast trix should have the same direction with the order.

SlowTrixDirection: Slow trix should have the same direction with the order.

FastTrixZeroLevel: Fast trix should be above/below zero.

For example, when FastTrixDirection and SlowTrixDirection = 110, this can avoid false entries when there is trix color change happens for only one candle.

iMaxCross: An iMax cross triggers a signal.

TrixOverboughtOversold: When true, if trix is beyond Overbought/Oversold levels, no trades will be opened, even if there is a valid entry signal. This setting will avoid buying at OB and selling at OS levels.

TrixOverboughtLevel: TrixOBlevel value, this value varies based on TF and setting a proper value is critical for TrixOverboughtOversold functionality. No long orders are opened above this level.

TrixOversoldLevel: TrixOSlevel value, this value varies based on TF and setting a proper value is critical for TrixOverboughtOversold functionality. No short orders are opened below this level.

TrixTimeframe: The defined timeframe is used for Overbought/Oversold levels. It should be 0 for current timerframe, 1 for M1, 5 for M5, 15 for M15, 30 for M30, 60 for H1, 240 for H4, 1440 for D1, 10080 for W1 and 43200 for MN.

For example, to identify proper TrixOBLevel / TrixOSLevel, load trix to your desired pair/ timeframe, where EA will be running. Check the OB/OS level displayed by trix, and enter those values in these settings. For M1, most of the pairs I watched had OB / OS level as = 0.00011 / -0.00011, this could be different for M5 or M15.

MTFTrixDot#: #1 means the 1st top dot, #2 means the next 2nd dot etc, as shown in MTF indicators.

MTFIchimokuDot#: #1 means the 1st top dot, #2 means 2nd next dot as shown in MTF indicators.

For example, if we want to use MTF for entries and closed candle, then the MTF value would be 110.

If we want to use MTF for entries and current open candle, then MTF value would be 100.

We can use this in conjunction with trix settings to derive a good edge for the EA to take trades. Combined together, these settings give lot of options to find that edge. I'll try my best to give an example below for a long order.

Let's say below are the conditions for long on M1.

1. Trix cross should be there.
2. Fast trix should be above zero.
3. Do not buy at OB level.
4. M15 slow trix, M30 fast trix, M30 slow trix should agree with direction of the trade.
5. Trix should use closed candle.
- 6 . Price has to be above ichimoku cloud in M15 and M30.

This can be achieved by setting the following properties.

FastSlowTrixCross = 100

FastTrixZeroLevel = 100

TrixOverboughtOversold = true (Remember for this to work properly, setting correct TrixOBLevel values is very critical)

MTFTrixDot1 = 110

MTFTrixDot2 = 110
MTFTrixDot3 = 110
MTFTrixDot4 = 000
MTFIchimokuDot1 = 110
MTFIchimokuDot2 = 110

When all the above condition matches, EA will open a long order. While this is not a complete possible combination, it should give you an idea on how and where to start.

PrevCandleSameDirection: The previous candle should have the same direction with the order.

EntryCandleMaxATR: Current candle length should not exceed the ATR multiplied by the defined number. 0 means this condition is not taken into account.

For example, we can use EntryCandleMaxATR to avoid entries where there is a very fast runup/rundown (which can happen easily during news times). Let's say we think that the ideal ATR for M1 on EUR/USD pips is 6 pips. When an entry signal occurs and if the current candle is 15 pips length already, we may not want to enter. So, if we have set this value to 2, then the max pips for the current candle cannot be more than 12 pips for a valid entry signal. Please remember the max number of pips completely depends on ATR value.

SRDistance: For an entry, price should differ from the nearest S/R level more than the defined pips. Daily pivot is ignored. If it is set to 0 this condition is not taken into account.

DailyPivotDistance: For an entry, price should differ from the daily pivot more than the defined pips. If it is set to 0 this condition is not taken into account.

We can use SRDistance setting to avoid entries which happen near to S/R levels. Let's say when an entry signal happened, the immediate S/R is 5 pips away, there is high possibility that the price might stall/reverse at that point. We may want to avoid those trades, so we can specify this setting. Say if we set this to 15, EA will open an order only if the nearest S/R is at least 15 pips away.

PriceTouchSRLevel: Exit a profitable order when bid touches the nearest support/resistance level. Daily pivot is ignored.

PriceTouchDailyPivot: Exit a profitable order when bid touches the daily pivot.

DailyPivotTouchPips: If PriceTouchDailyPivot is true, the exit occurs when bid comes close to daily pivot for the defined pips.

MidPivots: MidPivots are taken into account for entries and exits.

PriceTouchPsychLevel: Exit a profitable order when bid touches the nearest psych level. The considered psych levels are .50 and .00. You can also change these values in the EA settings.

MinLevelDistance: The order opening price and the nearest S/R, daily pivot or psych level should differ for at least the defined pips.

When a S/R level is very close to the order opening price an exit can occur almost immediately for a trivial profit. We use MinLevelDistance to avoid this and use the next S/R level as an exit, which should be at least MinLevelDistance away.

OppositeSignalExit: The entire order (or any remaining partial lots) is closed when an Opposite Entry Signal (defined by the entry settings) occurs.

IndicatorsExitPriority: An indicator based exit can occur at the defined or greater exit stage.

LevelsExitPriority: A S/R, daily pivot or psych levels based exit can occur at the defined or greater exit stage.

TrailingStopDisablesExits: Once trailing stop is active all other exit options are disabled and the order can be closed by stop loss or take profit only.

FreshSignal: An entry signal is valid only if there was not an entry signal at the previous bar. If only closed candle based MTF entries are used it should be false.

MaxSpread: No orders are opened when spread is greater than the defined pips. 0 means this option is ignored.

Patterns Related Settings:

The patterns can take the following values:

0 means the pattern is not taken into account for opening an order.

1 means an order is opened by the presence of this pattern.

2 means no order is opened by the presence of an opposite pattern.

(For example: If we have a double top, no longs are opened)

3 means an order is opened by the presence of this pattern and no order is opened if there is an opposite instance of this pattern. It is like options 1 and 2 are both valid.

4 means the presence of this specific pattern is an absolute prerequisite for opening an order.

PinBar: Pin bar pattern.

EngulfingBar: Engulfing bar pattern.

DoubleTopBottom: Double bottom pattern for long orders and double top pattern for short orders.

InsideBar: Inside bar pattern confirmed by the close of the next bar above/below the high/low of the inside bar.

TrixDivergence: Divergence of the trix indicator.

Harmonics: Harmonics patterns for entry.

TrendlineBreak: A closed candle breaks a trendline.

PreviousBars: The pattern should have been formed within the defined past bars.

Please use patterns settings, only if you are aware of its importance and have knowledge on how to use it to your edge. If you don't know about patterns, please avoid them.

When a desired pattern is selected, and when an entry signal is triggered, EA will check for the selected pattern settings and will decide whether to open a trade or not. The pattern also has to be present within "PreviousBars" specified when an entry signal is triggered.

Order Settings:

BaseMagicNumber: Base number is used for calculating the magic number. Each timeframe is assigned a different magic number automatically. If more than one chart of the same pair and the same timeframe are opened, the BaseMagicNumber should be manually set different, other than the last digit. The last digit changes for each timeframe. Different pairs can have the same magic number.

For example, if you have EURUSD M1, EURUSD M5, GBPUSD M1 and GBPUSD M5 you don't have to change the

BaseMagicNumber. However, if you have two charts of EURUSD M5 then you will need to change the BaseMagicNumber in either one of them.

TradeComment: The comment of the order as shown at the Metatrader terminal.

ClassicSL: True means a classic stop loss relative to opening price is used. All kind of stop loss and take profit is hidden from the broker.

HighLowSL: True means the stop loss is relative to the highest or lowest of the past bars.

BarsBack: Number of past bars taken into account to calculate the highest or lowest point.

MinimumSLPips: If HighLowSL is selected, stop loss should be at least the defined pips.

StopLossPips: Pips added to one of the above stop loss methods.

StopLossAtrMultiplier: If greater than zero, the stop loss is ATR based. ATR is multiplied by this number.

Only one kind of SL can be selected (Classic or HighLow), if by mistake both are selected then, ClassicSL is used. MinimumSLPips is used only for HighLowSL setting. The number of bars to look for HighLow is defined by BarsBack setting.

For example, when ClassicSL is true, The StopLoss is based on the open price of the trade. Let's say the open price is 1.3962 then, If StopLossPips = 20, the SL would be 1.3942. If StopLossAtrMultiplier is greater than zero, then this will be used. If the ATR setting gives a value of 30, then the SL would be 1.3932. If StopLossAtrMultiplier is zero, this setting is ignored.

For example, when HighLowSL is true, the stop loss is based on Highest or Lowest of the bars specified in BarsBack setting. Let's say if the BarsBack = 3 and order is a long, then the lowest of the 3 bars is taken and added with StopLossPips or ATR based SL. If this is less than MinimumSLPips, then MinimumSLPips is used. Whichever is lower for long and higher for short is used.

VisibleSL: Visible stop loss in pips, it is used in case of disconnection but visible to brokers.

This setting is used as a failsafe stop loss since all other stop loss settings are invisible to the broker. This is set in the server and visible to the broker. This comes in handy when there is a disconnect or any kind of interruption where a connection is lost.

We can have one or two take profit levels. Both can be pip based, ATR based or one pip based and the other ATR based.

TakeProfitPips1: Pips of the first take profit.

TakeProfitPips2: Pips of the second take profit.

TakeProfitAtrMultiplier1: If greater than zero, the first take profit is ATR based. ATR is multiplied by this number.

TakeProfitAtrMultiplier2: Multiplier for the second ATR based take profit.

VisibleTP: Visible take profit in pips, it is used in case of disconnection but visible to brokers.

Hopefully this is self explanatory. If TakeProfitAtrMultiplier is specified then the TP will be based on that, else the TakeProfitPips is used.

BreakEvenPips: The stop loss moves to the opening price after price is in profit for the defined pips.

BreakEvenAtrMultiplier: If greater than zero the break even is ATR based. ATR is multiplied by this number.

Hopefully this is self explanatory. If BreakEvenAtrMultiplier is specified then the breakeven will be based on that, else the BreakEvenPips is used.

LockPips: The stop loss moves to the opening price plus the defined pips after price reaches BreakEven level.

LockAtrMultiplier: If greater than zero, the lock level is ATR based. ATR is multiplied by this number.

For example, long Order is opened @ 1.3926, BreakEven is 10 pips, LockPips is 5 pips, price moves to 1.3936 thus activating the breakeven. Now if the price starts to come back, the order will be closed as soon as price reaches 1.3931 ($1.3926 + 5$).

PSARTrailingStop: The stop is activated if bid goes beyond the PSAR value of the previous closed candle.

ClassicTrailingStop: Classic trailing stop is used.

TrailingStopPips: Pips of trailing stop loss.

TrailingStopAtrMultiplier: If greater than zero, the trailing stop is ATR based. ATR is multiplied by this number.

TrailingStopStartPips: Trailing stop is activated when price goes above or below the order opening price for the defined pips.

TrailingStepPips: The trailing stop loss is modified in steps of price moves.

Trailing Stop can be based either on PSAR or Classic Trailing Stop or both.

The settings TrailingStopPips, TrailingStopAtrMultiplier, TrailingStopStartPips, TrailingStepPips, ADXMultiplier all are used only if ClassicTrailingStop is selected. PSARTrailingStop uses PSAR value to trail stops. When ClassicTrailingStop is used, the Trailing Stop can be defined pips by TrailingStopPips or ATR based. Trailing Stop can also be customized by setting TrailingStopStartPips and TrailingStepPips. When TrailingStopStartPips is used, the trailing starts after price reaches a predefined number of pips specified by this setting.

If we have a long order and ClassicTrailingStop is used and TrailingStopPips=10 and TrailingStepPips=3 and price is 10 pips above order opening price then the stop loss will not change if price goes in 11 pips profit but when it reaches 10+3 pips then stop loss will change to 10 pips below current price.

ADXMultiplier: The ATR based trailing stop is multiplied by ADX and by ADXMultiplier. 0 means this setting is ignored.

The purpose of ADXMultiplier is to adjust ATR based values to the trend strength. In strong trends where ADX has a higher value, a bigger take profit or stop loss is desirable.

Slippage: Max slippage of orders.

CloseIfProfit: True means that if an opposite or exit signal occurs only profitable or breakeven trades are closed.

Hedge: True means that a long and a short order can be simultaneously open.

ScreenShots: Screenshots are saved in the files folder at the opening and closing of an order.

LongColour: Arrow colour of long orders and patterns.

ShortColour: Arrow colour of short orders and patterns.

All hour based settings are in hhmm format.

UseTradingHours: Trading hours restrictions for opening new trades.

StartHour: Trades are only opened after this hour.

EndHour: No trades are opened after this hour.

NewsFilter: No new trades are opened during news period.

MinutesBeforeNews: The newsfilter is active for the defined minutes before news.

MinutesAfterNews: The newsfilter is active for the defined minutes after news.

MondayOpen: True means trades are only opened after this hour of Monday.

MondayOpenHour: Monday open hour.

DailyClose: True means that all open orders are closed after a specified hour of each day.

DailyCloseHour: Hour of the daily close.

DailyCloseInProfit: False means only losing orders are closed. True means that profitable orders are closed as well.

FridayClose: True means that all open orders are closed and no new orders are opened after a specified hour of Friday. This is to avoid the weekend gap.

FridayCloseHour: Hour of Friday when all orders are closed.

Lots: The lot size if money management is not used.

Partial exits can occur in up to four stages.

PartialClose1: Percent of the initial lots that is closed when the first exit occurs.

PartialClose2: Percent of the initial lots that is closed when the second exit occurs.

PartialClose3: Percent of the initial lots that is closed when the third exit occurs. If there are any remaining lots, they are closed by the fourth exit.

An indicator based partial exit can happen only once, no matter which indicator caused it. An exit caused by S/R or Psych level touch has no such limit.

BreakEvenPartialClose: The stop loss is moved to breakeven at the defined exit stage. This doesn't interfere with the BreakEven function. This defines after how many partial exits the SL should be moved to Break Even.

For example, this setting will define whether the stop loss is moved to breakeven after 1st, 2nd or 3rd partial exit. This can have a value of 0 (not used), 1, 2 or 3. When the partial lot is closed in favor of the trade, the stop loss is moved to breakeven for the remaining lots.

StartTrailingPartialClose: Trailing stop is activated at the defined exit stage.

PSARTrailingStop and/or ClassicTrailingStop should be set to true. This setting is similar to BreakEvenPartialClose, it gets activated based on the exit stage.

MinCloseDistance: Subsequent exits caused by take profit or S/R touch or Psych level touch should differ for at least the defined pips.

MoneyManagement: True means that the lot size is defined by the money management.

LeveragePercent: % of Equity Balance to risk for each trade.

Martingale: True means the lot size increases after the whole lots of a trade hit stop loss.

LotMultiplier: The lot size is multiplied by this number.

MaxProgression: Maximum times of lot increase after consecutive losing trades. Then the lot size will remain the same after each consecutive losing trade.

The settings after this point is all related to the indicators used by EA. I have not covered them here, because it is assumed that you know the basics of THV trading to set those values.