Blackbeard Long Nines Raiding Bot

Main Idea

The Blackbeard Long Nines Raiding Bot is a self learning bot utilizing a probabilistic approach to predict future price movements based on current market conditions combined with a Moving Average entry methodology.
It uses the inferred states to generate trading signals. For example, if all the criteria is met, it will enter a long position when the model indicates a high probability of being in a bullish market structure and exits or takes a short position when all of the criteria is met when the model indicates a high probability of a bearish market structure.

Parameters

Debug

Write debug log	if checked, strategy will write to a log file
Only realtime messages	if unchecked, both realtime and historical data messages will be written to debug log file

Settings

Template Name	Name of Strategy Template (including Name of bot, Symbol traded, Data Series time frame, Trading Hours used, and Date created)
Calculate on another instrument	if checked, strategy will use the instrument selected in "Another instrument" to base calculations off of (need to adjust stops, targets, etc. for instrument you choose in Data Series)
Another instrument	select instrument in which to base strategy calculations
MA1 price	Moving Average Entry Condition 1 price: Close or open
MA1 type	Moving Average Entry Condition 1 type: which MA to use
MA1 period	Moving Average Entry Condition 1 period: which period of MA to use
MA2 price	Moving Average Entry Condition 2 price: Close or open
MA2 type	Moving Average Entry Condition 2 type: which MA to use
MA2 period	Moving Average Entry Condition 2 period: which period of MA to use
Start time (EST)	strategy will trade starting at this time when criteria for a trade is met (trading hours session template takes precedence)
End time (EST)	strategy will not initiate new trades past this time (trading hours session template takes precedence)
Use close time	if checked, strategy will close any open trades at the time value entered in Close time
Close time (EST)	strategy will close any open trades at this time if Use close time is checked
Trade direction	strategy will trade only in the direction selected when criteria for a trade is met
Take new signals	if checked, strategy can take reverse signals or new same direction signals (if EntriesPerDirection>1)
Close on opposite signal	if checked, strategy will close on opposite signal

Trading Day of Week	if checked, strategy will look for trades on this Day of Week

HMM Filter (Hidden Markov Model)	is the Hidden Markov Model filter
Enabled	if checked, HMM Filter will be used in calculations
Show	if checked, the HMM filter is active
Train length	Training Period Length for the HMM
Retrain period	How often the HMM is retrained
Hidden states	How many states are used for the HMM
Long signal states	How many best states are used for the long signal
Short signal states	How many worst states are used for the short signal

Black Beard Predictor	is our Cycle Analysis and Predictive Trading Times Windows filter
CL long term	if checked, strategy will only trade during the Predictive Trading Times Window based on the CL 60 minute ETH time frame (if strategy was added to chart and enabled, will show on chart)
CL mid term	if checked, strategy will only trade during the Predictive Trading Times Window based on the CL 15 minute RTH time frame (if strategy was added to chart and enabled, will show on chart)
CL short term	if checked, strategy will only trade during the Predictive Trading Times Window based on the CL 8 minute RTH time frame (if strategy was added to chart and enabled, will show on chart)
ES long term	if checked, strategy will only trade during the Predictive Trading Times Window based on the ES 60 minute ETH time frame (if strategy was added to chart and enabled, will show on chart)
ES mid term	if checked, strategy will only trade during the Predictive Trading Times Window based on the ES 15 minute RTH time frame (if strategy was added to chart and enabled, will show on chart)
ES short term	if checked, strategy will only trade during the Predictive Trading Times Window based on the ES 15 minute RTH time frame (if strategy was added to chart and enabled, will show on chart)
GC long term	if checked, strategy will only trade during the Predictive Trading Times Window based on the GC 60 minute ETH time frame (if strategy was added to chart and enabled, will show on chart)
GC mid term	if checked, strategy will only trade during the Predictive Trading Times Window based on the GC 15 minute RTH time frame (if strategy was added to chart and enabled, will show on chart)
GC short term	if checked, strategy will only trade during the Predictive Trading Times Window based on the GC 8 minute RTH time frame (if strategy was added to chart and enabled, will show on chart)
NQ long term	if checked, strategy will only trade during the Predictive Trading Times Window based on the NQ 60 minute ETH time frame (if strategy was added to chart and enabled, will show on chart)
NQ mid term	if checked, strategy will only trade during the Predictive Trading Times Window based on the NQ 60 minute ETH time frame (if strategy was added to chart and enabled, will show on chart)
NQ short term	if checked, strategy will only trade during the Predictive Trading Times Window based on the NQ 15 minute RTH time frame (if strategy was added to chart and enabled, will show on chart)
YM long term	if checked, strategy will only trade during the Predictive Trading Times Window based on the YM 60 minute ETH time frame (if strategy was added to chart and enabled, will show on chart)
YM mid term	if checked, strategy will only trade during the Predictive Trading Times Window based on the YM 60 minute ETH time frame (if strategy was added to chart and enabled, will show on chart)
YM short term	if checked, strategy will only trade during the Predictive Trading Times Window based on the YM 60 minute ETH time frame (if strategy was added to chart and enabled, will show on chart)
Combine filters via AND	if checked, strategy will only trade when enabled Predictive Trading Times Windows (above) are in alignment with each other
Exit at end of the TSL interval	if checked, strategy will exit at the end of the TSL filter's time window
Long bias color	Blackbeard Predictor Trading Times Window Long bias color
Short bias color	Blackbeard Predictor Trading Times Window Short bias color
Opacity	sets the Opacity (transparency) level of the Blackbeard Predictor Trading Times Window Long/Short bias color
Exits	
Use stop loss	if checked, strategy will use Stop loss defined in value below
Stop loss ($ per contract)	stop loss value per contract in USD
Use profit target	if checked, strategy will use Profit Target defined in value below
Profit target ($ per contract)	profit targe value per contract in USD
Use breakeven	if checked, strategy will use Breakeven Trigger and Offset defined in values below
Breakeven trigger ($ per contract)	value per contract in USD above Entry price, if reached, will trigger Breakeven logic
Breakeven offset ($ per contract)	if Breakeven logic triggered, this is the value per contract in USD above Entry price at which the stop will be placed to protect profits
Use ATR trailing	if checked, strategy will use ATR Trailing Stop loss based on values below
ATR trailing period	value is the number of bars used in Trailing Stop Average True Range calculation
ATR trailing multiplier	value by which the ATR Trailing Period is to be multiplied
Show stop + target	if checked, stops and profit targets will be delineated on chart (if strategy was added to a chart)
Periods Limits	
Use loss limit	if checked, strategy will no longer initiate new trades during trading session if Daily stop loss limit value is reached
Loss limit ($)	value is total per day in USD
Use profit limit	if checked, strategy will no longer initiate new trades during trading session if Daily profit limit value is reached
Profit limit ($)	value is total per day in USD
Use max losers	if checked, strategy will no longer initiate new trades during trading session if Max losers value is reached
Max losers	value is total number of losers per day
Use max trades	if checked, strategy will no longer initiate new trades during trading session if Max trades value is reached
Max trades	value is total number of trades per day
Close position if limits reached	if checked, strategy will close position if limits defined above are reached

Data Series	
Instrument	Sets the instrument or list you wish to test on
Price based on	Sets the type of market data used to drive the Data Series
Type	Sets the bar type of the Data Series
Value	Sets the Data Series value
Time frame	
Start date (Strategy Analyzer Only)	Sets the start date for the test period
End date (Strategy Analyzer Only)	Sets the end date for the test period
Days to load (Strategies tab only)	minimum number of trading days to load for strategy (45 days is minimum)
Trading hours	Sets the trading hour template for the Data Series
Break at EOD	Enables or disables the bars being reset at EOD (End Of Day)
Setup	
Account (Strategy tab only)	
Calculate (Strategy tab only)	Sets the Calculation Mode for the strategy (default is "On Bar Close")
Label (Strategy tab only)	Sets a text label that will be displayed on the chart or the Strategies tab to represent the strategy
Include commission (Strategy Analyzer (backtest) only)	Enables or disables commissions in the backtest performance results
Maximum bars look back (Strategy tab AND Strategy Analyzer)	Max number of bars used for calculating an indicator's value
Bars required to trade (Strategy tab AND Strategy Analyzer)	Sets the minimum number of bars required before orders will be allowed to be submitted
Start Behavior (Strategy tab only)	Sets the starting behavior of the strategy, based upon the account position (default is "Wait until flat")
Historical fill processing	
Order fill resolution	Sets the order fill resolution to be used for the backtest (default is "Standard (Fastest)"
Fill limit orders on touch	Enables or disables the filling of limit orders on a single touch of price action
Slippage	Set the amount of slippage in ticks to apply to order executions
Order handling	
Entries per direction (Strategy tab AND Strategy Analyzer)	Sets the maximum number of entries allowed per direction while a position is active
Entry handling (Strategy tab AND Strategy Analyzer)	Sets the manner in which entry orders are handled
Exit on session close (Strategy tab AND Strategy Analyzer)	When enabled, open positions are closed on the last bar of a session
Exit on session close seconds (Strategy tab only)	Sets the number of seconds prior to the end of a session at to close any open positions held by the strategy
Stop & target submission (Strategy tab only)	Sets how stop and target orders are submitted (default is "By strategy position")
Order properties	
Set order quantity	Sets how the order size is determined (default is "Strategy" - enter desired number of contracts or position size per trade in Entry Quantity above)
Time in force	Sets the order's time in force