
Nika EA V2.91

Comprehensive User Guide

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A weighted-score signal confluence Expert Advisor
for MetaTrader 5 — designed for serious traders.

[8 Signal Methods](#) | [9-Layer Risk Stack](#) | [5 Trailing Modes](#) | [3 Session Profiles](#)

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CHAPTER 1

Introduction

What is Nika EA?

Nika EA V2.91 is a professional-grade Expert Advisor for MetaTrader 5, designed around the principle of **weighted-score signal confluence**. Rather than relying on a single indicator or rigid rule set, Nika EA aggregates signals from up to 8 independent analysis methods, scores them by user-defined weights, and only executes when the combined score exceeds a configurable threshold.

This approach gives you a **Filter → Score → Execute** pipeline that adapts to virtually any trading style, instrument, and market condition — from scalping EUR/USD on M15 to swing trading indices on H4.

Key Philosophy

Every aspect of Nika EA is built on three pillars:

- **Confluence over Conviction** — No single signal triggers a trade. Multiple independent methods must agree, each contributing a weighted score. The higher the agreement, the stronger the entry.
- **Defense in Depth** — A 9-layer risk management stack ensures that no single failure can cause catastrophic loss. From drawdown kill switches to spread filters, every layer adds protection.
- **Adaptive Execution** — Five trailing modes, three partial close levels, scale-in entries, and session-aware parameter overrides mean the EA adjusts its behavior to real-time market conditions.

At a Glance

Feature	Details
Signal Methods	8 independent methods, each with 2 slots (16 total channels)
Risk Layers	9 layers: drawdown kill switch, daily/weekly limits, risk budget, equity curve, spread filter, and more
Trailing Modes	5 modes: Step, Percentage, BE+Hybrid, Swing, Daily Profit
Session Profiles	3 configurable profiles (Asian, London, New York) with per-session overrides
Entry Types	Main entries, re-entries, and up to 5 scale-in levels
Partial Closes	TP1 / TP2 / TP3 with configurable close percentages
Total Parameters	311 fully configurable inputs
Platform	MetaTrader 5 (Windows, macOS via Wine, Linux via Wine/VPS)

Who Is This For?

Nika EA is designed for:

- **Serious retail traders** who want systematic, rule-based execution with full transparency and control over every parameter.
- **Prop firm traders** who need precise risk management — daily loss limits, drawdown kill switches, and risk budgets that align with firm rules.
- **Portfolio managers** running multiple EA instances across instruments, using the multi-instance portfolio coordination feature to share risk data.
- **Quantitative traders** who want to optimize and backtest across 311 parameters using MT5's Strategy Tester with custom fitness functions.

Version History

Version	Date	Key Changes
V1.34	2024	Initial public release — basic signal system, 3 trailing modes
V2.0	2025 Q1	Weighted scoring system, 9-layer risk stack, session profiles
V2.5	2025 Q3	Scale-in entries, equity curve trading, trade journal, state persistence
V2.91	2026 Q1	8 signal methods, swing trailing, portfolio coordination, 311 parameters, dashboard overhaul

CHAPTER 2

Installation & Setup

System Requirements

Component	Minimum	Recommended
Platform	MetaTrader 5 (Build 3000+)	MetaTrader 5 (Latest stable)
Operating System	Windows 10 / macOS / Linux	Windows Server on VPS
RAM	2 GB free	4 GB+ free
Internet	Stable broadband	Low-latency VPS (< 5ms to broker)
Broker	Any MT5 broker	ECN/STP with raw spreads
Account Type	Any	Hedge account recommended

Step-by-Step Installation

- 1. Locate Your MT5 Data Folder** — Open MetaTrader 5 and go to **File → Open Data Folder**. This opens the MQL5 directory in your file explorer.
- 2. Copy the EA File** — Copy `NikaEA_V291.ex5` into the `MQL5/Experts/` folder (or a subfolder of your choice).
- 3. Restart MetaTrader 5** — Close and reopen MT5. The EA should now appear in the Navigator panel under **Expert Advisors**.
- 4. Enable Algo Trading** — In MT5, go to **Tools → Options → Expert Advisors** and check **"Allow Algorithmic Trading"**. Also ensure the Algo Trading button in the toolbar is active (green icon).
- 5. Attach to a Chart** — Open a chart for the instrument you want to trade. Drag the EA from the Navigator panel onto the chart. The EA properties dialog will appear.
- 6. Configure Inputs** — In the Inputs tab, configure your parameters. You can also load a `.set` file if you have pre-configured settings.
- 7. Confirm and Start** — Click OK. The EA should display a smiley face icon in the top-right corner of the chart, and the dashboard should appear (if enabled).

TIP: Always test on a demo account first. Run the EA for at least 1-2 weeks on demo before switching to live trading.

First-Run Checklist

- Algo Trading is enabled (green icon in toolbar)
- Chart timeframe matches your intended strategy

- Spread is reasonable for your instrument (check with Spread Filter)
- Sufficient history is loaded (go to Tools → Options → Charts and set Max Bars)
- Account has adequate free margin
- Magic numbers don't conflict with other EAs
- Stop Loss and Take Profit values are set (non-zero)
- At least one signal method is enabled with a non-zero weight
- Minimum entry score is configured

Recommended Broker Settings

For optimal performance with Nika EA:

- **Account type:** ECN or Raw Spread — lower spreads mean better entry prices and less interference with the spread filter.
- **Execution:** Market execution preferred. Instant execution may cause requotes.
- **Leverage:** 1:100 or higher provides flexibility, but the EA's risk management controls actual position sizing.
- **VPS:** Strongly recommended for 24/5 operation. Choose a VPS located near your broker's server for minimal latency.
- **Swap-free:** Available if needed — the EA handles swap considerations through time-based exits.

Troubleshooting Common Installation Issues

Issue	Solution
EA not visible in Navigator	Restart MT5. Check that the .ex5 file is in the correct MQL5/Experts/ folder.
Sad face icon on chart	Enable Algo Trading in Tools → Options → Expert Advisors, and click the Algo Trading toolbar button.
"DLL not allowed" error	Go to Tools → Options → Expert Advisors and check "Allow DLL imports" if required.
No trades opening	Check: signal methods enabled, weights > 0, entry score threshold, hours filter, spread filter, daily limits not hit.
"Invalid stops" error	Your SL/TP is too close. Check broker's minimum stop level (Symbol info). Increase SL/TP values.
Dashboard not showing	Enable the Dashboard in EA inputs. Check that the chart window is large enough.

CHAPTER 3

Architecture Overview

Nika EA's architecture is organized as a layered pipeline. Every tick flows through four distinct layers, each with a clear responsibility. Understanding this pipeline is key to configuring the EA effectively.

The Filter → Score → Execute Pipeline

On every new bar (or tick, depending on configuration), the EA processes market data through the following stages:

Stage	Layer	Description
1. FILTER	Pre-Entry Filters	Time filters, session profiles, spread filter, volatility filter, news filter, candle pattern confirmation, and cool-down filter determine whether the EA is allowed to look for entries at all. If any filter blocks, processing stops.
2. SCORE	Signal Scoring	All enabled signal methods compute their current state (bullish, bearish, or neutral). Each active signal contributes its weight to <code>up_score</code> or <code>down_score</code> . VETO signals can block entry regardless of score.
3. DECIDE	Entry Decision	The net score is compared against the minimum entry score threshold. If met, the EA determines trade direction. Risk layers (drawdown, daily limits, risk budget, max lots) are checked.
4. EXECUTE	Trade Execution	Position is opened with calculated lot size, SL, and TP. Trade management begins: breakeven, partial closes, trailing stops, time-based exit. Scale-in and re-entry logic monitors for additional entries.

Signal Layer

The Signal Layer is the brain of the EA. It consists of **8 signal methods**, each available in **2 slots** (A and B variants), creating **16 possible signal channels**. Each channel can be independently enabled, configured with its own indicator parameters, and assigned a weight.

Signals operate in two roles:

- **Entry Scoring** — The signal contributes its weight to the overall score. A signal that is bullish adds its weight to `up_score`; bearish adds to `down_score`.
- **Hard Filter (VETO)** — The signal acts as a gate. If a VETO signal disagrees with the proposed trade direction, the entry is blocked regardless of the combined score.

This dual-role system allows you to build sophisticated entry logic: use high-timeframe signals as VETOs (only trade in the direction of the trend) while letting shorter-term signals compete via scoring.

Risk Layer

The Risk Layer provides **9 independent protection mechanisms** that operate in parallel. Each layer can be enabled or disabled independently, and together they form a defense-in-depth strategy:

#	Layer	Type
1	Max Drawdown Kill Switch	Emergency stop
2	Daily Loss/Profit Limits	Session caps
3	Weekly Loss/Profit Limits	Weekly caps
4	Risk Budget (Max SL Exposure)	Position sizing limit
5	Max Open Lot	Position sizing limit
6	Equity Curve Trading	Adaptive sizing
7	Recovery Mode	Adaptive sizing
8	Spread Filter	Entry gate
9	Volatility Filter	Entry gate

Execution Layer

Nika EA supports three types of trade entries:

- **Main Entry** — The primary trade triggered when all filters pass and the score threshold is met. Uses the main magic number for identification.
- **Re-Entry** — Automatic re-entry after a main trade closes. Configured with its own magic number and follows the same signal/filter logic.
- **Scale-In Entry** — Additional positions opened when price moves favorably after the initial entry. Up to 5 scale-in levels, each with configurable distance and lot size.

Management Layer

Once a trade is open, the Management Layer takes over with breakeven logic, partial closes at TP1/TP2/TP3, and one of five trailing stop modes. The chosen trailing mode determines how the stop loss evolves as the trade progresses.

Session Layer

Three configurable session profiles (Asian, London, New York) can override core parameters — stop loss, take profit, lot size, minimum entry score, and trade direction — during specific hours. When session profiles are active, they replace the basic hours filter with session-aware behavior.

Dashboard

The real-time dashboard displays on the chart and shows: current signal scores, active filters, open trade status, risk layer states, daily/weekly P/L, and session information. It provides at-a-glance monitoring without needing to check the Experts tab.

CHAPTER 4

Signal System

The signal system is the core decision engine of Nika EA. It evaluates market conditions through 8 independent methods, each bringing a different analytical perspective. Understanding each method and how they combine through weighted scoring is essential for effective configuration.

The 8 Signal Methods

1. Nika Signal Crosses Average

This method uses Nika EA's proprietary indicator line and compares it against its own moving average. A bullish signal is generated when the Nika signal line crosses above its average; bearish when it crosses below.

- **When to use:** As a primary trend-following signal. Works well on H1-H4 timeframes for medium-term trend detection.
- **Key parameters:** Signal period, average period, average type (SMA/EMA/SMMA/LWMA), applied price, shift, and weight.
- **Role:** Best used as an entry scoring signal with moderate-to-high weight, or as a VETO for trend direction.

2. Signal Line Crosses Level

Compares the Nika signal line against a fixed threshold level. Bullish when the signal is above the level; bearish when below. Useful for detecting overbought/oversold conditions or momentum thresholds.

- **When to use:** As a momentum filter — only trade when signal strength exceeds a minimum level.
- **Key parameters:** Signal period, level value, applied price, and weight.
- **Role:** Effective as a hard filter (VETO) to ensure minimum momentum before entry.

3. Histogram Crosses Level

Evaluates the histogram component of the Nika indicator against a threshold level. The histogram represents the difference between the signal and its average, making it a measure of momentum strength.

- **When to use:** To confirm momentum is accelerating, not just present. Works as a confirmation layer.
- **Key parameters:** Signal period, histogram period, level value, and weight.
- **Role:** Best as a secondary scoring signal or confirmation VETO alongside method 1 or 2.

4. MA Crossover

Classic moving average crossover — a fast MA crossing above a slow MA generates a bullish signal, and vice versa. This is one of the most widely used technical signals in trading.

- **When to use:** As a trend detection baseline. Reliable on H1-D1 timeframes for identifying regime changes.
- **Key parameters:** Fast MA period, slow MA period, MA type (SMA/EMA/SMMA/LWMA), applied price, and weight.
- **Role:** Excellent as a VETO signal for trend direction, or as a medium-weight scoring signal.

5. Price Close vs MA

Compares the bar's closing price against a moving average. Bullish when price closes above the MA; bearish when below. Simple but powerful for trend confirmation.

- **When to use:** As a trend-direction filter. Especially useful on higher timeframes to establish the prevailing bias.
- **Key parameters:** MA period, MA type, applied price, and weight.
- **Role:** Ideal as a VETO — block trades against the prevailing trend defined by a 200-period MA, for example.

6. Dual Signal Cross Average

Two separate Nika signal lines (A and B) are compared against one shared moving average. Bullish requires both signals above the average; bearish requires both below. This adds a confirmation requirement to signal method 1.

- **When to use:** When you want extra confirmation — two independent signals must agree on direction.
- **Key parameters:** Signal A period, Signal B period, average period, average type, and weight.
- **Role:** Use as a high-confidence scoring signal with higher weight, since dual agreement is harder to achieve.

7. Signal Crosses Two Averages

One Nika signal line is compared against two separate moving averages (A and B). Bullish when the signal is above both averages; bearish when below both. The zone between the averages acts as a neutral/no-trade zone.

- **When to use:** To create a dead zone that prevents trading in choppy conditions between two MA boundaries.
- **Key parameters:** Signal period, Average A period, Average B period, average types, and weight.
- **Role:** Effective as a filter that eliminates trades in ranging markets.

8. Signal Direction (Up/Down)

Detects whether the Nika signal line is moving upward or downward — pure momentum direction. Bullish when the signal is rising; bearish when falling. No crossover required.

- **When to use:** As a momentum confirmation — ensure you're entering in the direction of current momentum.
- **Key parameters:** Signal period, applied price, and weight.
- **Role:** Best as a lightweight scoring signal or VETO to prevent counter-momentum entries.

Weighted Scoring System

The weighted scoring system is what makes Nika EA's signal architecture unique. Rather than a simple "all signals must agree" approach, each signal contributes proportionally to the entry decision.

How Weights Combine

Each enabled signal method has a configurable weight (typically 0-100). On each evaluation:

1. Every active signal is evaluated: **bullish**, **bearish**, or **neutral**.
2. Bullish signals add their weight to `up_score`; bearish signals add to `down_score`.
3. The net scores are compared against the **Minimum Entry Score** threshold.
4. If `up_score` exceeds the threshold, a BUY is considered. If `down_score` exceeds, a SELL is considered.
5. VETO signals are checked last — any active VETO that disagrees blocks the trade.

Example Configuration

Consider this setup:

Signal Method	Weight	Current State	Contribution
MA Crossover (VETO)	—	Bullish	Allows BUY, blocks SELL
Nika Signal Crosses Avg	40	Bullish	+40 to <code>up_score</code>
Histogram Crosses Level	30	Bullish	+30 to <code>up_score</code>
Signal Direction	20	Neutral	No contribution
Price Close vs MA	10	Bullish	+10 to <code>up_score</code>

Result: `up_score` = 80, `down_score` = 0. If the minimum entry score is 60, a BUY entry is triggered (VETO allows it). If the MA Crossover were bearish, the BUY would be blocked regardless of the score.

VETO Logic

Any signal method can be configured as a VETO (hard filter) instead of — or in addition to — a scoring signal. A VETO signal does not contribute to the numeric score. Instead:

- If the VETO is **bullish**, only BUY entries are allowed.
- If the VETO is **bearish**, only SELL entries are allowed.
- If the VETO is **neutral**, no entries are allowed in either direction.

Multiple VETOs can be active simultaneously — all must agree with the proposed direction for an entry to proceed.

TIP: Start with 2-3 signal methods. Add more only after backtesting confirms they add value. Over-filtering with too many signals can reduce trade frequency to near zero.

CHAPTER 5

Risk Management

Risk management is not an afterthought in Nika EA — it is a first-class system with 9 independent layers of protection. Each layer addresses a different type of risk, and together they form a comprehensive safety net that protects your account under all market conditions.

The 9-Layer Risk Stack

Layer 1: Max Drawdown Kill Switch

The ultimate safety mechanism. When your account's drawdown (from peak equity) exceeds a configurable threshold, the EA immediately closes all open positions and stops trading entirely. This prevents catastrophic losses during extreme market events.

- **Protects against:** Catastrophic account blowout, flash crashes, unexpected gaps.
- **Key parameter:** Maximum drawdown percentage (e.g., 10% means the EA stops if equity drops 10% from peak).
- **Recommended:** Set at your absolute maximum acceptable loss. For prop firms, set slightly below the firm's drawdown limit.

Layer 2: Daily Loss/Profit Limits

Caps the total profit and loss for each trading day. Once the daily loss limit is hit, no new trades are opened until the next trading day (or a configurable resume hour). The daily profit limit locks in gains by stopping trading after a profitable day.

- **Protects against:** Runaway losses on a bad day, overtrading after big wins.
- **Key parameters:** Max daily loss (currency), max daily profit (currency), resume hour.
- **Recommended:** Daily loss limit = 1-2% of account. Daily profit limit = 3-5% or disabled.

Layer 3: Weekly Loss/Profit Limits

Similar to daily limits but applied over the trading week. Provides an additional cap to prevent a string of losing days from compounding into a significant drawdown.

- **Protects against:** Multi-day losing streaks, weekly drawdown breaches.
- **Key parameters:** Max weekly loss, max weekly profit, resume day.
- **Recommended:** Weekly loss = 3-5% of account. Aligns well with prop firm weekly limits.

Layer 4: Risk Budget (Max SL Exposure)

Limits the total open risk — the sum of potential stop-loss losses across all open positions — as a percentage of account balance. This prevents over-leveraging even if individual position sizes are within limits.

- **Protects against:** Excessive aggregate risk, correlated positions amplifying losses.

- **Key parameters:** Max SL exposure as % of balance.
- **Recommended:** 2-5% total open risk. Lower for conservative approaches.

Layer 5: Max Open Lot

A hard cap on the total number of lots that can be open at any time across all positions managed by this EA instance. Simple but effective guardrail.

- **Protects against:** Position size calculation errors, unexpected scale-in accumulation.
- **Key parameters:** Maximum total open lots.

Layer 6: Equity Curve Trading

Dynamically adjusts lot size based on your equity curve's relationship to its own moving average. When equity is below its MA (indicating a drawdown period), lot size is reduced. When equity recovers above the MA, full sizing resumes.

- **Protects against:** Continued full-size trading during losing periods.
- **Key parameters:** Equity MA period, reduction multiplier.
- **Recommended:** Enable for live trading. Use a 20-50 trade lookback for the MA.

Layer 7: Recovery Mode

Adjusts lot size after consecutive losses. After N consecutive losing trades, the EA reduces lot size by a configurable factor. This prevents the common pattern of sizing up to "recover" losses, which typically leads to deeper drawdowns.

- **Protects against:** Tilt-driven lot size increases, drawdown acceleration.
- **Key parameters:** Consecutive loss trigger count, lot reduction factor.

Layer 8: Spread Filter

Blocks new entries when the current spread exceeds a configurable maximum. This prevents the EA from entering during low-liquidity periods (e.g., market open, news releases, rollover) when spreads widen and slippage is likely.

- **Protects against:** Poor fills, excessive entry costs, slippage.
- **Key parameters:** Maximum allowed spread (in points).
- **Recommended:** Set based on your instrument's typical spread. For EUR/USD: 15-20 points. For indices: varies.

Layer 9: Volatility Filter

Uses the Average True Range (ATR) to determine if current volatility is within an acceptable range. Entries are blocked if ATR is too low (choppy, directionless markets) or too high (extreme volatility events where stops may be blown through).

- **Protects against:** Ranging markets, extreme volatility events, stop hunting.
- **Key parameters:** ATR period, minimum ATR, maximum ATR.

- **Recommended:** Set min/max based on backtesting. Generally, filter out the bottom 10% and top 5% of ATR values.

WARNING: Never disable all risk layers simultaneously. At minimum, keep the Max Drawdown Kill Switch and Daily Loss Limit active.

CHAPTER 6

Trade Management

Once a trade is opened, Nika EA's trade management system takes over. This layer controls how profits are protected and positions are exited through breakeven, partial closes, trailing stops, and additional entry mechanisms.

Breakeven

The breakeven feature moves the stop loss to the entry price (plus/minus a small offset) after the trade reaches a specified profit target — typically after TP1 is hit and a partial close is executed. This ensures the remaining position is risk-free.

- Activated after TP1 hit (configurable)
- Optional pip offset to cover spread/commission
- Works with all trailing modes

Partial Closes

Nika EA supports three take-profit levels, each closing a configurable percentage of the position:

Level	Typical Distance	Close %	Purpose
TP1	1x SL (1:1 RR)	33-50%	Lock in initial profit, trigger breakeven
TP2	2x SL (1:2 RR)	25-33%	Secure most of the profit
TP3	3x SL (1:3 RR)	Remainder	Let the rest run to full target or trail

Partial close percentages are fully configurable. The distances are set via TP1/TP2/TP3 ratio parameters relative to the stop loss distance.

5 Trailing Modes

Nika EA offers five distinct trailing stop modes. Only one can be active at a time. Each mode suits different market conditions and trading styles.

Mode 1: Step Trailing

Moves the stop loss by fixed steps based on the risk-to-reward ratio achieved. For example, when price reaches 1R profit, the SL moves to breakeven; at 2R, the SL moves to 1R; and so on. Each step locks in an incremental amount of profit.

- **Best for:** Trending markets with measured moves.
- **Key parameters:** Step size (in R-multiples), activation distance.

Mode 2: Percentage Trailing

Trails the stop loss at a fixed percentage distance from the current price. As price moves in your favor, the stop follows. If price reverses by more than the trailing percentage, the position closes.

- **Best for:** Volatile markets where you want to give trades room to breathe.
- **Key parameters:** Trail percentage, activation threshold.

Mode 3: BE + Trailing Hybrid

A two-phase approach: first, the stop is moved to breakeven after reaching a specified take-profit level. Then, a standard trailing mechanism activates after a subsequent TP level is reached. This provides the safety of breakeven with the upside capture of trailing.

- **Best for:** Conservative traders who want risk-free trades before trailing begins.
- **Key parameters:** BE trigger level, trailing activation level, trail distance.

Mode 4: Swing Trailing

The stop loss follows market structure — specifically swing highs and swing lows. For a long trade, the SL moves up to each successive higher swing low. For a short trade, down to each lower swing high. This is the most adaptive trailing mode.

- **Best for:** Trend-following strategies where you want to ride the trend as long as market structure holds.
- **Key parameters:** Swing lookback period, minimum swing distance.

Mode 5: Daily Profit Trailing

Unlike the other modes which trail individual trades, this mode trails your **total daily P/L**. When daily profit reaches a threshold, the trailing mechanism activates. If daily P/L pulls back by more than the trail amount, all positions are closed and trading stops for the day.

- **Best for:** Day traders who want to protect daily gains. Essential for prop firm compliance.
- **Key parameters:** Activation profit, trail distance, close-all behavior.

Scale-In Entries

Scale-in entries allow the EA to add to a winning position as price moves in your favor. Up to 5 scale-in levels can be configured, each with:

- **Distance:** How far from the initial entry (in pips or ATR multiples) each scale-in triggers.
- **Lot size:** The position size for each scale-in (can be smaller than the initial entry).
- **Shared SL:** All scale-in positions share the same stop loss management as the original trade.

Scale-in entries use a dedicated magic number for tracking and are subject to all risk management layers.

Re-Entry System

When a trade is closed (by SL, TP, or trailing stop), the re-entry system can automatically open a new trade if the signal conditions are still met. This is useful for catching trends that continue after a

stop-out. Re-entries have their own magic number and respect all filters and risk layers.

Time-Based Exit

Automatically closes a trade after a configurable number of bars. Useful for strategies that expect a move within a specific time window. If the trade hasn't reached TP by the bar limit, it's closed at market price — win or lose.

Cool Down Filter

Enforces a minimum number of bars between consecutive entries. Prevents rapid-fire entries during choppy conditions where signals may flip rapidly. Applies to main entries, re-entries, and scale-ins independently.

CHAPTER 7

Session & Time Filters

Markets behave differently during different sessions and times of day. Nika EA provides granular control over when the EA is allowed to trade, with basic time filters and advanced session profiles that can override core parameters.

Hours Filter

The basic hours filter restricts trading to a specific time window within each day. Set a start hour and end hour (broker server time). The EA will only open new trades during this window. Existing trades are managed normally outside the window.

NOTE: The Hours Filter is automatically disabled when Session Profiles are active. Use one or the other, not both.

Weekdays Filter

Enable or disable trading for each day of the week. Common configurations:

- **Disable Monday:** Avoid gaps and Monday volatility.
- **Disable Friday:** Avoid holding positions over the weekend.
- **Disable Sunday:** Low liquidity, wide spreads.

Session Profiles

Session profiles are a powerful feature that allows you to define up to three trading sessions (Asian, London, New York), each with their own parameter overrides. When a session is active, it can override the following parameters:

Override Parameter	Description	Use Case
Start / End Hour	Session time boundaries	Define exact session windows
SL Multiplier	Multiplies the base SL distance	Wider stops during volatile sessions
TP Multiplier	Multiplies the base TP distance	Larger targets during trending sessions
Lot Multiplier	Multiplies the base lot size	Smaller size during Asian session
Min Entry Score Override	Overrides the global minimum score	Higher bar during choppy sessions
Direction Override	Force BUY only, SELL only, or both	Trade with London momentum only long

Typical session profile example:

Session	Hours (Server)	SL Mult	TP Mult	Lot Mult	Notes
Asian	00:00 - 08:00	0.8x	0.8x	0.5x	Smaller trades, tighter targets
London	08:00 - 16:00	1.0x	1.2x	1.0x	Full size, extended targets
New York	13:00 - 21:00	1.0x	1.0x	1.0x	Standard parameters

News Filter

The news filter prevents new entries around high-impact economic news events. Configure a time buffer before and after news events. The EA will pause entry logic during these windows while continuing to manage existing trades.

- **Before minutes:** How many minutes before a news event to stop opening trades.
- **After minutes:** How many minutes after a news event before trading resumes.
- **Impact filter:** Filter by news impact level (high, medium, low).

Candle Pattern Confirmation

An optional confirmation layer that requires a specific candlestick pattern before allowing an entry. Even if the signal score meets the threshold, the entry is delayed until a confirming candle pattern appears. Supported patterns include engulfing, pin bar, inside bar, and other standard formations.

This is configured through the Candle Pattern section with 10 parameters controlling which patterns are accepted and their sensitivity settings.

CHAPTER 8

Advanced Features

Compounding

Nika EA supports three modes for calculating the risk base used in position sizing:

- **Balance:** Uses the current account balance (excluding floating P/L). Most stable option.
- **Equity:** Uses the current equity (including floating P/L). Adjusts sizing in real-time as open trades move.
- **Initial Balance:** Uses a fixed initial balance that doesn't change. Useful for fixed-risk strategies or prop firm setups where you want consistent sizing regardless of P/L.

For compounding to work effectively, use Balance or Equity mode. The EA will automatically increase lot sizes as the account grows and decrease them as it shrinks.

Trade Journal

The built-in trade journal automatically exports every trade to a CSV file. Each entry includes: open time, close time, symbol, direction, lot size, entry price, exit price, SL, TP, profit/loss, commission, swap, magic number, and the signal scores that triggered the entry.

The CSV file is saved in the MT5 Files folder and can be imported into spreadsheets or analysis tools for post-trade review.

Multi-Instance Portfolio Coordination

When running multiple Nika EA instances across different charts or symbols, the portfolio coordination feature shares risk data between instances using MT5's GlobalVariables mechanism.

Shared data includes:

- Total open risk across all instances
- Daily/weekly P/L aggregated across all instances
- Drawdown status

This ensures that risk limits are respected at the portfolio level, not just per-chart. If one instance hits a daily limit, all instances can be notified.

State Persistence

Nika EA saves its internal state to GlobalVariables so that it can fully resume after a restart or crash. Persisted state includes:

- Current trailing stop levels
- Partial close status (which TPs have been hit)
- Daily/weekly P/L counters

- Equity curve MA values
- Consecutive loss count

On restart, the EA reads its saved state and continues managing existing trades exactly where it left off. No manual intervention is needed.

Custom Optimization Metrics (NQ Modes)

MT5's Strategy Tester supports custom optimization criteria. Nika EA provides 5 proprietary fitness functions (NQ Modes) for the optimizer to maximize:

NQ Mode	Optimizes For	Best Use Case
Mode 1	Risk-adjusted return (Sharpe-like)	General purpose — balanced risk/reward
Mode 2	Profit factor with drawdown penalty	Conservative — prioritizes consistency
Mode 3	Recovery factor emphasis	Drawdown recovery — good for prop firms
Mode 4	Trade frequency weighted return	Ensures adequate sample size
Mode 5	Custom composite score	Advanced users — blends multiple metrics

Dashboard

The real-time dashboard is rendered directly on the chart and displays:

- Current signal scores (up/down) with visual bars
- Active filter states (which filters are passing/blocking)
- Open trade information (direction, lot, P/L, SL distance)
- Risk layer status (daily P/L, drawdown %, risk budget usage)
- Session information (current session, overrides active)
- Statistics (win rate, profit factor, average R-multiple)

Dashboard appearance is configurable — you can adjust position, size, colors, and which sections to display.

CHAPTER 9

Complete Parameter Reference

This chapter provides a complete reference for all 311 parameters in Nika EA V2.91. Parameters are organized by section exactly as they appear in the EA's input dialog. For each parameter, the table shows the name, default value, and description.

Core Trading

Global Settings -

Parameter	Default	Description
_main_magic	1000	Main Entry Magic Number
_re_entry_magic	1001	Re-Entry Magic Number
_scale_magic	1002	Scale-In Entry Magic Number
_magic_exclusion_start	0	Magic Number Exclusion Start(0 = OFF)
_magic_exclusion_end	0	Magic Number Exclusion End
_deviation_permille	1	Max Deviation Per mille‰ (Maximum Allowed Deviation Per mille‰)

Trade Settings

Parameter	Default	Description
_initial_entry_mode	EN_wait_for_signal	Initial Entry Mode
_trade_direction	EN_long_and_short	Allowed Trading Direction
_max_entries	1	Max Entries (Maximum Allowed Entries)
_max_day_entries	0	Max Entries Per Day(0 = OFF)
_lot_risk_perc	0.5	Risk Percentage% Of Balance (Percentage Value Setting)
_max_dd_kill_pct	0	Max Drawdown Kill Switch % (0 = OFF, Closes All & Stops EA)
_opposite_policy	EN_opposite_close	Opposite Signal Policy (What Happens When Signal Flips Direction)
_min_entry_score	0.5	Min Entry Score (0.0-1.0, Weighted Agreement Required to Open)
_min_exit_score	0.5	Min Exit Score (0.0-1.0, Weighted Agreement Required to Close Opposite)
_min_active_weight	1.0	Min Active Weight Floor (Prevents Fake Certainty From Single Low-Weight Rule)
_allow_hedge	true	Allow Hedge? (Enable/Disable Hedge Feature)

Re-Entry Settings

Parameter	Default	Description
_max_re_entry_orders	3	Max Re-Entry Series(0 = OFF, -1 = INFINITE)

Stoploss Settings

Parameter	Default	Description
_sl_method	en_atr	SL Method (Calculation Type for SL)
_sl_pips	50	SL Pips (Distance in Pips)
_atr_frame	PERIOD_D1	ATR Timeframe (Chart Period for ATR)
_atr_period	21	ATR Period (Number of Bars for ATR)
_atr_multiplier	0.2	ATR Multiplier (Scale Factor for ATR)
_promille	10	Price Promille ‰ (User-Configurable Setting)
_promille_average_period	14	Promille Average Period (Number of Bars for Promille Average)

Targets Settings

Parameter	Default	Description
_allow_breakeven	true	Enable SL Breakeven? (Turn On SL Breakeven Feature)
_allow_sl_steps	true	Enable SL Steps? (Turn On SL Steps Feature)
_tp1_multiplier	1.5	TP1 Multiplier(0 = OFF)
_tp1_partial_perc	70	TP1 Close Percentage% Level (Percentage Value Setting)
_tp2_multiplier	2	TP2 Multiplier(0 = OFF)
_tp2_partial_perc	90	TP2 Close Percentage% Level (Percentage Value Setting)
_tp3_multiplier	2.5	TP3 Multiplier(0 = OFF)
_tp3_partial_perc	100	TP3 Close Percentage% Level (Percentage Value Setting)
_tp4_multiplier	0	TP 4 Multiplier(0 = OFF)
_tp4_partial_perc	0	TP 4 Close Percentage% Level (Percentage Value Setting)

Scale-In Entry Settings

Parameter	Default	Description
_scale_range_variation	0.05	Max Scale Entry Level Deviation (User-Configurable Setting)
_scale_trigger_1	0	Scale 1 Trigger(0 = OFF)
_scale_size_1	50	Scale 1 Size (Volume/Size Setting)

Parameter	Default	Description
_scale_trigger_2	0	Scale 2 Trigger(0 = OFF)
_scale_size_2	100	Scale 2 Size (Volume/Size Setting)
_scale_trigger_3	0	Scale 3 Trigger(0 = OFF)
_scale_size_3	0	Scale 3 Size (Volume/Size Setting)
_scale_trigger_4	0	Scale 4 Trigger(0 = OFF)
_scale_size_4	0	Scale 4 Size (Volume/Size Setting)

Trade Cool Down Filter Settings

Parameter	Default	Description
_cooldown_frame	PERIOD_M10	Cool Down Timeframe (Chart Period for Cool Down)
_wait_bars_main	1	Main Entry Wait Bars(0 = OFF)
_wait_bars_re_entry	1	Re-Entry Wait Bars(0 = OFF)
_wait_bars_scale	0	Scale-In Entry Wait Bars(0 = OFF)

Time-Based Exit (Close After X Bars)

Parameter	Default	Description
_time_exit_enable	false	Enable Time-Based Exit? (Auto-Close After Set Number of Bars)
_time_exit_bars	10	Close After N Bars (User-Configurable Setting)
_time_exit_timeframe	PERIOD_H1	Time Exit Timeframe (Chart Period for Time Exit)

Volatility Filter Settings

Parameter	Default	Description
_volatility_filter_enable	false	Enable Volatility Filter? (Blocks Entry When ATR Out of Range)
_vol_atr_min	0.0	Min ATR Points (0 = Disabled, Too Low = Ranging Market)
_vol_atr_max	0.0	Max ATR Points (0 = Disabled, Too High = Erratic Market)
_vol_atr_timeframe	PERIOD_H1	Volatility ATR Timeframe (Chart Period for Volatility ATR)
_vol_atr_period	14	Volatility ATR Period (Number of Bars for Volatility ATR)

Max Open Lot

Parameter	Default	Description
_max_open_lot	0	Max Open Lot(0 = OFF)

Parameter	Default	Description
_max_open_lot_symbol	en_current_symbol	Symbols Mode (Operating Mode Selection)

Risk Budget (Max Open SL Exposure)

Parameter	Default	Description
_risk_budget_enable	false	Enable Risk Budget? (Limits Total SL Exposure Across Open Trades)
_max_risk_percent	5.0	Max Total Risk % of Balance (Sum of All Open SL Distances)
_risk_budget_all_symbols	false	Include All Symbols? (Yes/No Toggle)

Trade Management

Trailing Stop Settings

Parameter	Default	Description
_allow_trailing	false	Allow Trailing? (Enable/Disable Trailing Feature)

Trailing Steps Settings

Parameter	Default	Description
_trailing_start	0.5	Trailing Start RRR (User-Configurable Setting)
_trailing_step	0.2	Trailing Step RRR (User-Configurable Setting)
_trailing_stop	1	Trailing Offset RRR (User-Configurable Setting)

BE + Trailing Hybrid (Move to BE After TP, Then Trail)

Parameter	Default	Description
_hybrid_trailing_enable	false	Enable Hybrid BE+Trailing? (Turn On Hybrid BE+Trailing Feature)
_hybrid_tp_step_trigger	2	Start Trailing After TP Step N (User-Configurable Setting)
_hybrid_trail_offset_rrr	0.5	Hybrid Trailing Offset RRR (User-Configurable Setting)

Swing Trailing (SL Follows Market Structure)

Parameter	Default	Description
_swing_trailing_enable	false	Enable Swing-Based Trailing? (SL Moves to Last Swing High/Low)
_swing_lookback	20	Swing Lookback Bars (User-Configurable Setting)
_swing_trail_offset_points	50	Swing Trail Offset (Points)
_swing_timeframe	PERIOD_H1	Swing Timeframe (Chart Period for Swing)

Daily Profit Trailing (Lock In Profits, Trail Daily P/L)

Parameter	Default	Description
_allow_daily_trailing	false	Allow Daily Account Trailing? (Yes/No Toggle)
trailStartInput	0.0	Trail Start Percentage% (Percentage Value Setting)
trailStepInput	0.0	Trail Step Percentage% (Percentage Value Setting)
trailAmountInput	0.0	Trail Percentage% (Percentage Value Setting)
DailyResumeHour	h9	Resume Hour (User-Configurable Setting)

Risk & Money Management

Max Daily/Weekly Profit/Loss Settings

Parameter	Default	Description
_max_pl_buffer_value	1	Buffer Value
_daily_loss_value	0	Daily Loss Value(0 = OFF)
_daily_profit_value	0	Daily Profit Value(0 = OFF)
_daily_resume_hour	h9	Resume Next Day Hour (User-Configurable Setting)
_weekly_loss_value	0	Weekly Loss Value(0 = OFF)
_weekly_profit_value	0	Weekly Profit Value(0 = OFF)
_weekly_resume_day	1	Resume Next Week Day (User-Configurable Setting)

Filters & Sessions

Hours Filter (Disabled When Session Profiles Active)

Parameter	Default	Description
_allow_trading_time	true	Allow Hours Filter? (Enable/Disable Hours Filter Feature)
_trade_start_hour	10	Start Hour (User-Configurable Setting)
_trade_end_hour	23	End Hour (User-Configurable Setting)
_close_on_time_filter	EN_time_close	Close Trades? (Yes/No Toggle)

Weekdays Filter Settings

Parameter	Default	Description
_allow_saturday	false	Allow Saturday? (Enable/Disable Saturday Feature)
_allow_sunday	true	Allow Sunday? (Enable/Disable Sunday Feature)
_allow_monday	true	Allow Monday? (Enable/Disable Monday Feature)
_allow_tuesday	true	Allow Tuesday? (Enable/Disable Tuesday Feature)
_allow_wednesday	true	Allow Wednesday? (Enable/Disable Wednesday Feature)
_allow_thursday	true	Allow Thursday? (Enable/Disable Thursday Feature)
_allow_friday	true	Allow Friday? (Enable/Disable Friday Feature)

Session Profiles (Overrides SL/TP/Lot Per Session)

Parameter	Default	Description
_session_profiles_enable	false	Enable Session Profiles? (Overrides Hours Filter when ON)

Asian Session

Parameter	Default	Description
_asian_enable	false	Enable Asian Session? (Turn On Asian Session Feature)
_asian_start_hour	0	Asian Start Hour (Broker Server Time, 0-23)
_asian_end_hour	8	Asian End Hour (Broker Server Time, 0-23)
_asian_sl_multiplier	1.0	Asian SL Multiplier (1.0 = No Change)
_asian_tp_multiplier	1.0	Asian TP Multiplier (1.0 = No Change)
_asian_lot_multiplier	1.0	Asian Lot Multiplier (1.0 = No Change)
_asian_max_entries	1	Asian Max Entries (Overrides Global Max Entries)
_asian_allow_re_entry	true	Asian Allow Re-Entry? (Overrides Global Setting)

London Session

Parameter	Default	Description
_london_enable	true	Enable London Session? (Turn On London Session Feature)
_london_start_hour	8	London Start Hour (Broker Server Time, 0-23)
_london_end_hour	16	London End Hour (Broker Server Time, 0-23)
_london_sl_multiplier	1.0	London SL Multiplier (1.0 = No Change)
_london_tp_multiplier	1.0	London TP Multiplier (1.0 = No Change)
_london_lot_multiplier	1.0	London Lot Multiplier (1.0 = No Change)
_london_max_entries	2	London Max Entries (Overrides Global Max Entries)
_london_allow_re_entry	true	London Allow Re-Entry? (Overrides Global Setting)

New York Session

Parameter	Default	Description
_newyork_enable	true	Enable New York Session? (Turn On New York Session Feature)
_newyork_start_hour	13	New York Start Hour (Broker Server Time, 0-23)
_newyork_end_hour	22	New York End Hour (Broker Server Time, 0-23)
_newyork_sl_multiplier	1.0	New York SL Multiplier (1.0 = No Change)
_newyork_tp_multiplier	1.0	New York TP Multiplier (1.0 = No Change)
_newyork_lot_multiplier	1.0	New York Lot Multiplier (1.0 = No Change)
_newyork_max_entries	2	New York Max Entries (Overrides Global Max Entries)
_newyork_allow_re_entry	true	New York Allow Re-Entry? (Overrides Global Setting)

News Filter Settings

Parameter	Default	Description
_allow_news_filter	false	Enable News Filter? (Turn On News Filter Feature)
_auto_close_on_news	true	Auto Close Positions?
_high	true	Filter High Impact News?
_high_pause	60	Pause High News Trading Before/After (Seconds)

Spread Filter Settings

Parameter	Default	Description
_spread_filter_enable	false	Enable Spread Filter? (Blocks Entry When Spread Too Wide)

Parameter	Default	Description
_spread_max_points	0	Max Spread Points (0 = Disabled)
_spread_max_atr_ratio	0.0	Max Spread % of ATR (0 = Disabled, e.g. 10 = Spread Must Be < 10% of ATR)

Candle Pattern Confirmation (Requires Pattern Before Entry)

Parameter	Default	Description
_candle_pattern_enable	false	Enable Candle Pattern Filter? (Entry Only When Pattern Detected)
_candle_engulfing	true	Bullish/Bearish Engulfing (Strong Reversal Signal)
_candle_pin_bar	false	Pin Bar / Hammer / Shooting Star (Rejection Wick)
_candle_inside_bar	false	Inside Bar (Compression Before Breakout)
_pin_bar_ratio	2.0	Pin Bar Wick-to-Body Ratio (User-Configurable Setting)
_candle_pattern_timeframe	PERIOD_CURRENT	Candle Pattern Timeframe (Chart Period for Candle Pattern)
_candle_doji	false	Doji (Indecision, Body < 10% of Range)
_candle_doji_body_perc	10.0	Doji Max Body % of Range (Lower = Stricter)
_candle_lookback	1	Pattern Lookback Bars (Check Last X Bars, 1 = Only Last Bar)
_candle_require_all	false	Require ALL Enabled Patterns? (false = ANY Pattern Matches)

Signal Rules

Nika Signal Crosses Average

Parameter	Default	Description
_NikaCross_allow_1	true	1. Enable Nika Crossover? (Activate This Signal Slot)
_NikaCross_weight_1	1.0	1. Entry Weight (Higher = More Influence in Weighted Score)
_NikaCross_frame_1	PERIOD_CURRENT	1. Timeframe (Chart Period for This Signal)
_NikaCross_role_1	EN_role_entry	1. Role (Entry Scoring or Hard Filter)
_NikaCross_ma_type_1	EMA	1. MA Method (Calculation Type for 1. MA)
_NikaCross_t3_factor_1	0.7	1. T3 Factor (User-Configurable Setting)
_NikaCross_length_1	13	1. Nika Length (Main Indicator Lookback Period)
_NikaCross_nika_ma_period_1	3	1. Nika Average Period (Smoothing for Nika Signal)
_NikaCross_shift_1	0	1. Shift (Bars to Look Back, 0=Current)
_NikaCross_allow_2	false	2. Enable Nika Crossover? (Activate This Signal Slot)
_NikaCross_weight_2	1.0	2. Entry Weight (Higher = More Influence in Weighted Score)
_NikaCross_frame_2	PERIOD_CURRENT	2. Timeframe (Chart Period for This Signal)
_NikaCross_role_2	EN_role_entry	2. Role (Entry Scoring or Hard Filter)
_NikaCross_ma_type_2	EMA	2. MA Method (Calculation Type for 2. MA)
_NikaCross_t3_factor_2	0.7	2. T3 Factor (User-Configurable Setting)
_NikaCross_length_2	13	2. Nika Length (Main Indicator Lookback Period)
_NikaCross_nika_ma_period_2	3	2. Nika Average Period (Smoothing for Nika Signal)
_NikaCross_shift_2	0	2. Shift (Bars to Look Back, 0=Current)

Nika Signal Line Crosses Level

Parameter	Default	Description
_NikaSigLevCross_allow_1	false	1. Sig Crosses Level? (Signal vs Threshold)
_NikaSigLevCross_weight_1	1.0	1. Entry Weight (Higher = More Influence in Weighted Score)
_NikaSigLevCross_frame_1	PERIOD_CURRENT	1. Timeframe (Chart Period for This Signal)
_NikaSigLevCross_role_1	EN_role_entry	1. Role (Entry Scoring or Hard Filter)
_NikaSigLevCross_level_1	0	1. Cross Level (Signal Threshold Value)
_NikaSigLevCross_length_1	13	1. Nika Length (Main Indicator Lookback Period)
_NikaSigLevCross_shift_1	0	1. Shift (Bars to Look Back, 0=Current)

Parameter	Default	Description
_NikaSigLevCross_allow_2	false	2. Sig Crosses Level? (Signal vs Threshold)
_NikaSigLevCross_weight_2	1.0	2. Entry Weight (Higher = More Influence in Weighted Score)
_NikaSigLevCross_frame_2	PERIOD_CURRENT	2. Timeframe (Chart Period for This Signal)
_NikaSigLevCross_role_2	EN_role_entry	2. Role (Entry Scoring or Hard Filter)
_NikaSigLevCross_level_2	0	2. Cross Level (Signal Threshold Value)
_NikaSigLevCross_length_2	13	2. Nika Length (Main Indicator Lookback Period)
_NikaSigLevCross_shift_2	0	2. Shift (Bars to Look Back, 0=Current)

Histogram Crosses Level

Parameter	Default	Description
_HistLevCross_allow_1	false	1. Hist Crosses Level? (Histogram vs Level)
_HistLevCross_weight_1	1.0	1. Entry Weight (Higher = More Influence in Weighted Score)
_HistLevCross_frame_1	PERIOD_CURRENT	1. Timeframe (Chart Period for This Signal)
_HistLevCross_role_1	EN_role_entry	1. Role (Entry Scoring or Hard Filter)
_HistLevCross_level_1	0	1. Cross Level (Signal Threshold Value)
_HistLevCross_HA_1	true	1. Enable Histogram Heiken Ashi? (Yes/No Toggle)
_HistLevCross_length_1	13	1. Histogram Length (Lookback Period)
_HistLevCross_smooth_1	2	1. Smoothing Period (Histogram Smoothing Bars)
_HistLevCross_allow_2	false	2. Hist Crosses Level? (Histogram vs Level)
_HistLevCross_weight_2	1.0	2. Entry Weight (Higher = More Influence in Weighted Score)
_HistLevCross_frame_2	PERIOD_CURRENT	2. Timeframe (Chart Period for This Signal)
_HistLevCross_role_2	EN_role_entry	2. Role (Entry Scoring or Hard Filter)
_HistLevCross_level_2	0	2. Cross Level (Signal Threshold Value)
_HistLevCross_HA_2	true	2. Enable Histogram Heiken Ashi? (Yes/No Toggle)
_HistLevCross_length_2	13	2. Histogram Length (Lookback Period)
_HistLevCross_smooth_2	2	2. Smoothing Period (Histogram Smoothing Bars)

MA Crossover

Parameter	Default	Description
_MACross_allow_1	false	1. MA Crossover? (Fast MA Crosses Slow MA)

Parameter	Default	Description
_MACross_weight_1	1.0	1. Entry Weight (Higher = More Influence in Weighted Score)
_MACross_frame_1	PERIOD_CURRENT	1. Timeframe (Chart Period for This Signal)
_MACross_role_1	EN_role_entry	1. Role (Entry Scoring or Hard Filter)
_MACross_ma_method_1	EMA	1. MA Method (Moving Average Type for Calculation)
_MACross_ma_price_1	MA_PRICE_CLOSE	1. MA Price Type (User-Configurable Setting)
_MACross_slow_ma_period_1	50	1. Slow MA Period (Long Moving Average Lookback)
_MACross_fast_ma_period_1	20	1. Fast MA Period (Short Moving Average Lookback)
_MACross_mafactor_1	0.7	1. T3 Factor (if T3)
_MACross_allow_2	false	2. MA Crossover? (Fast MA Crosses Slow MA)
_MACross_weight_2	1.0	2. Entry Weight (Higher = More Influence in Weighted Score)
_MACross_frame_2	PERIOD_CURRENT	2. Timeframe (Chart Period for This Signal)
_MACross_role_2	EN_role_entry	2. Role (Entry Scoring or Hard Filter)
_MACross_ma_method_2	EMA	2. MA Method (Moving Average Type for Calculation)
_MACross_ma_price_2	MA_PRICE_CLOSE	2. MA Price Type (User-Configurable Setting)
_MACross_slow_ma_period_2	50	2. Slow MA Period (Long Moving Average Lookback)
_MACross_fast_ma_period_2	20	2. Fast MA Period (Short Moving Average Lookback)
_MACross_mafactor_2	0.7	2. T3 Factor (if T3)

Price Close Above/Below MA

Parameter	Default	Description
_MAPriceCross_allow_1	false	1. Close vs MA? (Price Close Above/Below MA)
_MAPriceCross_weight_1	1.0	1. Entry Weight (Higher = More Influence in Weighted Score)
_MAPriceCross_frame_1	PERIOD_CURRENT	1. Timeframe (Chart Period for This Signal)
_MAPriceCross_role_1	EN_role_entry	1. Role (Entry Scoring or Hard Filter)
_MAPriceCross_ma_method_1	EMA	1. MA Method (Moving Average Type for Calculation)
_MAPriceCross_ma_price_1	MA_PRICE_CLOSE	1. MA Price Type (User-Configurable Setting)
_MAPriceCross_ma_period_1	50	1. MA Period (Moving Average Lookback Period)
_MAPriceCross_mafactor_1	0.7	1. T3 Factor (if T3)
_MAPriceCross_allow_2	false	2. Close vs MA? (Price Close Above/Below MA)

Parameter	Default	Description
_MAPriceCross_weight_2	1.0	2. Entry Weight (Higher = More Influence in Weighted Score)
_MAPriceCross_frame_2	PERIOD_CURRENT	2. Timeframe (Chart Period for This Signal)
_MAPriceCross_role_2	EN_role_entry	2. Role (Entry Scoring or Hard Filter)
_MAPriceCross_ma_method_2	EMA	2. MA Method (Moving Average Type for Calculation)
_MAPriceCross_ma_price_2	MA_PRICE_CLOSE	2. MA Price Type (User-Configurable Setting)
_MAPriceCross_ma_period_2	50	2. MA Period (Moving Average Lookback Period)
_MAPriceCross_mafactor_2	0.7	2. T3 Factor (if T3)

Nika Signals A and B Crosses Average A

Parameter	Default	Description
_2SigAvgCross_allow_1	false	1. 2SigAvgCross? (2 Signals Cross Average)
_2SigAvgCross_weight_1	1.0	1. Entry Weight (Higher = More Influence in Weighted Score)
_2SigAvgCross_frame_1	PERIOD_CURRENT	1. Timeframe (Chart Period for This Signal)
_2SigAvgCross_role_1	EN_role_entry	1. Role (Entry Scoring or Hard Filter)
_2SigAvgCross_ma_type_1	EMA	1. MA Method (Calculation Type for 1. MA)
_2SigAvgCross_t3_factor_1	0.7	1. T3 Factor (User-Configurable Setting)
_2SigAvgCross_nika1_length_1	13	1. Nika A: Length (First Signal Lookback)
_2SigAvgCross_nika1_nika_ma_period_1	3	1. Nika A: Avg Period (First Signal Smoothing)
_2SigAvgCross_nika1_shift_1	0	1. Nika A: Shift (First Signal Bar Offset)
_2SigAvgCross_nika2_length_1	13	1. Nika B: Length (Second Signal Lookback)
_2SigAvgCross_nika2_shift_1	0	1. Nika B: Shift (Second Signal Bar Offset)
_2SigAvgCross_allow_2	false	2. 2SigAvgCross? (2 Signals Cross Average)
_2SigAvgCross_weight_2	1.0	2. Entry Weight (Higher = More Influence in Weighted Score)
_2SigAvgCross_frame_2	PERIOD_CURRENT	2. Timeframe (Chart Period for This Signal)
_2SigAvgCross_role_2	EN_role_entry	2. Role (Entry Scoring or Hard Filter)
_2SigAvgCross_ma_type_2	EMA	2. MA Method (Calculation Type for 2. MA)
_2SigAvgCross_t3_factor_2	0.7	2. T3 Factor (User-Configurable Setting)
_2SigAvgCross_nika1_length_2	13	2. Nika A: Length (First Signal Lookback)
_2SigAvgCross_nika1_nika_ma_period_2	3	2. Nika A: Avg Period (First Signal Smoothing)

Parameter	Default	Description
_2SigAvgCross_nika1_shift_2	0	2. Nika A: Shift (First Signal Bar Offset)
_2SigAvgCross_nika2_length_2	13	2. Nika B: Length (Second Signal Lookback)
_2SigAvgCross_nika2_shift_2	0	2. Nika B: Shift (Second Signal Bar Offset)

Nika Signal A Crosses Averages A and B

Parameter	Default	Description
_Sig2AvgCross_allow_1	false	1. Sig2AvgCross? (Signal Crosses 2 Averages)
_Sig2AvgCross_weight_1	1.0	1. Entry Weight (Higher = More Influence in Weighted Score)
_Sig2AvgCross_frame_1	PERIOD_CURRENT	1. Timeframe (Chart Period for This Signal)
_Sig2AvgCross_role_1	EN_role_entry	1. Role (Entry Scoring or Hard Filter)
_Sig2AvgCross_ma_type_1	EMA	1. MA Method (Calculation Type for 1. MA)
_Sig2AvgCross_t3_factor_1	0.7	1. T3 Factor (User-Configurable Setting)
_Sig2AvgCross_nika1_length_1	13	1. Nika A: Length (First Signal Lookback)
_Sig2AvgCross_nika1_nika_ma_period_1	3	1. Nika A: Avg Period (First Signal Smoothing)
_Sig2AvgCross_nika1_shift_1	0	1. Nika A: Shift (First Signal Bar Offset)
_Sig2AvgCross_nika2_nika_ma_period_1	3	1. Nika B: Avg Period (Second Avg Smoothing)
_Sig2AvgCross_allow_2	false	2. Sig2AvgCross? (Signal Crosses 2 Averages)
_Sig2AvgCross_weight_2	1.0	2. Entry Weight (Higher = More Influence in Weighted Score)
_Sig2AvgCross_frame_2	PERIOD_CURRENT	2. Timeframe (Chart Period for This Signal)
_Sig2AvgCross_role_2	EN_role_entry	2. Role (Entry Scoring or Hard Filter)
_Sig2AvgCross_ma_type_2	EMA	2. MA Method (Calculation Type for 2. MA)
_Sig2AvgCross_t3_factor_2	0.7	2. T3 Factor (User-Configurable Setting)
_Sig2AvgCross_nika1_length_2	13	2. Nika A: Length (First Signal Lookback)
_Sig2AvgCross_nika1_nika_ma_period_2	3	2. Nika A: Avg Period (First Signal Smoothing)
_Sig2AvgCross_nika1_shift_2	0	2. Nika A: Shift (First Signal Bar Offset)

Nika Signal Line Moving Up/Down

Parameter	Default	Description
_SigUD_allow_1	false	1. Signal Up/Down? (Detect Direction Movement)

Parameter	Default	Description
_SigUD_weight_1	1.0	1. Entry Weight (Higher = More Influence in Weighted Score)
_SigUD_frame_1	PERIOD_CURRENT	1. Timeframe (Chart Period for This Signal)
_SigUD_role_1	EN_role_entry	1. Role (Entry Scoring or Hard Filter)
_SigUD_length_1	13	1. Nika Length (Main Indicator Lookback Period)
_SigUD_shift_1	0	1. Shift (Bars to Look Back, 0=Current)
_SigUD_allow_2	false	2. Signal Up/Down? (Detect Direction Movement)
_SigUD_weight_2	1.0	2. Entry Weight (Higher = More Influence in Weighted Score)
_SigUD_frame_2	PERIOD_CURRENT	2. Timeframe (Chart Period for This Signal)
_SigUD_role_2	EN_role_entry	2. Role (Entry Scoring or Hard Filter)
_SigUD_length_2	13	2. Nika Length (Main Indicator Lookback Period)
_SigUD_shift_2	0	2. Shift (Bars to Look Back, 0=Current)

Advanced

Compounding Settings (Risk Calculation Base)

Parameter	Default	Description
_compounding_enable	false	Enable Compounding? (Changes How Risk % Is Calculated)
_compound_base	EN_compound_balance	Risk Calculation Base (Balance = Standard, Equity = Aggressive, Initial = Conservative)

Equity Curve Trading (Scale Down During Drawdown)

Parameter	Default	Description
_equity_curve_enable	false	Enable Equity Curve Trading? (Uses MA of Trade Results)
_equity_curve_ma_period	20	Equity MA Period (Number of Past Trades)
_equity_curve_lot_reduction	0.5	Lot Reduction Factor Below MA (0.5 = Half Size)
_equity_curve_block_trading	false	Stop All Trading When Below MA? (Nuclear Option)

Recovery Mode (Adjust Lot After Consecutive Losses)

Parameter	Default	Description
_recovery_mode_enable	false	Enable Recovery Mode? (Increase Lot to Recover Faster)
_recovery_consec_losses	3	Consecutive Losses to Trigger Recovery (User-Configurable Setti)
_recovery_lot_multiplier	1.5	Recovery Lot Multiplier (e.g. 1.5 = 50% Larger Lot)
_recovery_max_attempts	3	Max Recovery Trades Before Reset (Then Back to Normal)

Trade Journal (Export Every Trade to CSV)

Parameter	Default	Description
_journal_enable	false	Enable CSV Trade Journal? (Logs to MQL5/Files/)
_journal_filename	"NikaTradeJournal"	Journal Filename (Auto-Appends _SYMBOL.csv)

Multi-Instance Portfolio (Coordinate Risk Across Charts)

Parameter	Default	Description
_portfolio_risk_enable	false	Enable Portfolio Coordination? (Shares Risk Data via GlobalVariables)
_portfolio_max_risk_percent	10.0	Max Combined Risk % Across All Instances (Percentage Value Set)
_portfolio_gv_prefix	"NikaPortfolio_"	Portfolio Group ID (Same ID = Same Portfolio, Must Match Across Charts)

State Persistence (Resume After Restart/Crash)

Parameter	Default	Description
_state_persistence_enable	false	Enable State Persistence? (Saves Recovery/Equity State to File)
_state_save_interval_sec	300	Save Interval (Seconds)

Display & Testing

Alerts Settings

Parameter	Default	Description
allow_sound_alerts	true	Allow PopUp Alerts? (Enable/Disable PopUp Alerts Feature)
allow_push_alerts	false	Allow Push Notifications? (Yes/No Toggle)
allow_email_alerts	false	Allow Email Alerts? (Enable/Disable Email Alerts Feature)

Tester

Parameter	Default	Description
_drawdown_type	enum_nq_final _boss	Optimization Metric (NQ Modes Recommended)
_nq_risk_pct_per_trade	0.33	Risk % Per Trade (Used by NQ Depth For Expectancy Calculation)
_nq_min_trades	30	Min Trades For Custom Score (Reject Low-Sample Optimization)
_show_indicators	false	Show Indicators On Testing? (Yes/No Toggle)
_nika_name	"Universal Nika Trading"	Nika Trading Indicator Name (User-Configurable Setting)
_ma_name	"All_MA"	Moving Averages Indicator Name (User-Configurable Setting)

Dashboard

Parameter	Default	Description
_show_dashboard	true	Display Dashboard? (Yes/No Toggle)
_max_dashboard_actions	10	Max Dashboard Actions (Maximum Allowed Dashboard Actions)
_dashboard_font	"Segoe UI Semibold"	Dashboard Font (Text Font for Display)
_dashboard_font_size	9	Dashboard Font Size
_dashboard_text_color	clrLightGray	Dashboard Text Color (Display Color for Dashboard Text)
_dashboard_background_color	C'34,40,51'	Dashboard Background Color (User-Configurable Setting)
_dashboard_enabled_color	clrGreen	Dashboard Enabled Color (Display Color for Dashboard Enabled)
_dashboard_disabled_color	clrOrangeRed	Dashboard Disabled Color (Display Color for Dashboard Disabled)
_dashboard_profit_color	clrLime	Dashboard Profit Color (Display Color for Dashboard Profit)
_dashboard_loss_color	clrCrimson	Dashboard Loss Color (Display Color for Dashboard Loss)

Statistics Panel Settings

Parameter	Default	Description
_stats_panel_enable	false	Enable On-Chart Statistics Panel? (Yes/No Toggle)
_stats_panel_x	15	Statistics Panel X Position (Offset in Pixels)
_stats_panel_y	400	Statistics Panel Y Position (Offset in Pixels)

CHAPTER 10

Optimization Guide

Optimization is the process of finding the best parameter combinations for your trading strategy. MT5's Strategy Tester is a powerful tool for this, but it must be used carefully to avoid the trap of overfitting — creating a strategy that looks perfect on historical data but fails in live trading.

Strategy Tester Setup

- 1. Select the EA** — In Strategy Tester, choose Nika EA V2.91 from the Expert dropdown.
- 2. Choose the symbol and timeframe** — Match your intended trading instrument and timeframe.
- 3. Set the modeling mode** — Use **"Every tick based on real ticks"** for the most accurate results. "Every tick" is acceptable if real tick data is unavailable.
- 4. Set the date range** — Use at least **3-5 years** of data. More data = more robust results, but also longer optimization time.
- 5. Enable variable spread** — Uncheck "Use fixed spread" to test with realistic spread conditions.
- 6. Set the optimization criterion** — Choose "Custom max" to use Nika EA's NQ Mode fitness functions.
- 7. Configure the NQ Mode** — In the EA inputs, set the desired NQ Mode (1-5) under Tester settings.

Walk-Forward Methodology

Walk-forward analysis is the gold standard for validating optimization results. The process:

- 1. Split your data** — Divide your historical data into an in-sample (IS) period (e.g., 70%) and an out-of-sample (OOS) period (e.g., 30%).
- 2. Optimize on IS data** — Run the optimizer on the in-sample period only.
- 3. Test on OOS data** — Take the top parameter sets and run them (without optimization) on the out-of-sample data.
- 4. Evaluate OOS performance** — If the strategy performs well on OOS data, the parameters are likely robust.
- 5. Repeat with rolling windows** — Slide the IS/OOS window forward and repeat. Consistent OOS performance across multiple windows = strong validation.

Avoiding Overfitting

Signs that your optimization is overfit:

- **Perfect equity curve** — Real markets produce drawdowns. If your backtest has none, it's fit to noise.

- **Narrow parameter islands** — If changing a parameter by 1-2 units destroys performance, the result is fragile.
- **Few trades** — Less than 100 trades is insufficient for statistical significance.
- **OOS degradation** — If out-of-sample performance is much worse than in-sample, the parameters are overfit.

Best practices to avoid overfitting:

- Optimize as few parameters as possible at once (5-10, not 50).
- Use at least 3 years of data with 200+ trades.
- Look for parameter plateaus, not peaks — robust parameters work across a range of values.
- Always validate with walk-forward or out-of-sample testing.
- Use Nika EA's NQ Modes which include drawdown and consistency penalties in the fitness function.

Recommended Optimization Workflow

1. **Start with signals:** Optimize signal method selection and weights first.
2. **Then SL/TP:** With signals locked, optimize stop loss and take profit levels.
3. **Then trailing:** Optimize the trailing mode and its parameters.
4. **Then risk:** Fine-tune position sizing, scale-in levels, and risk limits.
5. **Validate:** Run walk-forward analysis on the final parameter set.
6. **Demo test:** Run on demo for 2-4 weeks before going live.

CHAPTER 11**FAQ & Troubleshooting****Frequently Asked Questions****What instruments does Nika EA work on?**

Any instrument available on MetaTrader 5 — forex pairs, indices, commodities, cryptocurrencies, stocks. The EA is instrument-agnostic; performance depends on your signal configuration and optimization.

What timeframe should I use?

Any timeframe works, but H1 and H4 are recommended for most strategies. Lower timeframes (M5, M15) are viable but require tighter spread filters and faster execution. Higher timeframes (D1) work well with wider stops and longer holding periods.

Does Nika EA use martingale or grid?

No. Nika EA does not use martingale, grid, or any progressive lot-sizing strategy. Position sizing is fixed-risk based. Scale-in entries add to winning positions only, with controlled lot sizes and shared stop losses.

How do I set up for a prop firm challenge?

Enable the Max Drawdown Kill Switch (set below the firm's limit), Daily Loss Limit (set below the firm's daily limit), and Risk Budget. Disable scale-in if the firm restricts it. Use Initial Balance as the compounding mode so sizing doesn't change during the challenge. Test thoroughly on demo first.

Can I run multiple instances on different charts?

Yes. Use different magic numbers for each instance. Enable Multi-Instance Portfolio Coordination to share risk data between instances. Each instance can have completely different settings.

How many signals should I use?

Start with 2-3 signals. A common setup: one trend signal as VETO (e.g., MA Crossover or Price Close vs MA), one momentum signal for scoring (e.g., Nika Signal Crosses Average), and one confirmation signal (e.g., Signal Direction). Add more only if backtesting shows improvement.

Can I use preset files (.set)?

Yes. Save your configuration as a .set file via the EA inputs dialog (Save button). Load presets the same way. This makes it easy to switch between configurations or share settings.

Does the EA work on Mac or Linux?

MetaTrader 5 is Windows-native. On macOS, you can use CrossOver, Wine, or a Windows VM. On Linux, use Wine or a Windows VPS. A VPS is the recommended approach for non-Windows systems.

Common Issues & Solutions

EA is not taking any trades

- Verify Algo Trading is enabled (green icon in toolbar and in EA properties).
- Check the Experts tab for error messages.
- Ensure at least one signal method is enabled with a weight greater than 0.
- Verify the minimum entry score is achievable with your active signals and weights.
- Check if the hours filter or session profiles are blocking trading at the current time.
- Check if the spread filter is blocking due to wide spreads.
- Check daily/weekly loss limits — they may already be hit.
- Enable the dashboard to see real-time filter and signal states.

"Invalid stops" or "Invalid SL/TP" errors

- The SL or TP distance is below the broker's minimum stop level.
- Check your instrument's stop level: right-click the symbol → Specification.
- Increase your SL/TP values to exceed the minimum stop level.
- This is common on indices and cryptos where minimum stop levels are larger.

Dashboard not displaying

- Ensure the Dashboard section is enabled in EA inputs.
- Check that the chart window is large enough to render the dashboard.
- Try resizing the chart or moving to a different timeframe and back.
- Some VPS environments with minimal graphics may need specific display settings.

EA stopped trading mid-day

- Check if the daily loss or profit limit was reached.
- Check if the max drawdown kill switch was triggered.
- Check the Experts tab for any error messages.
- If using session profiles, the current time may be outside all defined sessions.
- The spread may have widened beyond the filter threshold.

Different results in backtest vs live

- Use 'Every tick based on real ticks' modeling for accurate backtests.
- Enable variable spread in Strategy Tester.

- Live trading includes slippage, requotes, and real spread fluctuations.
- Ensure your backtest period includes various market conditions.
- Small differences are normal; large discrepancies suggest modeling issues.

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Nika EA V2.91 — Built for serious traders