ECFX XAU DUAL CROWN

COMPLETE USER MANUAL

Twin-engine XAU execution for MetaTrader 5

Manual version 1.15 | EA reference version 1.15 | Updated 18 August 2026

https://expertcodefx.com

Read this first

This manual explains the stock Dual Crown profile, installation, engine behavior, position sizing, portfolio safeguards, backtesting, optimization and the full input structure. Read the protection and shared-account sections before attaching the EA to any account that contains manual trades or another Expert Advisor.

ITEM	STOCK REQUIREMENT
Platform	MetaTrader 5
Instrument	XAUUSD / broker Gold equivalent
Chart	M5
Account mode	Hedging
Stock direction	Sell enabled; Buy disabled
Initial workflow	Real-tick backtest, then demo
External access	No DLL, no WebRequest, no external indicators

STOCK REQUIREMENT

ECFX XAU Dual Crown is designed for a Hedging account. The stock profile uses independently owned engine positions and should be tested on XAUUSD M5 before any live consideration.

What changed in v1.15

- Live tick-health monitoring now follows genuine tick arrivals using a monotonic terminal clock, with an initialization grace period before the first live tick.
- Internal EMA and ATR calculation indicators, platform trade levels and trade-history overlays are suppressed in visual tests where MT5 supports it.
- The wider, fully opaque red-and-silver dashboard now includes an aligned Total Profit row with professional currency formatting.
- Trade placement and profitable-close notices pulse silver; losing-close notices pulse red. Amber remains reserved for warnings and safety states.
- Trading strategy behavior, entries, exits, sessions, sizing, drawdown brakes, recovery mode and daily protection are unchanged from v1.11.

Official website and support

Product information, setup resources and official marketplace paths are available at https://expertcodefx.com. For MQL5 purchases, licensing and updates, use the official MQL5 Market product page associated with the buyer's account.

The website does not replace independent testing. Broker specifications, real-tick history, spread, leverage, commission, swap, market hours and execution can materially change results.

Contents

ECFX XAU Dual Crown is a multi-engine Expert Advisor developed for XAUUSD on the M5 chart. It combines the Lock30x pending-order framework with the Aurum Velocity market-execution framework inside one independently managed portfolio.

The two crowns do not simply duplicate the same signal. Lock30x focuses on completed-candle range levels, timed pending entries, a conditional profit-boost lane and an H1 expansion lane. Aurum evaluates short-term velocity, channel breaks and an optional EMA pullback model. Each component uses its own magic-number ownership, while shared portfolio controls can coordinate daily-loss protection and high-water equity protection across the complete system.

The stock profile is sell-focused. It does not use martingale lot multiplication, a conventional grid, latency arbitrage, news-event scraping or an external neural-network service. All required trading logic is contained in the Expert Advisor; no DLL, WebRequest permission or separate custom indicator is required.

Intended setup

- Platform: MetaTrader 5.
- Instrument: XAUUSD or the broker's equivalent Gold symbol.
- Chart timeframe: M5.
- Account position mode: Hedging.
- Recommended first use: Strategy Tester and demo account.
- Algorithmic trading: enabled in MetaTrader 5 and in the EA properties.
- DLL imports: not required.
- External indicators: not required.
- Default direction: sell setups enabled, buy setups disabled.
- Default engine profile: Lock30x and Aurum both enabled.

Broker symbols can differ in digits, tick size, stop distance, contract size, commission, swap, leverage and trading sessions. For that reason, results can differ between brokers even when the same inputs and dates are used.

How Dual Crown trades

CROWN I	SHARED SHIELD	CROWN II
LOCK30X M5 Core Profit Boost H1 Expansion	Hedging ownership Daily guard coordination High-water portfolio lock Unified dashboard	AURUM VELOCITY Velocity Channel Optional Pullback

TWIN-ENGINE OWNERSHIP

Crown I and Crown II keep independent trade ownership while the shared shield coordinates account-level safeguards and the unified dashboard.

Crown I: Lock30x

The Lock30x crown reads completed M5 candles and measures their range. When a completed candle meets the configured range threshold, the EA calculates a pending-entry level from the candle low and the configured offset.

In the stock sell profile, a qualifying bearish candle can create a Sell Stop below the completed candle. The order receives a protective stop loss and an expiry time. The engine limits how frequently it can make a new decision and prevents duplicate managed exposure on the same side.

When an open Lock30x trade progresses far enough, the trailing engine can move the protective stop behind the current market. The stock profile does not depend on a fixed take-profit target; exits are controlled through the stop, trailing logic, optional time exits, daily protection and shared portfolio protection.

Lock30x also contains two additional lanes

1. Portfolio Profit Boost

The Boost lane remains inactive until the account reaches the configured daily-profit threshold. Once unlocked, it looks for a stronger candle during its own trading window. Its momentum checks measure candle range relative to recent average range, body quality and where the candle closes within its range. A local rules-based regime score can further reduce low-quality entries by penalising spread, drawdown and recent loss streaks.

The Boost lane can risk only a configured portion of the current day's profit, subject to a maximum percentage of account equity, maximum lot size and a separate margin cap. It is not a martingale function.

2. H1 Expansion

The H1 lane reads completed H1 candles while the EA remains attached to the XAUUSD M5 chart. It combines candle expansion, ATR, EMA trend alignment, body quality, session windows and weekday controls. In the stock profile it trades sell expansions, uses its own stop, lot cap, pending-order expiry and margin cap, and can close positions after its separate maximum-hold time.

Crown II: Aurum Velocity

The Aurum crown evaluates completed M5 candles inside its configured broker-time session. It contains three independently owned signal engines:

1. Velocity

Velocity looks for a directional candle whose price range and real body exceed the configured thresholds. In the stock profile, a sufficiently strong bearish candle can open a market sell.

2. Channel

Channel compares the completed candle with the high and low of the configured number of prior candles. In the stock profile, a bearish close below the prior channel low can open a market sell.

3. Pullback

Pullback is included but disabled in the stock profile. When enabled, it uses ATR and the fast EMA to identify a wick into the moving-average area followed by a directional close. It can be combined with the optional fast/slow EMA trend requirement.

Each Aurum engine uses a different magic number. The stock profile permits a maximum of two simultaneous Aurum positions and prevents the same Aurum engine from opening a second position while it already owns one.

Aurum positions receive a protective stop loss when opened. They can then be managed by an optional break-even rule, a trailing stop and a maximum-hold exit. Aurum also has its own spread filter, broker-day entry limit, daily equity-loss limit, drawdown-based volume brakes and persistent high-water protection state.

Strategy points and Gold pricing

The principal distance settings use the EA's Gold strategy-point convention. On common two- and three-decimal XAUUSD symbols, one strategy point is intended to represent 0.01 in price. For example, 600 strategy points represents approximately 6.00 in XAUUSD price distance before the EA applies the broker's minimum stop and tick-size requirements.

Always check the calculated order distances in your broker's Strategy Tester before using changed distance settings on a demo or live account.

Volume and account growth

The two crowns have separate volume models.

Lock30x volume model

With automatic scaling enabled, Lock30x first calculates a detected base lot from:

Lot Size x Reference Equity / Capital Reference Balance

The stock reference is 3.00 lots per 200,000 account-currency units. On an account beginning at 50,000, the detected Lock30x base is therefore approximately 0.75 lots before broker normalization, drawdown protection and margin limits.

Lock30x can then add or remove the configured lot increment for each completed balance or equity step away from the starting anchor. With the stock values, the step interval is 250 and the increment is 0.01 lots. If account equity increases by one complete 250-unit interval, the raw reference volume rises by 0.01. If it falls by one complete interval, the raw volume falls by 0.01.

The final requested volume can still be reduced by

- the Level 1 or Level 2 drawdown brake;
- recovery mode;
- the safe maximum-lot cap;
- the broker's minimum, maximum or step volume;
- available margin and the configured margin-usage cap.

Aurum volume model

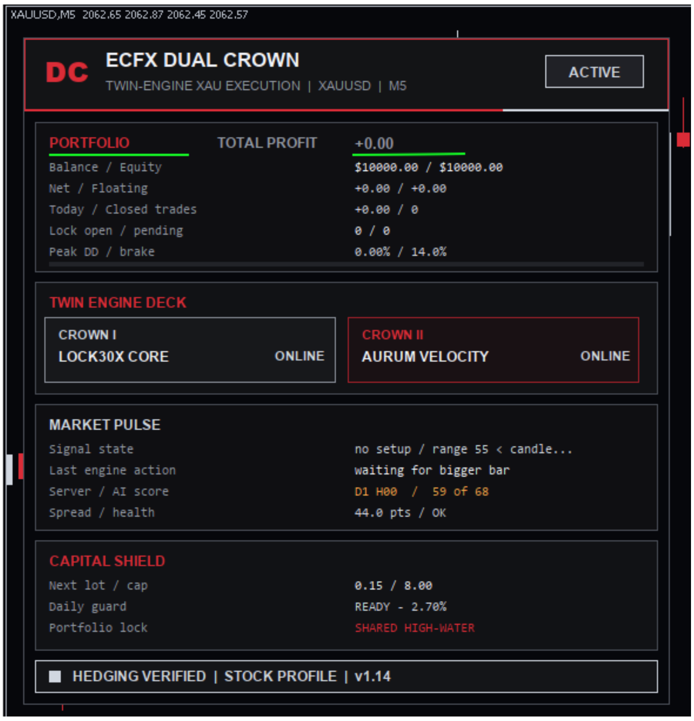
The stock Aurum mode scales proportionally with current equity

Reference Lots x Current Equity / Reference Equity

The stock reference is also 3.00 lots per 200,000 account-currency units, capped at 8.00 lots. At 50,000 equity, its raw reference is approximately 0.75 lots. Aurum then applies its own drawdown brakes, volume normalization and margin cap.

Changing a reference balance, step interval, lot increment, brake multiplier, margin cap or maximum lot can materially change both return and drawdown. Test volume changes on a demo account and in out-of-sample data before considering live use.

Daily-loss protection



SHARED-ACCOUNT WARNING

The stock account-wide daily close can affect unrelated manual or EA positions. Review that switch before running Dual Crown on a shared trading account.

Dual Crown contains two daily protection layers.

Lock30x Sydney-day guard

The stock Lock30x guard resets at 08:00 Sydney time and can adjust automatically for Sydney daylight saving. It can use equity or balance for the cutoff calculation. When the daily limit is reached, the guard can close positions, delete pending orders and prevent new entries until the next reset.

Daily Guard Account Wide Close is enabled in the stock profile. When this input is true, the cutoff can close positions belonging to other EAs or manual trading on the account. If the account is shared with unrelated strategies, review this input before operation. Disabling account-wide close confines the action to the EA's managed exposure, but it changes the stock protection behaviour.

Aurum broker-day guard

Aurum separately records broker-day starting equity and prevents new Aurum entries when its own daily equity-loss percentage is reached. This protects the Aurum crown even when it is tested or operated independently.

Drawdown brakes and recovery mode

Lock30x tracks peak equity and can reduce the next requested volume at two drawdown levels. The stock values are:

- Level 1: 8 percent drawdown, 0.50 volume multiplier.
- Level 2: 14 percent drawdown, 0.25 volume multiplier.

Recovery mode enters at 6 percent drawdown and leaves after drawdown recovers to 2.5 percent or less. Its stock multiplier is 0.40. When more than one reduction is active, the engine uses the smaller single multiplier rather than multiplying all reductions together.

Aurum has its own brakes

- Level 1: 6 percent drawdown, 0.40 volume multiplier.
- Level 2: 10 percent drawdown, 0.15 volume multiplier.

Lower brake thresholds or smaller multipliers reduce exposure earlier. Higher thresholds or larger multipliers retain more exposure during drawdown and can increase risk.

High-water profit protection

Aurum maintains initial equity, peak equity and a persistent lock state outside the Strategy Tester.

The protection does not arm immediately under the stock configuration. If InpProfitProtectionArmProfit is zero, the arm equity is calculated as:

Initial Equity x InpHardGuardActivationMultiple

The stock activation multiple is 20. For example, an account beginning at 50,000 would arm the high-water guard at 1,000,000 equity. After the guard is armed, a drawdown from the recorded peak equal to InpHardEquityGuardPct activates the lock. The stock drawdown threshold is 10 percent.

If a buyer prefers an exact account-currency profit before protection arms, set InpProfitProtectionArmProfit above zero. The arm level then becomes:

Initial Equity + InpProfitProtectionArmProfit

When Hybrid_Share_Aurum_Profit_Lock is enabled, an Aurum high-water lock closes positions and pending orders managed by both crowns and prevents further Dual Crown entries. The persistent state is designed to survive an EA or terminal restart. To intentionally clear that state, set InpResetStoredProtectionState to true for one initialization, confirm the reset message, and then return the input to false.

Do not reset a live protection state merely to resume trading after a genuine lock without first reviewing the account and the reason for the drawdown.

Default recent-regime controls

The stock profile contains explicit recent-regime controls beginning on 1 March 2026.

- Lock30x core: Monday remains available; Tuesday, Wednesday, Thursday and Friday are blocked after the configured start date.
- Boost: new Boost setups after hour 17 can be blocked in the recent regime.
- H1 Expansion: Monday, Wednesday and Friday are blocked after its configured recent-regime start; Tuesday and Thursday remain available.

These controls are editable research safeguards, not forecasts. Changing the start date or blocked weekdays can substantially alter trade count and historical performance. Any change should be evaluated with a separate in-sample period, out-of-sample period and fresh-account recent-period test.

Installation

1. Open MetaTrader 5 and sign in with the MQL5 account used for the purchase.
2. Open Navigator and locate the product under Expert Advisors and Market.
3. Download or install ECFX XAU Dual Crown from the Market section.
4. Open the broker's XAUUSD chart. If the broker uses a suffix, choose its equivalent Gold symbol.
5. Set the chart timeframe to M5.
6. Drag ECFX XAU Dual Crown onto the chart.
7. In the Common tab, allow algorithmic trading. DLL imports and WebRequest permissions are not required.
8. In the Inputs tab, keep the stock defaults for the first test.
9. Confirm that the trading account uses Hedging position mode.
10. Enable the main Algo Trading button in MetaTrader 5.
11. Check the Experts and Journal tabs for the initialization message and any broker, symbol, margin, market-hours or parameter warnings.

The recommended first run is in the Strategy Tester or on a demo account. Confirm order size, stop distance, spread, commissions, swap and session times before considering live operation.

One-instance and multi-strategy guidance

Use one Dual Crown instance per account and symbol unless every magic number is deliberately changed for the additional instance. Reusing the same magic numbers causes instances to manage the same positions.

If other EAs or manual trades share the account, review these settings carefully:

- Daily_Guard_Account_Wide_Close;
- Close_Positions_On_Daily_Cutoff;
- Delete_Pending_On_Daily_Cutoff;
- Hybrid_Share_Aurum_Profit_Lock.

The stock profile prioritises portfolio protection and may close broader account exposure when its configured guard activates.

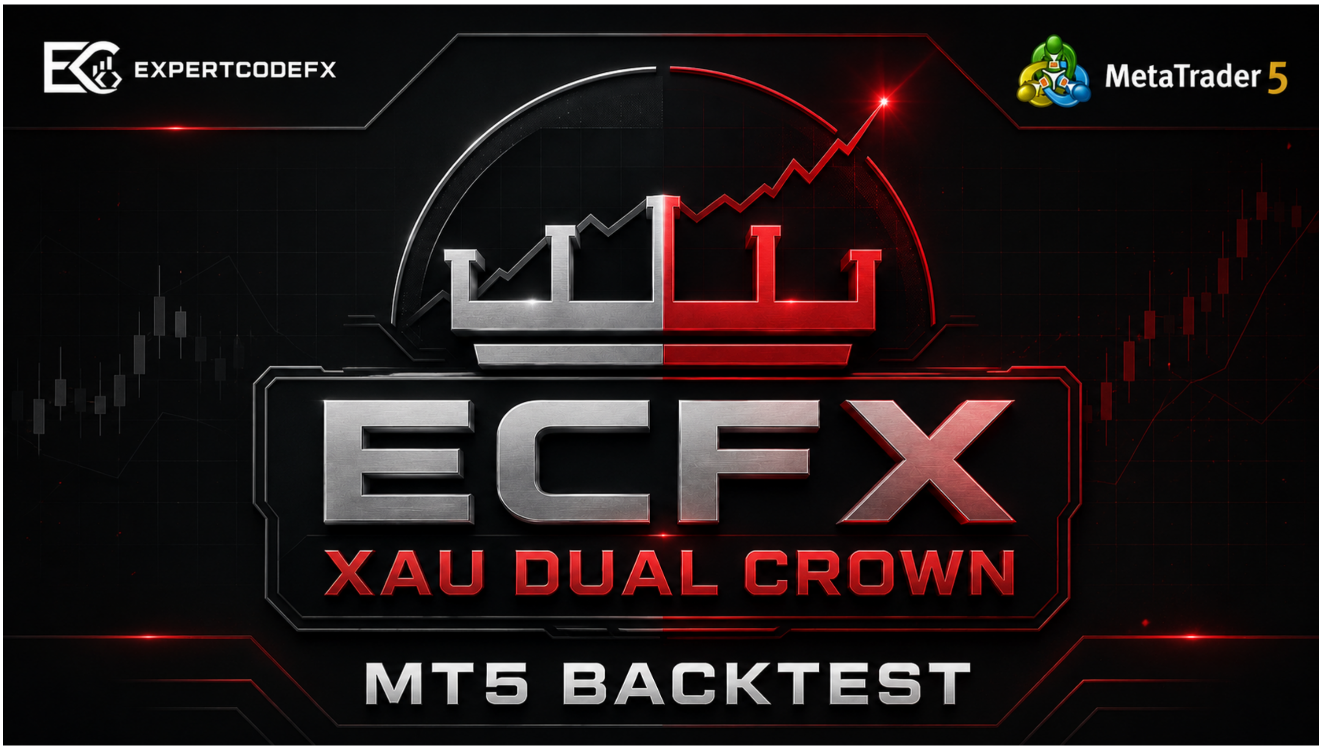
MetaQuotes VPS setup

After the EA has been configured and checked on the local terminal

1. Attach it to XAUUSD M5 with the intended inputs.
2. Confirm that AutoTrading is enabled and the EA has initialized correctly.
3. Right-click the trading account in Navigator and register or select the MetaQuotes VPS.
4. Migrate the Experts and chart environment.

5. Open the VPS Journal and confirm successful synchronization.
6. Do not run the same EA simultaneously on the local terminal and VPS unless only one terminal is permitted to trade.

How to backtest



Backtests are simulations. Use broker-specific data and evaluate drawdown, costs and recent-period behavior.

1. Open View, Strategy Tester, or press Ctrl+R.
2. Select ECFX XAU Dual Crown.
3. Select XAUUSD and M5.
4. Choose Every tick based on real ticks when the broker provides sufficient history.
5. Select a Hedging tester account mode.
6. Use the intended deposit currency, initial deposit and leverage.
7. Keep execution delay, spread and commission assumptions realistic for the broker being evaluated.
8. For the first run, use the stock defaults built into the EA.
9. Enable Visual Mode if you want to observe the Dual Crown dashboard, pending orders and trade events.
10. Run the test and save the full Strategy Tester report.

A useful controlled reference matrix is

- Symbol: XAUUSD.
- Timeframe: M5.
- Dates: 1 January 2020 through 9 August 2026.
- Initial deposit: 50,000 USD.
- Leverage: 1:30.
- Model: Every tick based on real ticks.

- Position mode: Hedging.

This matrix is provided to make comparisons repeatable. It is not a prediction of future performance, and a different broker feed can produce different trades and results.

Recommended validation sequence

Run more than one test before drawing a conclusion

1. Combined stock test

Keep both crowns enabled. This measures the complete portfolio.

2. Lock30x isolation

Set Hybrid_Enable_Lock30x_Engine to true and Hybrid_Enable_Aurum_Engine to false. This measures Crown I independently.

3. Aurum isolation

Set Hybrid_Enable_Lock30x_Engine to false and Hybrid_Enable_Aurum_Engine to true. This measures Crown II independently.

4. Fresh-account recent-period test

Start a new test with the original deposit at the beginning of the current or most recent market regime. Do not carry accumulated balance from the long historical run into this test.

5. Out-of-sample test

If inputs were optimized on one date range, lock those values and test them on a later range that was not used during optimization.

6. Forward demo observation

Confirm trade frequency, server-time windows, order rejection behaviour, volume, spread sensitivity and daily resets on the intended broker.

For every run, record net result, total trades, profit factor, maximum balance and equity drawdown, largest loss, consecutive losses, average holding time and the labels or magic numbers that generated the trades. A high return or win rate should not be considered in isolation from drawdown, data quality and recent-period behaviour.

Optimization guidance

Do not optimize every input simultaneously. That produces a very large search space and increases the risk of fitting historical noise.

A controlled sequence is

1. Keep volume and protection settings fixed.
2. Test one engine independently.

3. Optimize only a small related group, such as candle threshold and offset, or a session window.
4. Select a stable region rather than the single highest result.
5. Test the selected values on an unseen date range.
6. Restore both crowns and confirm that their interaction does not increase drawdown beyond the intended limit.
7. Repeat the test on a fresh deposit for the recent period.

Do not use maximum net profit as the only optimization criterion. Include drawdown, profit factor, trade count, stability across neighboring settings and recent-period performance.

Settings guide

00. ECFX Dual Crown stock profile

- Hybrid_Enable_Lock30x_Engine: enables or disables Crown I. Disable it only for an isolation test or a deliberately Aurum-only profile.
- Hybrid_Enable_Aurum_Engine: enables or disables Crown II. Disable it only for an isolation test or a deliberately Lock30x-only profile.
- Hybrid_Require_Hedging_Account: requires MT5 Hedging position mode. The stock value is true because each component needs independent position and magic-number ownership.
- Hybrid_Share_Aurum_Profit_Lock: applies the Aurum high-water lock to both crowns. Turning it off confines that lock to Aurum and changes portfolio protection.

01. Lock30x core engine

- Stoplose_trail: trailing distance after the trailing condition is active. A smaller value follows price more closely; a larger value allows more movement.
- Lot_Size: reference lot used by fixed sizing or the automatic base calculation. It is not always the final submitted lot.
- Candle: minimum completed-candle range in strategy points. Raising it reduces signals to larger candles; lowering it increases sensitivity and usually trade count.
- Offset: adjusts the pending entry relative to the completed candle's calculated level. Negative and positive values move the entry in opposite directions. Small changes can affect whether an order is valid or filled.
- Expire: pending-order lifetime in hours. A shorter lifetime removes unfilled setups sooner.
- stop_lose: initial stop distance in strategy points.
- stop_lose_trail_start: favorable movement required before Lock30x trailing begins.
- once_per_minutes: minimum decision spacing. Increasing it reduces repeated setup attempts.
- Magic_Number: ownership identifier for Lock30x positions and orders. Change it only when running a deliberately separate instance, and ensure it does not overlap another EA.

02. Auto lot and capital detection

- Enable_Auto_Lot_Scaling: uses detected base volume and account-growth steps. When false, Lot_Size becomes the fixed reference before caps and margin checks.
- Capital_Reference_Balance: capital level associated with Lot_Size in the base calculation. Increasing it reduces detected base lots for the same account size.
- Auto_Lot_Reference_Equity: optional fixed scaling reference. Zero captures the balance at initialization. A positive value overrides that automatic reference.

- Step_Lot_Profit_Interval: account-currency movement required for one volume step. A smaller interval changes volume more frequently.
- Step_Lot_Size_Increment: lots added or removed per completed step.
- Auto_Lot_Max_Lots: upper limit for the automatic Lock30x reference volume.
- Margin_Usage_Cap_Pct: maximum portion of free margin that the next Lock30x order may consume. A lower value can reduce or block volume sooner.
- Force_Requested_Lot_Without_Margin_Reduction: bypasses the EA's margin-based lot reduction. The stock value is false. Enabling it can cause broker rejection or excessive margin use and is not recommended without testing.

02B. Adaptive risk controls

- Enable_Equity_Based_Scaling: uses equity rather than balance as the step-scaling metric.
- Enable_Drawdown_Brake: permits the two peak-equity drawdown volume reductions.
- Drawdown_Brake_Level1_Pct: Level 1 drawdown trigger.
- Drawdown_Brake_Level1_Lot_Mult: volume multiplier at Level 1.
- Drawdown_Brake_Level2_Pct: deeper Level 2 trigger.
- Drawdown_Brake_Level2_Lot_Mult: volume multiplier at Level 2.
- Enable_Recovery_Mode: permits the recovery-state multiplier.
- Recovery_Mode_Enter_Drawdown_Pct: drawdown at which recovery mode begins.
- Recovery_Mode_Exit_Drawdown_Pct: drawdown below which recovery mode ends.
- Recovery_Mode_Lot_Mult: next-order volume multiplier during recovery.
- Enable_Safe_Lot_Cap: applies the separate safe maximum.
- Safe_Max_Lots: maximum lots allowed by the safe cap. The effective limit is the smaller applicable cap.

03. Runtime and diagnostics

- Enable_Trading: enables Lock30x order creation while still allowing the panel and management logic to run. It does not serve as the Aurum ownership switch; use the Hybrid inputs for that.
- Enable_GX_Panel: displays the main dashboard.
- Enable_Debug_Logs: adds detailed diagnostic messages. Use it when investigating behavior; extensive logs can make tester output larger.
- Enable_Trade_Event_Logs: records additional order and deal events.
- Enable_Health_Event_Logs: records market-feed and runtime health events.
- Panel_Refresh_Seconds: dashboard refresh interval.
- Heartbeat_Minutes: interval for periodic health messages.
- Tick_Stale_Threshold_Seconds: elapsed time without a fresh tick before the health monitor treats the feed as stale.

04. Broker protection

- Broker_Buffer_Points: extra distance added when respecting broker stop or freeze constraints.
- Entry_Buffer_Points: minimum safety distance between the current market and a new pending entry.

Larger buffers can reduce invalid-price and invalid-stop rejections but may move orders farther from the intended level.

05. Chart trade markup

- Enable_Chart_Trade_Markers: displays EA-created markers.
- Show_Closed_Trade_Text_Only: limits text display to closed trades when supported by the marker mode.
- Chart_Text_Offset_Points: distance between price and marker text.
- Enable_Chart_Marker_Stagger: separates labels that would otherwise overlap.
- Chart_Marker_Stack_Points: spacing used for staggered labels.
- Clear_Chart_Markers_On_Remove: deletes EA-created markers when the EA is removed.

These settings are visual only and do not change trading decisions.

06. Dual Crown visual experience

- Enable_GX_Chart_Theme: enables Dual Crown chart styling.
- Enable_GX_Object_Panel: uses the chart-object dashboard.
- Apply_Chart_Theme: applies the configured chart colours.
- Use_Premium_Chart_Theme: uses the full Dual Crown colour scheme.
- Show_Chart_Status_Badge: displays the compact status badge.
- Remove_Chart_Indicators: removes tester indicator subwindows used internally so the visual test remains clean. The aggressive cleanup is restricted to visual testing and does not remove a buyer's live-chart indicators.
- Hide_Platform_Trade_Levels: hides standard MT5 trade-level lines for a cleaner visual presentation.
- Panel_Corner: selects the chart corner used by the dashboard.
- Panel_X_Offset and Panel_Y_Offset: panel offset from the selected corner.
- Panel_X and Panel_Y: internal panel placement values.
- Panel_Width and Panel_Height: panel dimensions.
- Show_Background_Logo: displays the chart watermark.
- Background_Logo_Text and Background_Logo_Sub_Text: watermark wording.
- Background_Logo_Size: watermark font size.
- Background_Logo_Color: watermark colour.

These inputs are visual only.

06B. Trade flash alerts

- Show_Trade_Flash_Alerts: shows temporary entry and exit notices on the chart.
- Flash_Display_Seconds: duration of each notice.
- Flash_Font_Size: alert font size.
- Flash_Y_From_Bottom: vertical placement.
- Flash_Line_Gap: line spacing.

These inputs are visual only.

07. MQL5 Market validation compatibility

- Enable_Market_Validator_Safe_Mode: retains lightweight behavior needed for formal Market validation environments.
- Enable_Market_Validator_Fallback_Trade: allows the formal validator to exercise trade operations when its limited test history does not produce a normal setup.

Keep both settings at their stock values. They are compatibility controls and are not intended as strategy optimization inputs.

08. General trading guardrails

- Enable_No_Hedge_Mode: prevents a new side from being armed while managed exposure already exists. It can reduce simultaneous exposure, but it changes the Dual Crown stock behavior.

08B. Daily loss protection

- Enable_Daily_Loss_Guard: enables the Lock30x Sydney-day cutoff.
- Daily_Loss_Cutoff_Pct: permitted daily loss percentage before locking.
- Daily_Reset_Hour_Sydney: Sydney hour at which the trading day resets.
- Sydney_UTC_Offset_Hours: standard Sydney UTC offset used when automatic DST is disabled or unavailable.
- Auto_Sydney_DST: automatically adjusts the Sydney offset for daylight saving.
- Use_Equity_For_Daily_Cutoff: includes floating profit and loss when true; balance-only mode reacts only to closed results.
- Close_Positions_On_Daily_Cutoff: closes positions when the cutoff activates.
- Delete_Pending_On_Daily_Cutoff: deletes pending orders when the cutoff activates.
- Daily_Guard_Reference_Balance: optional fixed account-currency base for the percentage calculation. Zero uses the runtime day reference.
- Daily_Guard_Account_Wide_Close: when true, the cutoff can close unrelated account exposure. Review this carefully on shared accounts.

08C. Portfolio Profit Boost

- Enable_Hybrid_Profit_Boost: enables the conditional Boost lane.
- Boost_Unlock_Daily_Profit_Pct: daily profit percentage required to unlock Boost entries.
- Boost_Stop_Daily_Profit_Pct: if daily profit falls to this level, Boost entries stop again.
- Boost_Risk_Todays_Profit_Pct: maximum portion of the day's available profit used in Boost risk sizing.
- Boost_Max_Risk_Account_Pct: absolute account-equity risk ceiling for a Boost setup.
- Boost_Lot_Size: requested Boost volume before risk, cap and margin reductions.
- Boost_Max_Lots: Boost lot ceiling.
- Boost_Margin_Usage_Cap_Pct: separate Boost margin cap.
- Boost_Candle: minimum Boost candle range.
- Boost_Offset: Boost pending-entry offset.
- Boost_Expire: Boost pending-order lifetime in hours.
- Boost_Stop_Loss: Boost stop distance.
- Boost_Once_Per_Minutes: minimum spacing between Boost decisions.
- Boost_Enable_Buy and Boost_Enable_Sell: allowed Boost directions.
- Boost_Buy_Hour_Start and Boost_Buy_Hour_End: first Boost buy session.
- Boost_Sell_Hour_Start and Boost_Sell_Hour_End: Boost sell session.
- Boost_Only_When_Flat: requires no managed exposure before a Boost order is created.
- Boost_Use_Momentum_Filter: requires the candle-quality checks.
- Boost_Avg_Range_Bars: number of candles used for average range.
- Boost_Min_Range_vs_Avg: minimum current-range multiple relative to that average.

- Boost_Min_Body_Pct: minimum real-body percentage.
- Boost_Min_Close_Extreme_Pct: minimum close location toward the directional edge of the candle.

08C2. Regime quality filter

The local regime filter is a deterministic weighted score. It is not a remotely trained neural network and does not send market or account information to an external service.

- Enable_Local_AI_Regime_Filter: enables the score requirement.
- AI_Min_Boost_Score: minimum score needed for a Boost entry.
- AI_Range_Weight: contribution from candle range quality.
- AI_Body_Weight: contribution from body quality.
- AI_Close_Weight: contribution from directional close location.
- AI_Profit_Cushion_Weight: contribution from available daily profit cushion.
- AI_Spread_Penalty_Weight: deduction for spread.
- AI_Drawdown_Penalty_Weight: deduction for current drawdown.
- AI_Loss_Streak_Penalty: deduction for consecutive losing trades.
- AI_Max_Allowed_Spread_Points: spread scale used by the score and its high-spread assessment.

Raising the minimum score or penalties usually reduces Boost activity. Lowering them allows more marginal regimes.

08D. Recent market regime guard

- Enable_Recent_Regime_Guard: enables date-sensitive core and Boost restrictions.
- Recent_Guard_Start_Date: date from which those restrictions apply, formatted as YYYY.MM.DD.
- Recent_Guard_Core_Block_Monday through Recent_Guard_Core_Block_Friday: weekday-specific core blocks after the start date.
- Recent_Guard_Boost_Block_After_17: blocks later Boost setups in the recent regime.

These settings can materially change recent-period behavior and should not be optimized using only the same period on which they are judged.

08E. H1 Expansion engine

- Enable_H1_Expansion_Engine: enables the independent H1 lane.
- H1_Expansion_Timeframe: source timeframe; H1 is the stock value.
- H1_Expansion_Candle: minimum H1 candle range.
- H1_Expansion_Offset: pending-entry offset from the H1 candle level.
- H1_Expansion_Stop_Loss: H1 stop distance.
- H1_Expansion_Expire: H1 pending-order lifetime in hours.
- H1_Expansion_Once_Per_Minutes: minimum H1 decision spacing.
- H1_Expansion_Enable_Buy and H1_Expansion_Enable_Sell: H1 direction switches.
- H1_Expansion_Only_When_Flat: requires no managed exposure before an H1 setup.
- H1_Expansion_Lot_Size: requested H1 lot size.
- H1_Expansion_Max_Lots: H1 volume ceiling.

- H1_Expansion_Margin_Usage_Cap_Pct: H1 margin cap.
- H1_Expansion_EMA_Fast and H1_Expansion_EMA_Slow: trend filters.
- H1_Expansion_ATR_Period: ATR calculation period.
- H1_Expansion_Min_ATR_Points: minimum ATR environment.
- H1_Expansion_Min_Range_ATR: minimum candle range relative to ATR.
- H1_Expansion_Min_Body_Pct: minimum body quality.
- H1_Expansion_Buy_Hour_Start/End, Buy_Hour_2_Start/End and Buy_Hour_3_Start/End: up to three H1 buy windows.
- H1_Expansion_Sell_Hour_Start/End, Sell_Hour_2_Start/End and Sell_Hour_3_Start/End: up to three H1 sell windows.
- H1_Expansion_Use_Recent_Guard: enables the H1 date-sensitive weekday guard.
- H1_Expansion_Recent_Guard_Start_Date: H1 guard start date.
- H1_Expansion_Block_Monday through H1_Expansion_Block_Friday: weekday blocks after the H1 guard date.
- H1_Expansion_Use_Separate_Max_Hold: uses an H1-specific time exit.
- H1_Expansion_Max_Hold_Minutes: maximum H1 position duration.
- H1_Expansion_Max_Hold_Buy and H1_Expansion_Max_Hold_Sell: sides to which the H1 time exit applies.

09. Direction controls

- Enable_Buy_Setups: enables Lock30x core buy setups.
- Enable_Sell_Setups: enables Lock30x core sell setups.

The stock profile is sell-only. Enabling buys changes the tested strategy and requires separate validation.

10. Setup hours

- Enable_Buy_Hour_Filter and Enable_Sell_Hour_Filter: enable the broker-time session filters.
- Buy_Hour_1_Start/End, Buy_Hour_2_Start/End and Buy_Hour_3_Start/End: up to three Lock30x core buy windows.
- Sell_Hour_1_Start/End, Sell_Hour_2_Start/End and Sell_Hour_3_Start/End: up to three Lock30x core sell windows.

Hours use broker server time. A window beginning at 15 and ending at 16 includes times from 15:00 up to, but not including, 16:00. Values of -1 disable an unused window. Confirm the broker's server time and daylight changes before altering sessions.

11. Time-based exit safety

- Enable_Max_Hold_Exit: enables the general Lock30x maximum-hold exit.
- Max_Hold_Minutes: maximum duration when that exit is enabled.
- Apply_Max_Hold_To_Buy and Apply_Max_Hold_To_Sell: sides affected.
- Enable_Force_Close_Hour_Exit: enables a broker-hour exit.
- Force_Close_Buy_Positions and Force_Close_Sell_Positions: sides affected.
- Force_Close_Buy_Hour and Force_Close_Sell_Hour: broker hours at which the selected side is closed.

The stock general maximum-hold and force-close switches are disabled. The H1 lane still has its own enabled maximum-hold protection.

Aurum engine ownership

- InpMagicVelocity, InpMagicChannel and InpMagicPullback: independent position identifiers. They must remain unique and must not overlap another EA.

- InpComment: order comment prefix used for Aurum entries.

Aurum concurrent signal engines

- InpSignalTF: Aurum signal timeframe; M5 is the stock value.
- InpEnableVelocity, InpEnableChannel and InpEnablePullback: individual Aurum engine switches.
- InpAllowBuy and InpAllowSell: Aurum direction switches.
- InpATRPeriod: ATR period used by Pullback.
- InpFastEMAPeriod and InpSlowEMAPeriod: moving-average periods for optional trend confirmation and Pullback logic.
- InpVelocityMinPoints: minimum Velocity candle range.
- InpVelocityBodyPct: minimum Velocity real-body percentage.
- InpChannelBars: number of prior candles forming the Channel boundary.
- InpChannelBufferPoints: additional distance beyond the prior high or low required for a Channel break.
- InpPullbackWickATR: required pullback wick distance expressed as a fraction of ATR.
- InpRequireTrend: requires EMA trend agreement for Velocity and Channel entries when true.
- InpMaxOpenPositions: maximum simultaneous Aurum positions.
- InpEngineCooldownBars: minimum bars between entries by the same Aurum engine. Zero disables the cooldown.

Aurum broker-time activity window

- InpSessionStartHour and InpSessionEndHour: Aurum broker-time session. The stock window is 15:00 to 18:00.
- InpTradeMonday through InpTradeFriday: permitted Aurum weekdays.
- InpMaxEntriesPerDay: maximum Aurum entries during one broker day.
- InpTradingStartDate: earliest date on which Aurum can trade, formatted as YYYY.MM.DD. Blank disables the date filter.

Aurum volume and scaling

- InpVolumeMode: chooses fixed lots or equity-reference scaling.
- InpFixedLots: volume when fixed mode is selected.
- InpReferenceLots: lots associated with the reference equity.
- InpReferenceEquity: equity associated with the reference lots.
- InpMaximumLots: Aurum volume ceiling.
- InpMarginUsageCapPct: maximum percentage of equity allocated to the estimated margin of a new Aurum order.

Aurum exit engine

- InpStopPoints: initial protective stop distance.
- InpTrailStartPoints: favorable movement required before trailing.
- InpTrailDistancePoints: distance maintained by the trailing stop.
- InpUseBreakEven: enables break-even adjustment.
- InpBreakEvenAtPoints: favorable movement required before break-even.
- InpBreakEvenLockPoints: amount locked beyond the entry price.
- InpMaxHoldMinutes: maximum Aurum position duration. Zero disables the time exit.
- InpCloseAtSessionEnd: closes Aurum positions after the session end when true.

Aurum portfolio protection

- InpMaxSpreadPoints: blocks new Aurum entries above this spread. Zero disables the filter.
- InpSlippagePoints: maximum intended execution deviation in strategy points.
- InpDailyLossLimitPct: Aurum broker-day equity-loss limit.
- InpBrakeLevel1Pct and InpBrakeMultiplier1: first Aurum drawdown brake.
- InpBrakeLevel2Pct and InpBrakeMultiplier2: second Aurum drawdown brake.
- InpHardEquityGuardPct: drawdown from peak that locks Aurum after the arm level is reached.
- InpProfitProtectionArmProfit: exact account-currency profit required to arm protection. Zero selects automatic multiple-based arming.
- InpHardGuardActivationMultiple: automatic arm-equity multiple when the fixed arm profit is zero.
- InpPersistSafetyState: preserves initial equity, peak equity and lock state between live terminal sessions.
- InpResetStoredProtectionState: one-time reset switch. Return it to false after use.
- InpDiagnosticLogging: enables detailed Aurum messages.

Aurum panel

- InpEnablePanel: displays the separate Aurum panel. It is disabled in the stock Dual Crown profile because the main Dual Crown panel is already active.
- InpApplyChartTheme: applies the Aurum-only theme when its separate panel is used.
- InpRemoveChartIndicators: keeps internal indicator handles from creating visual-tester subwindows.
- InpHidePlatformTradeLevels: hides standard MT5 trade-level lines.
- InpPanelX, InpPanelY and InpPanelWidth: separate Aurum panel placement and width.
- InpShowCenterBrand: displays the Aurum center branding.

These settings do not alter Aurum trading decisions.

Troubleshooting

The EA does not initialize

- Confirm that the account uses Hedging position mode.
- Confirm that at least one crown is enabled.
- Check that all magic numbers are unique.
- Review the Experts and Journal tabs for an invalid parameter message.

No trades appear

- Confirm XAUUSD M5 and sufficient M5/H1 history.
- Check that the tested date is not earlier than the Aurum trading start date.
- Check broker server time against the configured setup windows.
- Check recent-regime weekday blocks.
- Check direction switches, spread filters, daily locks, decision cooldowns and maximum-exposure limits.
- Remember that the Boost lane remains locked until the daily-profit condition is reached.

Requested volume is smaller than expected

- Check current equity and the scaling reference.
- Check the completed step count.
- Check drawdown brake and recovery mode.
- Check safe and automatic lot caps.
- Check available margin, leverage and the relevant margin-usage cap.
- Check the broker's volume minimum, maximum and step.

Orders are rejected

- Check whether the Gold market is open.
- Check spread and available margin.
- Check the broker's minimum stop and freeze distances.
- Check symbol digits and tick size.
- Increase broker or entry buffers only after confirming the rejection reason.

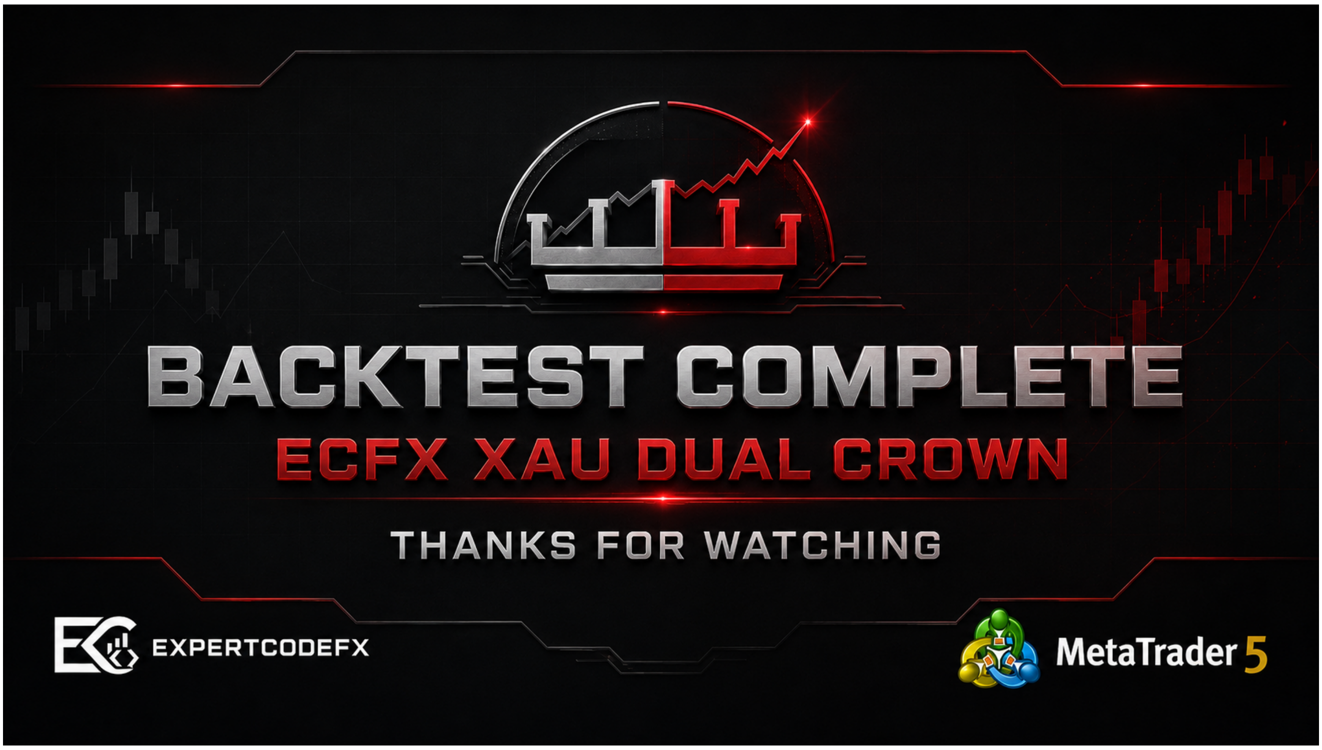
The EA stopped after a protection event

- Check the Dual Crown dashboard and Experts log for the Sydney daily guard, Aurum daily guard or high-water lock.
- A daily guard normally waits for its configured reset.
- A persistent high-water lock requires an intentional one-time reset only after the account and cause have been reviewed.

Risk notice

ECFX XAU Dual Crown is an automated trading tool, not a guarantee of profit. Gold can move quickly, gap, experience spread expansion and produce slippage. Historical and Strategy Tester results do not predict future results. Broker data, execution conditions, leverage, commission, swap and symbol specifications can materially change performance.

Use the Strategy Tester and a demo account before live operation. Select volume and protection settings appropriate to the account, broker and personal risk tolerance. Monitor the EA after broker, symbol, terminal or input changes. Trading leveraged products can result in loss of some or all deposited funds.



Final operating checklist

[ ] XAUUSD or the broker's equivalent Gold symbol is confirmed.

[ ] Chart timeframe is M5 and sufficient M5/H1 history is loaded.

[ ] Account position mode is Hedging.

[ ] Magic numbers do not overlap another running instance.

[ ] Starting lot, volume step and margin use were checked in the Strategy Tester.

[ ] Daily account-wide close behavior was reviewed for the complete account.

[ ] Broker-time sessions and recent-regime filters were checked.

[ ] A real-tick backtest and a fresh-account recent-period test were reviewed.

[ ] The EA was observed on demo before any live consideration.

[ ] Experts and Journal contain no unresolved order, data or protection errors.

ExpertCodeFX
https://expertcodefx.com
Independent Gold automation tools for MetaTrader 5 and cTrader.

RISK NOTICE

Automated trading does not remove risk. Historical simulations are not guarantees. Use only risk that is appropriate for the account and that can be lost without financial hardship.