AURUM GOLD MT5

Quantitative Adaptive Gold Architecture — Official User Manual

Version: 1.0.0 | **Asset Class:** Commodities / Precious Metals | **Target Symbol:** XAUUSD (Gold) | **Platform:** MetaTrader 5 (MT5)

> **EXECUTIVE NOTICE**
> This manual contains configuration standards, mathematical logic definitions, parameter references, and capital protection rules for **Aurum Gold MT5**. Read this manual before deploying on live capital.

Table of Contents

1. System Overview & Philosophy

2. System Requirements & Broker Specifications

3. Installation & Setup Guide

4. Core Algorithmic Architecture

5. Strategy Risk Presets (Low, Medium, High)

6. Complete Input Parameters Reference

7. On-Chart HUD & Interactive Controls

8. Drawdown & Capital Protection Rules

9. Best Practices, VPS & Troubleshooting (FAQ)

10. Legal & Risk Disclosure

1. System Overview & Philosophy

Aurum Gold MT5 is an institutional quantitative trading system engineered exclusively for **XAUUSD (Gold)**. Gold exhibits distinct structural behavior compared to conventional currency pairs, including aggressive momentum expansions, sudden liquidity pool sweeps, and deep macro trends driven by geopolitical and interest-rate shifts.

Conventional automated robots fail on Gold because they rely on static spacing and single-indicator triggers. In persistent trend runs, rigid systems open layers too close together, leading to margin calls. Aurum Gold addresses these conditions through three adaptive mechanisms:

- **Macro Trend Shield:** Filters trading direction against the higher-timeframe Exponential Moving Average (EMA). Longs are permitted only above the EMA; Shorts are permitted only below.
- **Adaptive Volatility Grid (ATR):** Replaces static point steps with live Average True Range calculations. When volatility surges, recovery distances widen; when markets consolidate, distances tighten.
- **Volume-Weighted Soft-TP Settlement:** Computes the real-time weighted break-even of open positions and contracts the required profit target as volume accumulates, allowing the basket to exit on shallow pullbacks.

2. System Requirements & Broker Specifications

To ensure proper execution of the multi-period calculation models, your broker and terminal environment should meet the following specifications:

Parameter	Requirement / Recommendation	Operational Notes
Trading Terminal	MetaTrader 5 (Build 6230+)	64-bit architecture required for mathematical stability.
Target Instrument	**XAUUSD** (Gold vs US Dollar)	May appear as *GOLD*, *XAUUSD.m*, or *XAUUSDraw* depending on broker.
Chart Timeframe	M15 (Recommended)	Internal routines calculate higher and lower timeframes independently.
Account Type	RAW / ECN / Zero Spread	Accounts with tight spreads (10–25 points) and flat per-lot commission are preferred.
Account Leverage	1:100 to 1:500	1:500 provides higher margin headroom during multi-layer basket recoveries.

Parameter	Requirement / Recommendation	Operational Notes
Execution Latency	< 20 milliseconds	A reliable VPS located near your broker's server (London LD4 or New York NY4) is recommended.
Minimum Balance	• Strategy Low Risk: **$500** • Strategy Medium Risk: **$1,000** • Strategy High Risk: **$2,000+**	Based on a 0.01 starting lot size.

3. Installation & Setup Guide

Step 1: Install the EA File into MT5

1. Launch your **MetaTrader 5** desktop terminal.
2. From the top menu, click **File** → **Open Data Folder**.
3. Navigate to `MQL5` → `Experts`.
4. Copy and paste `AurumGold_v1.00.ex5` file into this `Experts` directory.
5. Return to MT5, press `Ctrl + N` to open the **Navigator** window, right-click on **Experts**, and click **Refresh**.

Step 2: Configure Terminal Trading Permissions

1. In the top toolbar, click the **Algo Trading** master button so it displays a green play icon.
2. Navigate to **Tools** → **Options** (or press `Ctrl + O`) and select the **Expert Advisors** tab.
3. Ensure the following settings are enabled:
    - `[✓] Allow algorithmic trading`
    - `[✓] Allow WebRequest for listed URL` (Required if using external calendar APIs)
4. Click **OK** to confirm.

Step 3: Attach the EA to a Chart

1. Open a clean chart for **XAUUSD**. Set the chart timeframe to **M15**.
2. In the **Navigator** panel under *Experts*, locate **Aurum Gold MT5** and drag it onto the chart.

3. Under the **Common** tab of the properties window, verify that `[✓] Allow Algo Trading` is checked.
4. Under the **Inputs** tab, select your preferred `Strategy` risk preset (Low, Medium, or High Risk).
5. Click **OK**. Confirm the HUD appears in the top-left corner and displays `Auto-Trading: ACTIVE`.

4. Core Algorithmic Architecture

Aurum Gold processes market conditions through an integrated multi-stage pipeline:

1. Macro Trend Shield (EMA)

The Macro Trend Shield checks the market's position relative to the Exponential Moving Average on a higher timeframe. When price is above the EMA, only long entries are permitted. When price is below, only short entries are permitted. Counter-trend positions are rejected at the code level.

2. Momentum Inflection Engine

Initial entries are generated using dual-period DeMarker wave oscillators that identify momentum exhaustion and reversal conditions. Rather than entering at arbitrary prices, the engine waits for price to reach statistically extreme momentum boundaries across multiple internal calculation periods.

3. Adaptive Volatility Grid (ATR Engine)

If the market pulls back after entry, the EA calculates recovery distances dynamically using the Average True Range:

This ensures recovery orders remain at least `distance` apart, while automatically widening during high-volatility moves to avoid over-stacking positions.

4. Volume-Weighted Soft-TP Settlement

As recovery orders open, the system updates its volume-weighted break-even calculation. To reduce exposure time in deeper baskets, the take-profit target shrinks dynamically.

5. Strategy Risk Presets

The EA includes three built-in strategy risk presets selected via the `input` parameter:

Preset Option	Operational Profile	Target Objectives	Recommended Account
Strategy Low Risk **CAPITAL PRESERVATION**	Filtered quantitative matrix. Engages only during high-probability momentum setups. Limits simultaneous exposure.	Capital security, smooth equity growth, controlled drawdown limits.	Conservative private accounts and drawdown-sensitive portfolios. *Deposit: $500+*
Strategy Medium Risk **OPTIMAL BALANCED**	Standard balanced matrix. Combines momentum inflections with dynamic volatility expansion recovery.	Consistent compounding, steady cash flow, balanced risk-to-reward ratio.	Standard live trading accounts. *Deposit: $1,000+*
Strategy High Risk **DYNAMIC ALPHA**	Full algorithmic matrix unlocked. Operates across all market phases with higher trade frequency.	High capital utilization, aggressive monthly returns.	Experienced traders running active cash-flow portfolios. *Deposit: $2,000+*

6. Complete Input Parameters Reference

Group 1: General & Execution Settings

Input Parameter	Default	Description & Recommended Usage
`Start paused`	Off	If enabled, starts the EA in paused mode without opening initial trades.
`Lot sizing mode`	Automatic	Lot sizing method: *Automatic*, *Fixed*, or *Fixed per balance*.

Input Parameter	Default	Description & Recommended Usage
`Automatic lot risk level`	Medium	Compounding risk profile for Automatic mode (Very Low to Very High).
`Fixed`	0.01	Volume used when `Lot sizing mode` is set to *Fixed*.
`Fixed per balance`	500.0	Balance increment required per 0.01 lot in *Fixed per balance* mode.
`Strategy Risk Selection`	Strategy Medium Risk	Selects the active strategy risk preset (Low, Medium, or High Risk).
`Max number of orders`	100	Hard cap on the maximum number of orders permitted in a single basket.
`Drawdown control mode`	Off	Drawdown protection mode (Percentage or Fixed Currency loss limits).
`Drawdown threshold`	0.0	Trigger threshold for the selected drawdown mode (e.g., 10.0 for 10%).
`Magic number`	666888	Unique identifier used to track this EA's positions on the account.
`Max spread (points)`	100	Maximum allowable broker spread in points (100 pts = $1.00 on 2-digit Gold).

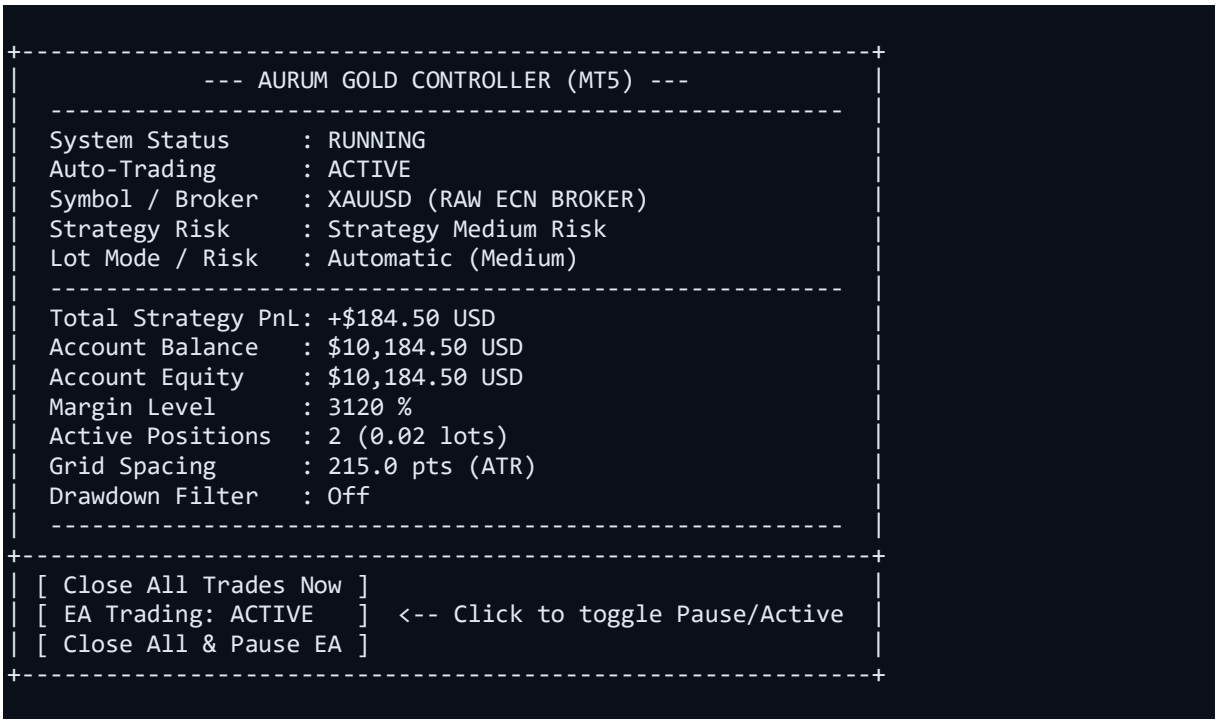
Input Parameter	Default	Description & Recommended Usage
`Max slippage (points)`	100	Maximum allowable execution slippage in points.
`Trade comment`	"Aurum Gold"	Base comment tagged to orders for audit and tracking.
`Trading direction type`	Both directions	Direction filter: *Buy only*, *Sell only*, or *Both directions*.

Group 2: Dynamic ATR Grid Settings

Input Parameter	Default	Description & Recommended Usage
`Use dynamic ATR grid spacing`	true	Enables dynamic ATR-based grid distance scaling.
`ATR timeframe for grid`	PERIOD_M5	Timeframe used to calculate ATR volatility for recovery steps.
`ATR period`	14	Smoothing period for the ATR calculation.
`ATR step multiplier`	1.0	Multiplier applied to the calculated ATR value.
`Minimum grid step (points)`	100	Minimum allowable distance between recovery orders in points.

7. On-Chart HUD & Interactive Controls

The Heads-Up Display (HUD) provides live performance metrics and manual controls directly on the chart:



On-Chart Diagnostic Metrics

- **System Status:** Displays `RUNNING`, `PAUSED`, or `DRAWDOWN ALERT`.
- **Auto-Trading:** Shows whether the execution engine is actively scanning for setups.
- **Active Positions & Volume:** Real-time count of open tickets and aggregate lots managed by the EA.
- **Grid Spacing:** Live calculation of the next recovery grid distance in points.

Interactive Control Buttons

Button Label	Color State	Action Triggered Upon Click
Close All Trades Now	Dark Red	Sends immediate market close orders for all positions opened by Aurum Gold. Leaves auto-trading active for new signals.

Button Label	Color State	Action Triggered Upon Click
EA Trading: [ACTIVE] / [PAUSED]	Green / Amber	Toggles the auto-trading engine. When **PAUSED**, the EA will not open new initial trades, but continues managing existing positions to their take-profit target.
Close All & Pause EA	Firebrick Red	Emergency stop button. Liquidates all open positions immediately and switches the EA into paused mode.

8. Drawdown & Capital Protection Rules

Aurum Gold includes integrated equity protection logic designed to cap losses during unexpected market events. Configure this using the `Drawdown control mode` and `Drawdown threshold` parameters:

Drawdown Protection Mode	Trigger Condition	Action Executed Upon Breach
`[Percent] Close then continue`	Floating loss ≥ `DDValue`% of balance	Closes all open positions immediately. The EA resets its tracking and resumes scanning for new setups.
`[Percent] Close then remove`	Floating loss ≥ `DDValue`% of balance	Closes all open positions and removes the EA from the chart. Manual intervention is required to resume trading.
`[Percent] Terminal alert`	Floating loss ≥ `DDValue`% of balance	Displays an alert dialog in MT5 without modifying open positions.

Drawdown Protection Mode	Trigger Condition	Action Executed Upon Breach
`[Money] Close then continue`	Floating loss ≥ `DDValue` (Currency)	Closes all open positions when floating loss exceeds a fixed monetary value (e.g., $500), then continues trading.
`[Money] Close then remove`	Floating loss ≥ `DDValue` (Currency)	Closes all open positions when fixed monetary loss is hit and removes the EA from the chart.
`[Money] Terminal alert`	Floating loss ≥ `DDValue` (Currency)	Triggers visual and audio alerts when monetary loss is reached without modifying trades.

9. Best Practices, VPS & Troubleshooting

Operational Best Practices

- **Use Low-Spread Accounts:** Verify that your broker's average Gold spread stays below 25–35 points during standard trading hours. Avoid accounts where Gold spreads exceed 50 points.
- **VPS Connectivity:** Run the terminal on a dedicated VPS with an uninterrupted internet connection and low latency (< 20ms) to your broker's trade servers.
- **Order Comments:** Do not edit the ticket comments of trades opened by the EA. The internal engine uses these tags to track cost-averaging baskets independently.
- **Separate Magic Numbers:** If running multiple instances of the EA on the same account, assign a unique `Magic number` to each chart.

Frequently Asked Questions (FAQ)

Q: Why hasn't the EA opened a trade yet?
A: Aurum Gold is selective. Confirm that the MT5 *Algo Trading* button is green, the HUD shows `RUNNING` and `ACTIVE` and the current spread is below `Max spread (points)`.

Q: Can I change chart timeframes while the EA is running?
A: Yes. The EA handles all indicator and ATR timeframes internally, so changing the active chart timeframe will not affect trading logic.

Q: What happens if the terminal restarts while positions are open?
A: Aurum Gold automatically recalculates its basket targets, weighted prices, and grid levels from your account's open orders upon terminal restart.

Q: How does the dynamic ATR grid help during news spikes?
A: If Gold experiences a large price move on unexpected news, the 14-period ATR expands. This widens the distance to the next recovery order, preventing the EA from opening layers too close together.

10. Legal & Risk Disclosure

REGULATORY WARNING & RISK DISCLAIMER

Trading commodities, precious metals, and foreign exchange on margin carries a high level of risk and may not be suitable for all investors. The high degree of leverage available in trading can work against you as well as for you.

Before deciding to trade Gold or deploy automated trading software, carefully consider your investment objectives, financial situation, trading experience, and risk tolerance. There is a possibility that you could sustain a loss of some or all of your initial investment; do not invest capital you cannot afford to lose.

Hypothetical or simulated performance results from backtesting have inherent limitations. Unlike actual trading records, simulated results do not represent actual execution, and factors such as slippage, spread widening, and liquidity gaps may affect real-world outcomes. No representation is made that any account will achieve profits or losses similar to those demonstrated.

© 2026 Aurum Gold. All rights reserved. Developed by Profit Winning System.