RIZA EA

User Guide

Multi-strategy XAUUSD Expert Advisor for MetaTrader 5



RIZA in the visual Strategy Tester. The screenshot shows a historical simulation.

10 strategy modules | Fixed lot or percent risk | News and session filters | Strategy-level performance panel

This guide covers installation, strategy selection, position sizing, safeguards, chart controls and testing on your broker's Gold symbol.

Install and activate RIZA

Install the Expert Advisor in MetaTrader 5 on the terminal you intend to use for testing or trading.

MQL5 Market installation

1. If you acquired RIZA through MQL5 Market, sign into MetaTrader 5 with the MQL5.community account used for the purchase. Open Tools > Options > Community to sign in.
2. Open the terminal's Market purchases, locate RIZA and select Install. Refresh Navigator if necessary.
3. Open your broker's XAUUSD chart and drag RIZA onto it from Navigator > Expert Advisors.

Installation from a supplied EX5 file

1. Choose File > Open Data Folder. Copy the supplied EA file into MQL5 > Experts.
2. Refresh Navigator or restart MetaTrader 5. Find the Expert Advisor by its installed file name.
3. Drag it onto your broker's Gold chart. Open Inputs to review the settings before confirming.

Enable algorithmic trading

For demo or live operation, enable Allow Algo Trading in the EA's Common tab and turn on the terminal's Algo Trading button. Check the Experts tab for the startup summary and any permissions or initialization messages.

Chart setup	Use one RIZA chart per account and Gold symbol with the default magic numbers. Keep MT5 connected and running whenever the EA is expected to manage trades.

1. Quick start

RIZA EA trades Gold using a selectable portfolio of breakout strategies. Start with a visual test so you can see when the EA places pending orders and how it manages filled trades.

Platform	MetaTrader 5
Symbol	Your broker's Gold symbol, such as XAUUSD or XAUUSD.p
Chart timeframe	M15 for a first visual test. Strategies use their own internal signal settings.
Portfolio	Default S: 2+3+4+5+7+8+10
Risk for a first test	Try Manual with EA_RiskPercent = 0.5 as a sizing example. Check the minimum-lot warning.
Server time	Set the winter and summer GMT offsets to match your broker.

First run Leave the supplied strategy strings intact. Pick the portfolio, select the lot-sizing mode and verify the broker's server offsets before changing other inputs.

From the tester to demo

In Strategy Tester, choose Every tick based on real ticks and enable Visual mode for the first run. Inspect entries, stop losses and the Experts or Journal messages. Then run a longer non-visual test with the same inputs and save the .set file.

On a demo account, attach the EA to the same Gold symbol. Compare the log and panel with the tester run, then check how the EA behaves during the trading hours you intend to use.

2. How the algorithm works

RIZA looks for price breakouts around recent swing highs and lows. It derives the reference levels from each strategy's configured source, including ZigZag swings on time-based or tick-built range bars where configured.

Stage	What RIZA does
Market structure	Tracks swing highs and lows using the strategy's internal settings.
Entry level	Calculates a breakout price and checks whether an entry is allowed.
Pending order	Uses Buy Stop or Sell Stop orders when the strategy and broker conditions permit.
Position sizing	Uses a fixed volume or sizes the order from its entry-to-stop-loss distance.
Trade management	Applies the strategy's stop loss, take profit and configured trailing behavior.

An order can be replaced, expire or be cancelled before it fills. Two strategies can react differently to the same price move because their internal signal settings, entry levels or trade management differ.

Portfolio scope All selected strategies trade the Gold symbol on the attached chart. Their exposure can overlap during the same move. Review combined risk as well as individual strategy results.

Strategy identification

Strategy N uses EA_MagicNumber + N - 1 for its primary orders. With the default base of 19117, strategy 1 uses 19117 and strategy 10 uses 19126.

3. Configurations and strategy selection

Use EA_ActiveStrategies to choose which of RIZA's ten strategy modules may open new trades. The dropdown includes single strategies and predefined combinations.

Selection	Enabled strategies
S: 1 through S: 10	A single module for an isolated test.
S: 1+2 or S: 1+2+3	Two- and three-strategy combinations.
S: 1+3+4+5	Four-strategy combination.
S: 1+2+3+4+5	First five modules. The dropdown also offers the first six through all ten.
S: 2+3+4+5+7+8+10	Default seven-strategy portfolio (734).
S: 2+3+4+5+6+7+8+10	Alternative eight-strategy portfolio (766).
S: 2+3+5+6+7+8+9+10	Alternative eight-strategy portfolio (1014).

Strategy parameter strings

EA_S1_Params through EA_S10_Params hold the supplied encoded strategy settings. Keep each string in its original field. To compare a supplied preset, use Load in the Inputs tab and review risk, strategy selection, news and broker time settings before running it.

Compare portfolios	Use the same symbol, dates, tick model, deposit and risk settings for each run. Add or change one portfolio setting at a time and compare trade count, drawdown and exposure.

4. Risk settings

EA_RiskLevel selects how RIZA calculates lot size. A risk percentage is the planned loss at the initial stop for one trade, before execution differences.

FixedLot

Choose FixedLot and set EA_FixedLot to the desired volume. Check your broker's minimum lot, volume step and margin requirements.

```
EA_RiskLevel = FixedLot
EA_FixedLot = 0.01
```

Manual

Choose Manual and specify EA_RiskPercent. RIZA uses the risk capital and the expected loss per lot at the initial stop, then rounds the volume down to the broker's lot step.

```
EA_RiskLevel = Manual: RiskPercent
EA_RiskPercent = 0.5
EA_RiskCapital = 0
```

Eco, Comfort and Sport

These entries scale RIZA's half-Kelly reference risk. The effort number in the dropdown is the share of that reference used for sizing. Eco 25%, Comfort 50% and Sport 100% correspond to approximately 0.97%, 1.94% and 3.88% per trade before the drawdown brake, panel adjustment and volume caps.

Risk capital	With EA_RiskCapital = 0, the EA uses current balance. A positive value sets a fixed sizing base in the account currency, capped at current balance.

If the calculated volume is below the broker's minimum, RIZA can skip the entry. Check deposit and margin warnings before increasing the risk setting.

5. Example risk profiles

Use these examples to compare sizing in Strategy Tester. Keep the symbol, portfolio, deposit and test period identical so you can see what changes when you change lot sizing.

Profile	EA_RiskLevel	Example setting
Fixed volume	FixedLot	EA_FixedLot = 0.01, subject to broker minimum.
Manual sizing	Manual: RiskPercent	EA_RiskPercent = 0.5. Uses 0.5% of risk capital before adjustments.
Eco example	Eco: 25%	About 0.97% per trade before adjustments.
Comfort example	Comfort: 50%	About 1.94% per trade before adjustments.
Sport example	Sport: 100%	About 3.88% per trade before adjustments.

Drawdown brake and limits

- EA_DrawdownBrakePercent reduces risk-based sizing as balance falls from its peak. At the floor, the sizing risk is 25% of the selected rate. The default threshold is 15. Set 0 to disable the brake.
- EA_MaxTotalRiskPercent caps planned stop-loss exposure across RIZA positions and pending orders on the chart symbol when using percentage-based sizing. Set 0 to disable it.
- EA_MaxMarginPercent limits projected margin load as a percentage of equity. Set 0 to disable the user-defined cap.

Factory sizing	The factory setup uses Manual at 4% per trade before adjustments, with the drawdown brake set to 15%. The brake changes future sizing. Realized drawdown can exceed the input threshold.

6. Main inputs and trading safeguards

Input	What it does
`EA_MaxSpreadPrice`	Blocks new order placement above the specified ask-bid spread in price units. 0 disables the check.
`EA_TradeHours`	Permits pending orders in selected strategy hours. Outside those hours, the EA removes its pending orders and continues to manage positions.
`EA_HolidayPause`	Applies the built-in late Monday and Friday pauses plus December 25 through January 5. Enabled by default.
`EA_FridayCancelPending`	Removes pending orders and blocks new entries ahead of Friday close.
`EA_FridayCancelMinutes`	Lead time before Friday close. Default 30 minutes.
`EA_FridayCloseTime`	Optional HH:MM in broker server time. Blank uses the broker's session close when available.
`EA_HolidayFilter`	Blocks new entries and removes pending orders on built-in holidays for selected regions. Uses the broker's server date.
`EA_PropFirmMaxDailyDD`	Attempts to close the EA's positions and cancel its orders when its daily loss limit triggers. New entries stay blocked until the next server day.
`EA_Randomization`	Shifts entry, SL, TP and trailing levels by up to the selected number of strategy points in either direction. Default 0.

Trading hours and spread

```
EA_TradeHours = "1-11,14,16-20"
EA_TradeHours = "22-3"    (wraps past midnight)
```

TradeHours and HolidayPause use RIZA's reference clock, GMT+2 in US winter and GMT+3 in US summer. MaxSpreadPrice uses the quoted price difference. On XAUUSD, 0.50 means fifty cents. Existing orders can still fill during a spread spike.

> **Daily loss scope** The daily check combines RIZA's closed daily P/L and floating P/L on this symbol against a percentage of the day's observed account equity high. Check the calculation against your firm's rules.

7. News filters

Set EA_NewsFilter to choose how RIZA handles US economic releases. The factory setting is Off.

Option	Where it applies
Off	Both news layers disabled.
NFP dates (tester and live)	Built-in US Nonfarm Payrolls schedule.
High-impact calendar news (live only)	Uses the MetaTrader 5 Economic Calendar for high-impact USD releases.
NFP dates + calendar news	Both layers, with the calendar layer available in live operation.

Dedicated NFP filter

The built-in NFP window starts 100 minutes before the scheduled release and ends 60 minutes after it. RIZA blocks entries, removes its pending orders and attempts to close its positions during that window. The built-in table covers scheduled dates through 2026 where listed. Later years use a first-Friday rule.

High-impact calendar news

During live operation, RIZA checks for high-impact USD calendar events within about one hour before or after release. When the filter triggers, it blocks new entries and removes the EA's pending orders.

Broker offsets Set EA_ServerGMTWinter and EA_ServerGMTSummer to your broker's actual server offsets. The defaults are +2 and +3. These offsets affect the NFP window and conversion to strategy time.

8. Manual strategy selection and the RIZA panel

To evaluate a single module, choose its entry under EA_ActiveStrategies. The RIZA panel shows the account summary and strategy rows in demo or live operation and in the visual tester when EA_ShowPanel is true.



The RIZA account card and the 10-strategy performance table in Visual mode.

Control	Action
PAUSE / RESUME	Pause new entries and remove current pending orders, or allow entries again. Existing positions remain under management.
CLOSE ALL	Send close requests for RIZA positions and remove its pending orders on this symbol.
BUY / SELL toggles	Disable or re-enable new orders on that side. Switching a side off removes its pending orders.
CLOSE BUYS / SELLS	Request closure of RIZA positions on the selected side.
DELETE ORDERS	Remove RIZA's current pending orders.
BREAK EVEN	Move an eligible position's stop to its entry price if broker distance rules allow.
RISK -10% / +10%	Change the sizing multiplier for subsequent risk-based orders by 0.1 per click.

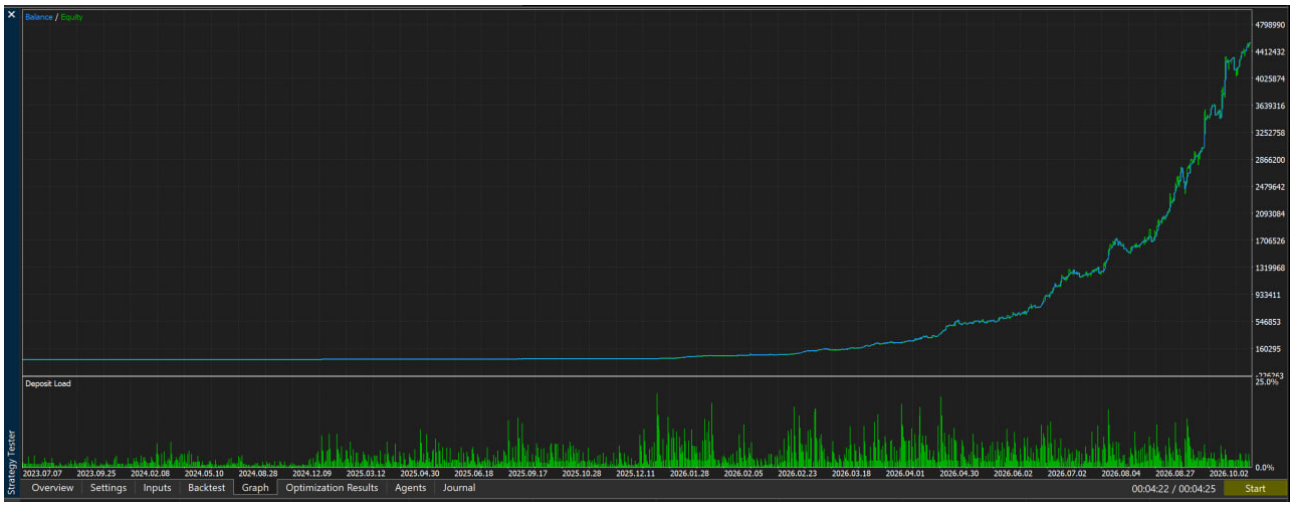
Open MORE for the additional controls. ACTIVE means the panel permits entries. PAUSED means you paused them. LOCKED means a trading condition is blocking entries. Inspect the status line and Experts tab for details.

9. Strategy Tester workflow

Open View > Strategy Tester or press Ctrl+R. Choose a Single test and select RIZA by its installed name.

Recommended workflow

1. Choose your broker's Gold symbol. Use M15 as the chart period for a first visual check.
2. Set modeling to Every tick based on real ticks. Choose a historical period with adequate tick coverage.
3. Use the account currency, deposit and leverage you want to evaluate. Set execution delay to match the scenario you are testing.
4. Review the portfolio, lot-sizing inputs and broker GMT offsets. Save the inputs to a .set file.
5. Enable Visual mode. Inspect pending orders, stop placement, exits and the strategy table.
6. Repeat with Visual mode off to review a longer date range. Save the report and note the settings used.



Example MT5 Strategy Tester graph. The lower pane shows deposit load over the test period.

For a detailed single-run log, enable EA_TradeJournalTester. Look for VTRADE and VDEAL entries in the tester journal. The detailed log can slow testing.

10. Broker data and execution differences

The visual example in this guide uses Tickmill Ltd Gold data. Run your own test on the exact broker symbol you plan to use and record its specifications alongside each result.

Broker setting	What to verify
Symbol name and digits	Use the Gold symbol available in Market Watch, including any suffix. Confirm price digits and minimum tick size.
Lot size and step	Check the volume minimum, step and maximum in the symbol specification.
Spread and costs	Compare normal and rollover spreads, commission, swaps and execution delay.
Trading sessions	Check session breaks and Friday close. Use server time for a custom FridayCloseTime.
Server GMT offsets	Check both winter and summer offsets before comparing tests.
Account mode and leverage	Test on the intended account type. Netting can change how trades combine and how strategies interact.
Historical data	Compare available date ranges and quality of the broker's real tick history.

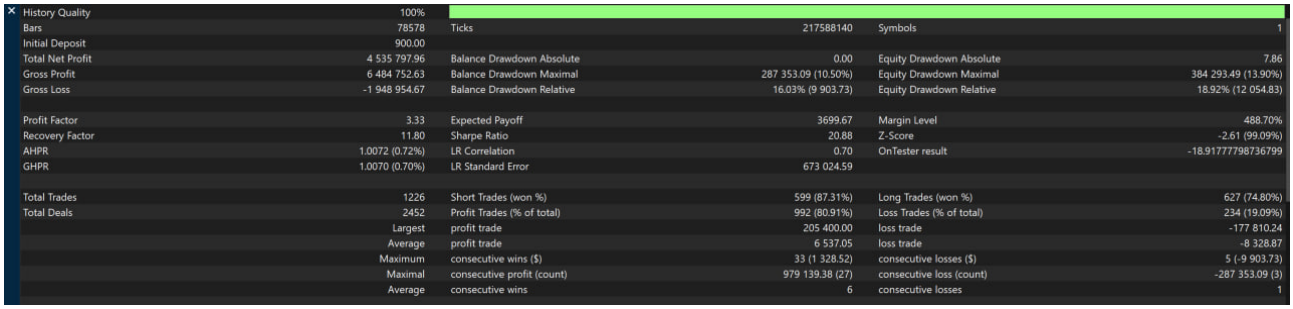
Compare like for like Use the same RIZA build, strategy selection, risk mode, dates and execution assumptions when comparing brokers. Record which symbol specifications still differ.

Consistency across accounts

Minimum lot and margin constraints can change which entries are affordable. A smaller deposit can therefore produce a different trade sequence even with the same EA inputs.

11. How to evaluate RIZA

Use the MT5 results report alongside the graph and visual walkthrough. Record the portfolio, broker, symbol, dates, deposit, leverage and risk inputs for every run.



History Quality	100%				
Bars	78578	Ticks	217588140	Symbols	1
Initial Deposit	900.00				
Total Net Profit	4 535 797.96	Balance Drawdown Absolute	0.00	Equity Drawdown Absolute	7.86
Gross Profit	6 484 752.63	Balance Drawdown Maximal	287 353.09 (10.50%)	Equity Drawdown Maximal	384 293.49 (13.90%)
Gross Loss	-1 948 954.67	Balance Drawdown Relative	16.03% (9 903.73)	Equity Drawdown Relative	18.92% (12 054.83)
Profit Factor	3.33	Expected Payoff	3699.67	Margin Level	488.70%
Recovery Factor	11.80	Sharpe Ratio	20.88	Z-Score	-2.61 (99.09%)
AHPR	1.0072 (0.72%)	LR Correlation	0.70	OnTester result	-18.91777798736799
GHPR	1.0070 (0.70%)	LR Standard Error	673 024.59		
Total Trades	1226	Short Trades (won %)	599 (87.31%)	Long Trades (won %)	627 (74.80%)
Total Deals	2452	Profit Trades (% of total)	992 (80.91%)	Loss Trades (% of total)	234 (19.09%)
	Largest	profit trade	205 400.00	loss trade	-177 810.24
	Average	profit trade	6 537.05	loss trade	-8 328.87
	Maximum	consecutive wins ($)	33 (1 328.52)	consecutive losses ($)	5 (-9 903.73)
	Maximal	consecutive profit (count)	979 139.38 (27)	consecutive loss (count)	-287 353.09 (3)
	Average	consecutive wins	6	consecutive losses	1

Example report layout showing trade counts, profit factor and separate balance and equity drawdown figures.

Measure	How to read it
Trade count	Check the sample size and look for dependence on a few trades or a short period.
Equity drawdown	Includes unrealized P/L. Review percentage and money figures in the report.
Profit factor	Gross profit divided by gross loss. Compare it across periods and brokers.
Deposit load	Review margin use over time, especially when several strategies can trigger together.
Per-strategy results	Use the panel and magic numbers to see which modules contribute trades and drawdown.

Forward check

Compare an earlier test period with a later period using the same inputs, then run the setup on demo. Compare fill prices, order timing, spreads and trade counts. Historical performance can differ materially from future results.

Updates, presets and support

Keep a copy of the tested .set file and the corresponding MT5 report. Record the EA build and terminal build so you can reproduce the setup after an update.

When installing an update

1. Export the current inputs with Save. Record the magic number and check whether the EA has open positions or pending orders.
2. Open the updated EA in Strategy Tester. Load the preset and compare the visible inputs and defaults against the previous setup.
3. Run a short visual check before using the new build on demo or live.

What to include in a support request

- RIZA build or file version, MT5 build, broker, exact symbol and account mode.
- The .set file, relevant Experts and Journal lines, and the approximate time in broker server time.
- For tester issues, the dates, modeling mode, leverage, starting deposit and execution delay.
- For a trade issue, describe the expected behavior and include the relevant order or deal ticket. Remove private account credentials before sharing.

Detailed logs	EA_TradeJournalLive is on by default. EA_TradeJournalTester enables the same VTRADE and VDEAL detail for a single test. Optimization runs omit that detail.

12. Common questions

Why are there no new trades?

Check Algo Trading, trade permissions, connection, trading hours, panel status and news settings. Look for minimum-lot, margin and spread messages. RIZA also needs enough data and a valid breakout setup.

Why does the panel show 10 strategies when fewer are selected?

The table has a row for each module. EA_ActiveStrategies determines which modules can open new trades. The startup log lists those selected.

Can I use a broker symbol with a suffix?

Use the broker's actual XAUUSD symbol, such as XAUUSD.p, and verify the symbol specification and GMT offsets.

Why is a calculated lot smaller than expected?

The drawdown brake, broker volume step, margin checks and any enabled total-risk limit can reduce the volume. If the final volume is too small, the trade can be skipped.

What is the difference between PAUSE and CLOSE ALL?

PAUSE removes pending orders and keeps managing open positions. CLOSE ALL requests closure of the EA's positions and deletion of pending orders. Use PAUSE first if you also want to stop subsequent entries.

Can I change the magic number while trades are open?

Keep the same magic number while the EA manages existing positions. Changing the base changes how it identifies its trades.

How do I restore the factory inputs?

Save the current setup if you need it, then use Reset in the MT5 Inputs tab. Verify risk, server offsets and the selected strategies before running the EA.