

EXPERT ADVISOR FOR METATRADER 5

Gold GodTier

User Manual

Version 90.08

Gold (XAUUSD) · M15 · AI engine + Breakout engine

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Trading leveraged gold CFDs carries a high risk of loss. Backtest results do not guarantee future results.

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1. Overview

Gold GodTier is an Expert Advisor (EA) for MetaTrader 5 that trades gold (XAUUSD) on the 15-minute chart with two independent engines and one shared account guard.

- **AI engine**: an LSTM + XGBoost model, run inside MetaTrader 5, reads the M15 chart and opens a market trade when its confidence passes the threshold of the trading preset you choose. Stop-loss and target are set from ATR.
- **Breakout engine**: every trading day it places a buy-stop near the N-day high and a sell-stop near the N-day low (20 days by default). Stop-loss 0.3 × daily ATR, target 1.5 × daily ATR, a trailing stop from +0.5R and the stop at entry from +1R.
- **Account guard**: if account equity falls 30 % below its peak (default), both engines close their trades, remove their pending orders and stop until you reload the EA.

Gold GodTier is built for traders who can keep MetaTrader 5 running 24 hours a day, 5 days a week (an MQL5 VPS is recommended), and who accept that gold is volatile and that every automated strategy has losing periods.

> **Risk notice.** Trading leveraged gold CFDs can lose part or all of your deposit. Backtest and past results do not guarantee future results. Start on a demo account and trade only money you can afford to lose.

2. Requirements

You need MetaTrader 5, a gold (XAUUSD) chart on M15 and a computer or VPS that stays online while the market is open.

Item	Requirement
Platform	MetaTrader 5 (desktop terminal)
Symbol	Gold against USD, any broker name (XAUUSD, XAUUSD-ECN, GOLD); 1 lot = 100 oz - check it in the symbol specification
Chart	M15 (the EA refuses other timeframes unless you allow them)
Account	Hedging account recommended: both engines can hold a buy and a sell at the same time. The amounts in this manual assume a USD account
Lot size	Minimum lot 0.01
History	At least 500 daily bars; the EA loads them itself at start
Running	MQL5 VPS (recommended) or a computer that is on 24 hours a day, 5 days a week

Deposit and the minimum lot. At a gold price of about 4,200 USD, one 0.01-lot trade can lose about 11 USD (AI engine) to 24 USD (Breakout engine) at its stop. On a 500 USD account that is about 2 % to 5 % per trade (more on volatile days), more than most risk settings allow. The EA still trades 0.01 lot and warns you in the Experts log. About 1,000 USD or more keeps each trade closer to the risk you set.

Why a VPS. With hidden stops the EA closes trades at its own levels. If the terminal goes offline, only the broker's backup stop (twice the distance) protects an open trade.

3. Installation

Install the EA on one XAUUSD M15 chart, check its first log lines, then move it to an MQL5 VPS.

1. In MetaTrader 5 open the Navigator, folder **Expert Advisors › Market**. The EA is listed as **Gold GodTier Dual Neural**.
2. Open a gold chart (File › New Chart › XAUUSD, or your broker's gold symbol) and set the timeframe to **M15**.
3. Drag the EA onto the chart. In the window that opens:
   a. **Common** tab: tick **Allow Algo Trading**.
   b. **Inputs** tab: choose your settings, or press **Load** and pick a preset file (.set).
   c. Press **OK**.
4. Switch on **Algo Trading** in the toolbar.
5. Check that it started: the panel appears on the chart, and the **Experts** tab shows the EA's start lines. The panel badge reads **SCANNING M15** on a trading day or **MARKET CLOSED** at the weekend.
6. Move it to an MQL5 VPS (recommended):
   a. In the Navigator, right-click your account and choose **Register a Virtual Server**, then follow the steps.
   b. Open the **VPS** tab and press **Migrate** with "Migrate experts" or "Migrate all".
   c. MetaTrader switches Algo Trading off on your computer and on at the VPS. Leave it off on your computer, or two copies will trade the same account.
   d. Read the VPS log in the VPS tab, sub-tabs **Experts** and **Journal**.
7. After every change of settings on your computer, migrate again. The VPS keeps the settings of the last migration.

4. Quick start

Most users only touch group **1. QUICK START**; the defaults below are a complete, working setup.

Setting (as shown in MT5)	Default	What to choose
AI trading preset	SAFE - low risk	Pick by risk, see the table below. VALIDATION does not trade.
AI engine	true	false = the AI engine opens no new trades (its open trades are still managed).
Breakout engine	true	false = no Breakout orders. Needs a hedging account when the AI engine is also on.
Breakout risk per trade (%)	0.70	Risk at the stop, % of balance, shared by all Breakout channels.
Breakout channels (1 = classic 20-day)	1	1 is the tested setup. 2-11 add more channels: more trades, not more profit in our tests.
Account stop: drop from peak (%, 0=off)	30	Both engines stop when equity falls this far below its peak.

The AI trading presets. Each preset fixes the AI engine's risk and filters; group 3 is used only by ADVANCED CUSTOM.

Preset	AI risk per trade	Signal threshold	Daily loss limit	Max spread (gold pips, 1 = 0.01 USD)	Stop / target (x ATR)	Pause between trades	Drawdown cuts (margin check)
SAFE	0.90 %	0.60	3.5 %	45	1.6 / 3.8	20 min	8 % / 16 % (on)
GROWTH	1.70 %	0.59	5.0 %	50	1.6 / 4.0	12 min	10 % / 20 % (on)
GROWTH+ (3,000 USD or more)	2.50 %	0.59	5.0 %	50	1.6 / 4.0	12 min	10 % / 20 % (on)
BEAST	2.30 %	0.58	8.0 %	40	1.7 / 4.2	8 min	12 % / 24 % (off)
ADVANCED CUSTOM	your values in group 3						

GROWTH+ is GROWTH with bigger trades: 2.50 % instead of 1.70 % per trade. BEAST risks a little less per trade (2.30 %), yet it is the most aggressive preset. It trades more often and has fewer brakes: a lower signal threshold (0.58), an 8-minute pause, an 8 % daily loss limit, later drawdown cuts (12 % / 24 %) and no margin check.

Drawdown cuts and the margin check. In every preset the AI risk is halved above the first drawdown level and cut to a quarter above the second (drawdown of account equity from the peak the AI engine keeps, so Breakout losses count too). The margin check ("AI drawdown defender", on in SAFE, GROWTH and GROWTH+, off in BEAST) skips a new AI trade whose margin would be more than "AI max margin use (%)" of equity (20 % by default).

The buy-only versions of SAFE, GROWTH and BEAST use the same values and never sell. The risk actually used is lower than the table: with "Lower risk in high volatility" on (default), the EA multiplies it by 0.5 when gold's M15 ATR is above 1.50 USD, which at today's prices is almost always, so expect about half. In these presets the AI lot is sized from at most 2 % of equity (the minimum lot can still risk more). In ADVANCED CUSTOM the limit is your "AI risk per trade (%, at most 10)"; before 90.08 it was 2 % there too. To trade a fixed size instead, see "AI fixed lot" and "Breakout fixed lot per order" (section 5).

5. Settings reference

The Inputs tab shows 118 settings in 8 numbered groups, in the order below, under the exact names in the first column. A name that starts with **AI** or **Breakout** belongs to that engine only; group 1 holds what most users change.

1. QUICK START

Setting	Default	What it does
AI trading preset	SAFE - low risk	Risk level of the AI engine (section 4). VALIDATION does not trade.
AI engine	true	false = the AI engine opens no new trades; its open trades are still managed.
Breakout engine	true	false = no Breakout orders; its pending orders are deleted. Close any open Breakout trade yourself.
Breakout risk per trade (%)	0.70	Loss at the stop, % of balance, shared by all Breakout channels.
Breakout channels (1 = classic 20-day)	1	How many channel lengths of the list in group 4 are traded (1-11).

Setting	Default	What it does
Account stop: drop from peak (%, 0=off)	30.0	Both engines close all trades, delete pending orders and stop when equity falls this far below its peak. Reload the EA to restart.

2. AI ENGINE

Setting	Default	What it does
AI: always trade the minimum lot	true	true = trade 0.01 lot even if it risks more than the preset allows (the log warns). false = skip such trades.
AI fixed lot (0 = size by the risk %)	0.0	0 = the risk % sizes each AI trade. Above 0 = every AI trade uses this lot (rounded down to the lot step, at least the minimum lot) whatever the risk %, the drawdown defender levels or the win-rate and volatility cuts. The lot caps (the preset's own maximum: SAFE 2, GROWTH and GROWTH+ 5, BEAST 8, or "AI max lot per trade" in ADVANCED CUSTOM; and "AI lot cap (x equity / 1000)") and the free margin still apply. New in 90.08.
AI: hidden stop-loss / take-profit	Auto - hidden on an MQL5 VPS	Auto: stop and target hidden on an MQL5 VPS, backup stop at the broker at 2x. Off: normal broker stops. Live: hidden on any live terminal. Always: also in the tester.
Lower risk when win rate drops	true	Cuts risk to 50 / 70 / 85 % when the recent win rate is below 50 / 55 / 60 %.
Lower risk in high volatility	true	Multiplies risk by 0.5 / 0.65 / 0.8 when gold's M15 ATR is high.
Skip ranging market (H1 ADX < 15)	true	No entry when the H1 trend strength is weak (ADX below 15), unless the direction is clear.
Session filter (skip weak hours)	true	No entry at 02:00-05:00 and 20:00-22:00 server time of a GMT+2/+3 broker (see group 6 for other brokers).
Extra spread check before entry	true	An extra spread test before each entry.
Partial closes and trailing stop	true	Takes the two partial profits below, then trails the stop.
Partial close 1 at (R)	1.0	First partial close when profit reaches this multiple of the initial risk.
Partial close 1 size (%)	30.0	Share of the position closed at the first partial close.
Partial close 2 at (R)	2.0	Second partial close, in multiples of the initial risk.
Partial close 2 size (% of the rest)	50.0	Share of what is left closed at the second partial close.
Close trades after max hold time	true	Closes an AI trade after the maximum hold time.
Max hold time (hours)	48	Maximum time an AI trade stays open.

3. AI CUSTOM PRESET (used only by ADVANCED CUSTOM)

These values apply only when **AI trading preset** = ADVANCED CUSTOM; every other preset uses its own fixed values (section 4). The exception is "AI max margin use (%)", which the margin check of SAFE, GROWTH and GROWTH+ also uses.

Setting	Default	What it does
AI risk per trade (%, at most 10)	2.0	Loss at the stop, % of equity, applied as set up to 10 (the volatility and win-rate cuts can lower it). Above 10 the EA does not start and the Experts log says why. Before 90.08 the AI lot was sized from at most 2 % of equity whatever this said. With "AI fixed lot" above 0 it does not size the lot, but the limit of 10 still applies.
AI signal threshold (0.50-0.80)	0.58	Higher = fewer, stronger signals.
AI max open trades	1	AI trades open at the same time.
AI stop-loss (x ATR)	1.5	Stop distance in ATR.
AI take-profit (x ATR)	4.0	Target distance in ATR.
AI trailing starts at (x ATR profit)	1.2	Trailing begins after this profit in ATR.
AI trailing step (x ATR)	0.4	Trailing distance in ATR.
AI pause between trades (minutes)	10	Minimum time between two AI trades.
AI max spread (gold pips)	60.0	No entry when the spread is wider.
AI buy bias (0 = none)	0.06	A small preference for buy signals.
AI max lot per trade	10.0	Largest AI lot.
AI daily loss limit (%)	5.0	No new AI trades for the rest of the day after this loss.
AI max margin use (%)	20.0	No new AI trade whose margin would be above this % of equity. Used by the margin check: in SAFE, GROWTH and GROWTH+, and in ADVANCED CUSTOM when "AI drawdown defender" = true.
AI drawdown defender	true	Turns on the margin check ("AI max margin use (%)"). The two drawdown levels below cut risk either way.
Defender level 1 (drawdown %)	10.0	Above this drawdown the AI risk is halved. A fixed lot ("AI fixed lot") is not cut.
Defender level 2 (drawdown %)	20.0	Above this drawdown the AI risk is cut to a quarter.

4. BREAKOUT ENGINE

Setting	Default	What it does
Channel lengths (days, in order)	20, 10, 55, 5, 15, 30, 40, 70, 90, 120, 150	Channel lengths in the order they are added; the first is the classic 20-day channel. 2-250 days, no duplicates.
Limit channels by balance	true	With 2-11 channels: trade only as many channels as the balance carries at 0.01 lot, or at the Breakout fixed lot when one is set (section 6). false = every channel trades at least 0.01 lot.
Breakout: always trade the minimum lot	true	true = trade 0.01 lot even if it risks more than the setting (the log warns). false = skip such trades.
Min-lot tolerance (x risk)	1.5	With minimum-lot forcing off: skip a trade whose 0.01 lot risks more than this times the setting. Also the limit used by "Limit channels by balance".
Breakout max lot per order	5.0	Largest Breakout lot.

Setting	Default	What it does
Size as if balance were (0 = real)	0	Sizes Breakout trades as if the balance were this amount (larger lots at your own risk). Stops and guards use the real account.
Breakout fixed lot per order (0 = size by the risk %)	0.0	0 = the risk % sizes each Breakout order. Above 0 = every Breakout order uses this lot (rounded down to the lot step, at least the minimum lot) whatever the risk %. "Breakout max lot per order" and the free margin still apply, and "Limit channels by balance" counts this lot (section 6). New in 90.08.
Breakout break-even at (R, 0=off)	1.0	Moves the stop to entry at this multiple of the initial risk.
Breakout: hidden stop-loss / target	On for live trading	The EA closes at its own levels; the broker holds a backup stop at 2x and no target. Off: stops at the broker.
Pause on US payrolls (NFP) afternoon	true	No Breakout entries 13:50-16:30 New York close time on US payrolls day.
NFP date source	Economic calendar (real date)	Where the payrolls date comes from.

5. PROTECTION

Setting	Default	What it does
AI capital floor (% net deposits, 0=off)	20.0	The AI engine closes its trades and stops when equity falls to this % of deposits minus withdrawals.
AI loss limit from its peak (%, 0=off)	0.0	The AI engine stops after losing this % of the balance it had at its own profit peak.
AI pause after losses in a row (0=off)	5	The AI engine pauses for the day after this many losses in a row.
AI: restore a removed/widened stop	false	If anything outside the EA removes or widens an AI stop-loss, the EA puts it back.
Breakout daily equity stop (%, 0=off)	0	Closes Breakout trades and pauses until the next day when equity falls this far below its peak.
Breakout halt: loss from best (%, 0=off)	0	Closes Breakout trades and stops when its results fall this % of the account below their best level.
Breakout halt counts from (date)	0 (from the first trade)	The halt counts from this time. To resume after a halt, set a time after it.
Breakout risk cap per side (%, 0=off)	0	Open positions plus pending orders on one side may risk at most this % of balance.
AI: close trades on Friday	false	Closes AI trades before the weekend at the time below.
AI Friday close hour (server)	22	Server time.
AI Friday close minute	15	Server time.
AI: no new trades after Friday close	true	No new AI trades after that time.
Breakout Friday cancel (minutes before)	120	Deletes Breakout pending orders this many minutes before the Friday session ends.
Breakout Friday close (minutes before)	60	Closes Breakout trades this many minutes before the Friday session ends.

Setting	Default	What it does
Breakout: holiday eves like a Friday	true	The day before Good Friday, Christmas and New Year gets the Friday rules.

6. BROKER, TIME AND COSTS

Setting	Default	What it does
Breakout server time zone	Auto - detect	Auto works for most brokers and in the Strategy Tester.
Breakout fixed GMT offset (hours)	0	Used only with "Fixed GMT offset".
AI: detect broker GMT offset	false	Set true on a GMT+0 broker (for example Exness) so the AI's session, rollover and Friday times are right.
AI time shift (hours)	0	Manual hour offset for those times when not detected (GMT+0 broker: 3 in EU summer, 2 in winter).
AI: no entries at daily rollover	true	No AI entries in the daily rollover window, when spreads jump.
Rollover from (server hour)	23	Start of the rollover window.
Rollover to (server hour)	1	End of the rollover window.
AI: auto spread limit (broker history)	true	Learns this broker's normal spread from its own history and sets the AI spread limit from it.
AI max spread (% of ATR, 0=off)	25.0	Your ceiling for that limit.
AI sizing: slippage allowance (points)	50	AI lots are sized for a fill this much worse.
AI sizing: commission per lot (0=auto)	0.0	0 = read from your trade history.
AI sizing: worst swap per lot	0.0	Adds a swap cost per lot to the AI risk.

7. PANEL

Setting	Default	What it does
Show panel	true	Shows the panel on the chart.
Panel style	Modern	Modern or Classic.
Panel colours	Auto - follow the chart	Auto, Dark or Light.
Panel size (0.8 - 1.5)	1.0	Also follows the screen DPI.
Show money values	true	Money next to R and %. Balance and equity are never shown.
Start collapsed	false	The [-] / [+] button switches.
Panel corner	Top left	Corner of the chart for the panel.
Panel X offset (pixels)	20	Distance from that corner.
Panel Y offset (pixels)	30	Distance from that corner.
Offset panel per magic number	true	Keeps two EAs' panels apart.
Write panel to Experts log (VPS)	true	On a VPS there is no chart, so this is the only way to read the panel there.
Panel log interval (seconds)	900	A status change is logged at once.

Setting	Default	What it does
Classic panel: compact	false	Classic panel only.
Classic panel: advanced lines	false	Classic panel only.
Classic panel: buttons	true	Classic panel only.
Classic panel: value column (pixels)	170	Classic panel only.
Classic panel: title font size	10	Classic panel only.
Classic panel: font size	9	Classic panel only.

8. ADVANCED (change only if you know why)

Setting	Default	What it does
AI magic number	118836	Change only when two copies of the EA run on the same account and symbol.
Breakout magic number (+1 per channel)	118840	Channels use this number and the next 10. Must not include the AI magic number.
AI order comment	Gold GodTier	Text in the Comment column of AI trades.
AI uses the neural model (off = rules)	true	false = simple rules only, without the neural model (for comparison).
AI lot cap (x equity / 1000)	1.0	Oversize guard for AI lots.
Allow charts other than M15	false	The EA is built and tested for M15.
AI: wait for full deal history	false	true = no new AI trades until the broker's deal history is complete. false = trade and warn.
Retry after broker refusal (seconds)	300	Wait after the broker refuses an order by rule (close-only, long-only). 0 = keep retrying.
Breakout legacy 3-channel switch	false	Old switch for 3 channels (20 / 10 / 55); ignored when "Breakout channels" is above 1.
AI: trend direction must agree (DI)	false	Requires the trend direction (+DI / -DI) to agree with the AI signal.
AI trend bias on the weak side	0.0	Research setting.
AI sell threshold offset	0.0	Research setting: lowers the sell threshold.
Auto spread: history (days)	30	Days of spread history learned.
Auto spread: percentile	70.0	The limit sits at this percentile of the broker's own spread.
Auto spread: lowest limit (x ATR)	0.12	Lower bound of the learned limit.
Auto spread: highest limit (x ATR)	0.40	Upper bound of the learned limit.
Auto spread: refuse broker above (0=off)	0.0	Refuse to trade on a broker whose median spread is above this share of ATR.
Auto spread: absolute cap (x p99, 0=off)	0.0	Extra cap at the 99th-percentile spread times this.
Auto spread: relearn every (hours)	168	How often the spread profile is relearned.
AI time-decay trailing (experimental)	false	Experimental.

Setting	Default	What it does
Time-decay strength	0.85	Experimental.
Time-decay floor	0.30	Experimental.
AI volatility lot scaling (experimental)	false	Experimental: scales AI lots by a volatility forecast.
Volatility lot factor min	0.6	Experimental.
Volatility lot factor max	1.4	Experimental.

Preset files (.set) from 90.01 to 90.04 still load: the internal names are the same, and the two fixed-lot settings of 90.08 start at 0 (off). Thirteen diagnostic settings (log details, history loader) are no longer shown; they always use their 90.02 default values, and values for them in old .set files are ignored.

6. Breakout channels and the balance limit

Every channel needs at least 0.01 lot, so a small balance trades fewer channels; at 522 USD on 9 October 2026 only the first channel traded.

How the Breakout engine trades. Each day after the New York close it measures the high and the low of each channel (20 days for the classic channel) and keeps one buy-stop near the high and one sell-stop near the low. It updates the price of the existing orders instead of opening new tickets, so the Time column in the Trade tab keeps the first placement time. Stop-loss 0.3 x daily ATR, target 1.5 x daily ATR; from +0.5R the stop trails the last 4 M15 bars, and at +1R it is at least at entry.

More channels. "Breakout channels" adds the next lengths of "Channel lengths (days, in order)": 20, 10, 55, 5, 15, 30, 40, 70, 90, 120, 150. Each channel is its own pair of orders with its own magic number (118840, 118841, ...), and "Breakout risk per trade (%)" is split equally between them.

The balance limit. With "Limit channels by balance" = true (default) the EA trades only as many channels as the balance can carry at 0.01 lot:

- channels traded = sizing balance x Breakout risk % x 1.5 / (loss of 0.01 lot at today's stop), rounded down, at least 1; the sizing balance is the real balance, or "Size as if balance were (0 = real)" when that is above 0;
- the 1.5 is "Min-lot tolerance (x risk)";
- with "Breakout fixed lot per order" above 0 the count uses the loss of that lot instead of 0.01 lot (90.08), so 0.02 lot trades about half as many channels (in 90.08 the daily log line still says "at the minimum lot", but its risk figure is for the fixed lot);
- on 9 October 2026 (gold about 4,190 USD) the stop was 23.69 USD per 0.01 lot.

Breakout risk per trade	2 channels from	3 channels from	6 channels from	11 channels from
3 %	1,050 USD	1,580 USD	3,160 USD	5,790 USD
2 %	1,580 USD	2,370 USD	4,740 USD	8,690 USD
0.70 % (default)	4,510 USD	6,770 USD	13,540 USD	24,820 USD

Below the first column the EA trades the first channel only. The amounts move with gold's daily range; the Experts log prints the current count once a day when it changes, for example `channel capacity: 1 of 11 channels trade today (20)`.

What our tests say. At the same total risk, 11 channels with the balance limit earned no more per unit of drawdown than the classic channel (4.70 vs 4.72): in that test more channels meant more trades, not more profit per unit of drawdown.

Turning the limit off is not recommended on a small account. With "Limit channels by balance" = false every channel trades 0.01 lot on both sides. If one side of 11 channels fills and then stops out, the loss is about 11 x 23.69 = 261 USD, half of a 522 USD account, and about twice that at the broker's backup stops if the VPS is offline. In the Strategy Tester at 522 USD the account stop halted the EA after 16 days (July 2026) and after 2 months (from January 2024).

7. Protection

The protections are brakes, not a guaranteed loss limit: gaps and slippage can make a real loss larger than the setting.

Protection (setting)	Engine	Default	What happens	How to trade again
Account stop: drop from peak	both	30 %	Equity 30 % below its peak since the EA was attached: both engines close all trades, delete pending orders and stop. Panel badge **HARD STOP**.	Remove the EA and attach it again (or change any input), then migrate to the VPS again. The peak restarts from the equity at that moment.
AI capital floor	AI	20 %	Equity falls to 20 % of deposits minus withdrawals: the AI engine closes its trades and stops. Badge **CAPITAL FLOOR HIT**.	Deposit so equity is above the floor, or lower the %, then reload the EA.
AI loss limit from its peak	AI	off	The AI engine stops after losing this % of the balance it had at its own profit peak. Badge **HARD STOP**.	Reload the EA after you have checked why.
AI daily loss limit (from the preset)	AI	3.5-8 %	No new AI trades for the rest of the day. Badge **DAILY LIMIT HIT**.	Automatic the next day.
AI pause after losses in a row	AI	5	Pause for the rest of the day. Badge **STREAK PAUSE**.	Automatic the next day.
AI drawdown cuts and margin check (from the preset)	AI	cuts: always	Risk is halved above the preset's first drawdown level and cut to a quarter above the second; a fixed lot ("AI fixed lot") is not cut. The margin check (on in SAFE, GROWTH and GROWTH+, and in ADVANCED CUSTOM when "AI drawdown defender" = true) skips a new AI trade whose margin would be above "AI max margin use (%)" of equity (20 % by default).	Automatic as the drawdown recovers.
Breakout daily equity stop, halt, risk cap per side	Breakout	off	Optional extra brakes for the Breakout engine (group 5).	Daily stop: the next day. Halt: set "Breakout halt counts from (date)" after the halt.
Breakout Friday rules	Breakout	120 / 60 min	Pending orders deleted 120 minutes and trades closed 60 minutes before the Friday session ends; the same on the day before Good Friday, Christmas and New Year.	New orders on the next trading day.
AI Friday close	AI	off	Closes AI trades at the set server time on Friday. Badge **WEEKEND CUT-OFF** after it.	Monday.

Protection (setting)	Engine	Default	What happens	How to trade again
Hidden stops	both	on (VPS)	The EA closes trades at its own stop and target; the broker holds a backup stop at twice the distance.	Keep the VPS running: offline, only the backup stop protects.

Deposits and withdrawals. Since 90.04 a withdrawal is not counted as a loss: when the EA sees it (within 2 minutes), the account stop and the AI drawdown cuts keep the same drawdown % as before it. A withdrawal made while the EA was off restarts both peaks from the equity at the next start. A deposit works as before: the peak follows equity up, and with it the stop level; a deposit after a withdrawal does not bring back the stop level from before the withdrawal. After a restart the deal history can arrive late: if the balance is lower than the deals explain, the account stop waits up to 5 minutes of connected time for it. For a withdrawal of more than about 25 % of equity the safe way is still: remove the EA, withdraw, attach it again and migrate. The Breakout daily equity stop (off by default) still counts a withdrawal as a loss, and after a withdrawal the Breakout halt (off by default) measures the same Breakout loss as a larger % of the smaller account.

Small accounts. On 500 USD one 0.01-lot trade can lose about 2-5 % (section 2), so five or six losses in a row can reach the 30 % account stop. In a Strategy Tester run from 1 July to 7 October 2026 at 522 USD, our signal-account settings (ADVANCED CUSTOM, AI risk 4 %, both engines) rose to 833 USD and then hit the account stop on 17 September; with the EXTREME 3 % preset the run was trade for trade the same. Both runs used the 90.03 sizing, where every AI trade was sized from at most 2 % of equity; 90.08 can trade larger AI lots with the same ADVANCED CUSTOM settings.

8. Dashboard

The panel answers three questions at a glance: is the EA allowed to trade, what is the AI engine seeing, and how close are the brakes.

- **Header**: Gold GodTier and its version; the [-] / [+] button folds the panel.
- **Status badge** with a countdown to the next M15 bar, and one line that says why no trade is open.
- **AI SIGNAL** card: the BUY and SELL scores against the preset's threshold, and the decision on the last bar.
- **POSITION** card: the AI trade's lot, entry and result in money and R; which profit stage is done and which comes next; the hidden stop and target and the broker's backup stop.
- **GUARDS** card: today's result against the daily loss limit (with a bar), losses in a row, spread against its limit, distance to the capital floor, the risk per trade in use, and a warning when the minimum lot risks more than the setting. With "AI fixed lot" set the AI engine trades that lot, but in 90.08 this card still shows the risk % (and can show the minimum-lot warning); the Classic panel's RISK / DL line shows the fixed lot.
- **Chips**: stop-loss on every trade, no grid, no martingale, the maximum number of AI positions, hidden or broker SL/TP.

Folded, the panel shows only the position, today's result with the losing streak, and the top AI score.

Badge	Meaning
SCANNING M15	Ready; waiting for an AI signal.
IN TRADE: BUY IN TRADE: SELL	An AI trade is open.
AUTOTRADING OFF	Algo Trading is off in this terminal. Normal on your computer when the EA runs on the VPS.

Badge	Meaning
MARKET CLOSED STARTING	Weekend, or waiting for the first price.
WRONG CHART	Not gold, or not M15.
SPREAD TOO HIGH ROLLOVER WINDOW SESSION INACTIVE	A filter blocks new AI entries for now.
COOLDOWN ACTIVE	Waiting the preset's pause between trades.
WEEKEND CUT-OFF	AI Friday rule: no new trades before the weekend.
DAILY LIMIT HIT STREAK PAUSE	Daily loss limit or losses in a row reached: no new AI trades today.
HARD STOP CAPITAL FLOOR HIT	A stop guard triggered (section 7).
SYNCING HISTORY	Loading price or deal history; trading starts when it is complete.
BROKER REFUSED ORDER FAILED NO FREE MARGIN	The broker did not accept an order; the line under the badge says why.
VALIDATION	The VALIDATION preset: no trading.

The Breakout engine on the panel. The modern panel shows the AI engine. The Breakout engine's state (channels, risk, pending and open orders, how many channels trade today) is written in the panel line of the Experts log, `BREAKOUT=...`, and its orders are in the Trade tab.

On a VPS there is no chart. With "Write panel to Experts log (VPS)" = true the EA writes the panel to the log every 15 minutes and at every status change; read it in the VPS tab, sub-tab Experts.

9. Broker and server time

On a GMT+2/+3 broker the defaults are right; on a GMT+0 broker such as Exness set "AI: detect broker GMT offset" = true.

The two engines read the clock differently:

- **Breakout engine**: works in New York close time. "Breakout server time zone" = Auto detects the broker's offset live and uses New York close in the Strategy Tester. The Experts log confirms it at start, for example `GGTB server time: GMT+3 -> New York close`.
- **AI engine**: its session filter, rollover window and Friday close are set for a broker whose server runs at GMT+2/+3. On a GMT+0 broker, "AI: detect broker GMT offset" = true shifts them; or set "AI time shift (hours)" by hand (3 in EU summer, 2 in winter).

Broker type	Breakout server time zone	AI: detect broker GMT offset	AI time shift (hours)
GMT+2/+3, New York close (for example VT Markets)	Auto - detect	false	0
GMT+0 (for example Exness)	Auto - detect, or Fixed GMT offset with 0	true	0

The preset files come in two versions for this reason: `_VT.set` for GMT+2/+3 brokers and `_EXNESS.set` for GMT+0 brokers; they differ only in this setting.

Spread and costs. "AI: auto spread limit (broker history)" learns your broker's normal spread and blocks AI entries when it is unusually wide; "AI max spread (% of ATR, 0=off)" is your ceiling for that limit, and each preset adds a maximum in gold pips. The commission per lot is read from your trade history, and AI lots are sized for 50 points of slippage.

10. Recommended setups by account size

Start with the defaults and raise risk only after you have watched the EA through a losing week; on small accounts the minimum lot, not the preset, sets the risk.

Account	AI trading preset	Breakout	Why
Demo, first weeks	SAFE - low risk	1 channel, 0.70 %	Learn the panel, the log and the Friday rules first.
500-1,000 USD	SAFE - low risk	1 channel, 0.70 %	Each 0.01-lot trade already risks about 2-5 % (section 2); a higher preset adds little and the swings are larger than the setting.
1,000-3,000 USD	SAFE or GROWTH	1 channel, 0.70 %	The minimum lot gets closer to the risk you set.
3,000 USD or more	GROWTH, or GROWTH+	1 channel, 0.70 %; more channels only as the balance limit allows (section 6)	GROWTH+ is built for 3,000 USD or more.
Experienced, higher risk	BEAST or ADVANCED CUSTOM	2-3 % with up to 11 channels, "Limit channels by balance" = true	Drawdowns of 25-28 % in our tests; never turn the balance limit off on a small account.

A fixed lot. "AI fixed lot" and "Breakout fixed lot per order" (90.08) trade the same size at any balance. At 500 USD one 0.02-lot trade can lose about 4-10 % at its stop, and a fixed lot is not reduced in a drawdown. At 0.03 lot or less (with the default 30 % first partial close) the AI engine skips its first partial close and the move of the stop to entry at 1R on a hedging account; the trailing stop still works.

Whatever you choose:

- keep "Account stop: drop from peak (%, 0=off)" on (30 % default);
- run one copy per account and symbol, on an MQL5 VPS;
- after a change, migrate again and read the start lines in the VPS log.

11. Troubleshooting and FAQ

Start with the panel badge and the line under it: they name the rule that is holding the EA back.

The EA opens no trades. Read the badge (section 8). SCANNING M15 means it is ready and waiting: the AI engine trades only when its score passes the preset's threshold, and some days have no signal. AUTOTRADING OFF, WRONG CHART, SPREAD TOO HIGH, ROLLOVER WINDOW, DAILY LIMIT HIT and VALIDATION each name their cause.

I set 11 Breakout channels but see only one pair of pending orders. The balance limit allows fewer channels on a small account (section 6). The Experts log says how many trade today, for example `channel capacity: 1 of 11 channels trade today (20)`.

The pending orders show yesterday's date. The EA moves its existing orders to the new levels instead of opening new tickets; the Time column keeps the first placement time.

My pending orders disappeared on Friday night. The Friday rule deletes them 120 minutes before the session ends (section 7). New orders follow on the next trading day.

The log says "SMALL DEPOSIT" or "min lot ... traded anyway". The minimum lot of 0.01 risks more than your setting. The EA trades it and warns. To stay within the setting, deposit more, or set "AI: always trade the minimum lot" / "Breakout: always trade the minimum lot" to false and accept fewer trades. With a fixed lot this warning can still appear in 90.08; the lot traded is the fixed lot.

The panel shows HARD STOP. A stop guard triggered. Read the log line that starts with HARD STOP or GT90 ACCOUNT GUARD, then follow section 7.

The panel on my computer says AUTOTRADING OFF. That is correct when the EA runs on the VPS. Switching it on would make two copies trade.

I changed a setting but the VPS still uses the old one. Migrate again after every change.

The Experts log says the Breakout engine is off on a netting account. Both engines together need a hedging account. On a netting account the AI engine runs alone; for the Breakout engine alone set "AI engine" = false.

Can I use my old preset files? Yes. Files from 90.01 to 90.04 load in 90.08; the two new fixed-lot settings start at 0 (off), and the 13 hidden diagnostic values in them are ignored. An ADVANCED CUSTOM file with "AI risk per trade" above 10 stops the start: set 10 or less.

I set "AI risk per trade" to 24 and the EA does not start. Since 90.08 ADVANCED CUSTOM accepts at most 10 %; above that the EA stops at the start (also when "AI fixed lot" is set) and the Experts log says `invalid inputs`. Set 10 or less. Before 90.08 any value above 2 % was held at 2 %, so 90.08 can trade larger AI lots with the same setting.

How do I trade a fixed 0.02 lot? Set "AI fixed lot" = 0.02 and "Breakout fixed lot per order" = 0.02 (in ADVANCED CUSTOM keep "AI risk per trade" at 10 or less), then migrate again. The Experts log shows `AI LOT: fixed 0.02` and `GGTB fixed lot 0.02` at the start.

Can I run it on other symbols or timeframes? It is built and tested for gold on M15 only.

I run two copies on one account. Give each copy its own "AI magic number" and "Breakout magic number (+1 per channel)"; the Breakout numbers use the next 10 as well.

12. Backtest results and risk disclosure

The tests show recent years that were good and older years that were not; they cannot show the future.

Data and period	Setup	Result
Gold 2004-2013, data never used to build the EA	Both engines	Lost 61-80 %
Gold 2005-2013	AI engine alone	1 of 9 years positive, profit factor 0.91
Gold 2004-2013	Breakout, classic channel, 1 % risk	Positive, but equity drawdown 36 %
Real ticks, another broker, 2015 - Sep 2026, 522 USD	Signal-account settings (ADVANCED CUSTOM, AI risk 4 %, both engines)	+3,361 USD, max equity drawdown 20.6 %, 12 of 12 years positive
VT Markets, Jan 2024 - Oct 2026, 522 USD	Same settings	+6,653 USD, max equity drawdown 24.2 %
VT Markets, Jul - Oct 2026, 522 USD	Same settings	Up to 833 USD, then the account stop on 17 Sep 2026

Read these numbers with care.

- The AI model was trained on data up to 2025, so its results from 2015 to 2025 are in-sample and overstate what to expect.
- Each line is one test path on one broker's data; spreads, swaps and execution differ between brokers and change over time.
- At 522 USD the 2024 test could trade more Breakout channels than an account of the same size can today, because gold was cheaper (section 6).
- These tests used the sizing of 90.03 and earlier, where every AI trade was sized from at most 2 % of equity. In 90.08 the same ADVANCED CUSTOM 4 % setting can size AI trades from up to 4 %, so results with it can differ (larger AI lots and swings).

> **Risk disclosure.** Trading leveraged CFDs on gold carries a high risk of loss. You can lose part or all of your deposit, and gaps or slippage can make a loss larger than any stop or guard. Backtest and past results do not guarantee future results. The EA needs a running terminal or VPS; an outage leaves open trades protected only by the broker's backup stop. Test on a demo account first and trade only money you can afford to lose. This manual explains how the EA works; it is not investment advice.

13. Changes since 90.03

90.08 (October 2026): lot size options. Entries, exits and the account guards are unchanged.

- New "AI fixed lot" and "Breakout fixed lot per order" (0 = off): set a lot and that engine trades it whatever the risk % (section 5).
- ADVANCED CUSTOM: "AI risk per trade (%, at most 10)" is applied as set up to 10 %; above 10 the EA does not start. Before, every AI trade was sized from at most 2 % of equity.
- The other presets are unchanged. With the new settings at 0 and ADVANCED CUSTOM at 2 % or less, 90.08 trades as 90.04 (tested deal by deal on SAFE and on ADVANCED CUSTOM at 2 %).

- Known in 90.08 (display only, the traded lot is right): with a fixed lot, the modern panel's risk line, some start-up log lines and the Breakout channel-capacity log line still describe the risk % and the minimum lot.

90.04 (October 2026): bug fixes. Trading rules unchanged.

- Deposits and withdrawals are no longer counted as losses (section 7).
- After a restart or a reconnect the account stop waits up to 5 minutes of connected time for a late deal history before it acts.
- The AI drawdown peak is kept per account, and the first start of 90.04 or later on an account works like a reload (the account stop starts from the equity then).