TradingCheckup

EA Code Audit report

GoldScalper_demo.mq5 · 55 lines · checked 2 Nov 2026

SAMPLE REPORT · fictional demo Expert Advisor with planted bugs

2	9	2	−76%
Fix first	Fix	Improve	Tester result

Headline

The EA compiles cleanly, but it **trades without a stop loss**, **doubles the lot after losses** and has **no loss limit**. In our Strategy Tester run it turned **$10,000 into $2,392** with an **81% drawdown** and up to **78 positions open at once**.

1. Summary
2. Compile and tester proof
3. Findings with line numbers
4. Fix plan
5. Limits

Every issue: line number, why it matters, the exact fix.
Compile log and Strategy Tester proof included.

EA Audit by TradingCheckup

1 · Summary

TradingCheckup

13 issues found, 2 of them account-killing. Do not run this EA on a live or prop-firm account until the "Fix first" items are corrected.

The 3 biggest risks

RISK	WHERE	CONFIRMED BY TESTER?
No stop loss on any order	`line 45`	Yes: 98 of 98 entries without SL
Lot doubles after every loss (martingale)	`line 41`	In the code; the tester run had no long losing run of closed deals
Signal fires on every tick, no position limit	`line 45`	Yes: up to 78 positions open at once

2 · Compile and tester proof

TradingCheckup

We compile your code in MetaEditor 5 and run it in the MT5 Strategy Tester, so findings are backed by evidence, not opinion.

CHECK	RESULT
Compile (MetaEditor 5)	**Result: 0 errors, 0 warnings**
Tester set-up	EURUSD.ms0 H1, 2025.07.01 - 2025.10.01, deposit $10,000 (offline test data)
Net profit	**−$7,607.90 (final balance $2,392.10)**
Max equity drawdown	**8 974.90 (81.24%)**
Profit factor	0.07
Trades / entries without stop loss	98 / 98
Most positions open at once	78
Tester errors	42 × "not enough money", 14 × failed orders

Tester ran on a copy where the hard-coded symbol name was replaced by the chart symbol (our offline test symbols have other names). One short tester run on our own test data is a stress test of the code, not a forecast of future results.

3 · Findings with line numbers

01 FIX FIRST — line 41

Lot size grows after a loss (martingale)

```
41  lastLot = lastLot * Multiplier;
```

WHY IT MATTERS

After every losing trade the lot is multiplied by 2. Five losses in a row turn 0.10 lots into 3.20 lots; one bad run can wipe the account.

HOW TO FIX

Size each trade from a fixed % of equity and the stop distance. Never multiply the lot after a loss; one losing run can wipe the account.

02 FIX FIRST — line 45

Orders are opened without a stop loss

```
45  trade.Buy(lastLot, _Symbol, ask, 0, ask + TakeProfit * _Point);
```

WHY IT MATTERS

Every buy is sent with stop loss 0. A trade that goes the wrong way has no exit until margin call. Confirmed in the tester: 98 of 98 entries had no stop loss.

HOW TO FIX

Send every order with a stop loss (in points from the entry, checked against the broker's stops level), or set it right after the fill and check that worked.

03 FIX — line 23

Symbol name is hard-coded

```
23  int fast = iMA("XAUUSD", PERIOD_H1, FastMA, 0, MODE_SMA, PRICE_CLOSE);
```

WHY IT MATTERS

The indicators read "XAUUSD" by name. On a broker that names gold XAUUSD.m or GOLD the EA reads nothing, or reads the wrong chart.

HOW TO FIX

Use _Symbol (the chart symbol) or an input, so the EA works on any broker suffix (EURUSD.m, EURUSDpro...).

04 FIX

line 23

Indicator handle created on every tick

```
23  int fast = iMA("XAUUSD", PERIOD_H1, FastMA, 0, MODE_SMA, PRICE_CLOSE);
```

WHY IT MATTERS

iMA() is called on every price tick, creating a new indicator each time. This slows the terminal and can run out of memory over days.

HOW TO FIX

Create indicator handles once in OnInit, check INVALID_HANDLE, release them in OnDeinit.

05 FIX

line 26

Copy of indicator/price data is not checked

```
26  CopyBuffer(fast, 0, 0, 2, f);
```

WHY IT MATTERS

If CopyBuffer returns fewer values (data still loading), f[0] and s[0] are read from an empty array and the EA can crash or trade on garbage.

HOW TO FIX

Check the number returned by CopyBuffer/CopyRates against the count you asked for before reading the array.

06 FIX

line 30

Division by a value that can be zero

```
30  double ratio = (iClose(_Symbol, PERIOD_H1, 1) - iLow(_Symbol, PERIOD_H1, 1)) / range;
```

WHY IT MATTERS

When the last bar has high = low (quiet market, gaps, weekends), the range is 0 and the division fails.

HOW TO FIX

Guard the divisor (if(x <= 0) return;) before dividing.

07 FIX

line 45

Trade result is not checked

```
45  trade.Buy(lastLot, _Symbol, ask, 0, ask + TakeProfit * _Point);
```

WHY IT MATTERS

trade.Buy() can fail (no money, market closed). The EA never checks, so it keeps firing. Confirmed in the tester: 42 "not enough money" and 14 failed orders.

HOW TO FIX

Wrap the call: if(!trade.Buy(...)) or check trade.ResultRetcode()/result.retcode, log the code and stop retrying on hard errors.

08 FIX

line 45, 48

Magic number missing or positions not filtered by magic

```
45  trade.Buy(lastLot, _Symbol, ask, 0, ask + TakeProfit * _Point);
```

WHY IT MATTERS

No magic number, and the close loop touches every position on the account, including trades from other EAs or manual trades.

HOW TO FIX

Call trade.SetExpertMagicNumber(InpMagic) (request.magic in raw OrderSend) and skip positions whose POSITION_MAGIC / symbol is not yours.

09 FIX

line 45

Fixed lot size is not adjusted to the broker's lot limits

```
45  trade.Buy(lastLot, _Symbol, ask, 0, ask + TakeProfit * _Point);
```

WHY IT MATTERS

The lot is never rounded to the broker's lot step or limits, so orders get rejected on brokers with different minimums.

HOW TO FIX

Round the lot to SYMBOL_VOLUME_STEP and clamp it between SYMBOL_VOLUME_MIN and SYMBOL_VOLUME_MAX before sending.

10 FIX

line 45

No daily loss limit and no equity drawdown stop (prop-firm rule risk)

```
45  trade.Buy(lastLot, _Symbol, ask, 0, ask + TakeProfit * _Point);
```

WHY IT MATTERS

No daily loss limit and no equity stop. Most prop firms fail an account at 4-5% daily loss; this EA would keep trading straight through it.

HOW TO FIX

Add a daily loss limit (from the day's starting balance/equity) and a max equity drawdown stop that closes and stops trading.

11 FIX

line 48

Closes positions in a forward loop (skips some)

```
48  for(int i = 0; i < PositionsTotal(); i++)
```

WHY IT MATTERS

Closing positions while counting up from 0 skips every second position, because the list shifts after each close.

HOW TO FIX

Loop backwards: for(int i = PositionsTotal()-1; i >= 0; i--).

12 IMPROVE

line 45

No check that trading is allowed before sending orders

```
45  trade.Buy(lastLot, _Symbol, ask, 0, ask + TakeProfit * _Point);
```

WHY IT MATTERS

The EA does not check that trading is allowed (AutoTrading off, market closed), which floods the journal with errors.

HOW TO FIX

Before sending, check TerminalInfoInteger(TERMINAL_TRADE_ALLOWED), MQLInfoInteger(MQL_TRADE_ALLOWED) and SYMBOL_TRADE_MODE.

13 IMPROVE

line 45

Per-bar logic runs on every tick (no new-bar check)

```
45  trade.Buy(lastLot, _Symbol, ask, 0, ask + TakeProfit * _Point);
```

WHY IT MATTERS

The entry logic runs on every tick, not once per bar, so the same signal can open many trades in the same hour. Confirmed: up to 78 positions were open at once.

HOW TO FIX

Run the signal logic once per bar: compare iTime(_Symbol,_Period,0) with the last bar time you stored.

4 · Fix plan

TradingCheckup

Work top to bottom, then send the file back for a free re-check (included in your revision).

- [ ] **Line 41**: Size each trade from a fixed % of equity and the stop distance. Never multiply the lot after a loss; one losing run can wipe the account.
- [ ] **Line 45**: Send every order with a stop loss (in points from the entry, checked against the broker's stops level), or set it right after the fill and check that worked.
- [ ] **Line 23**: Use _Symbol (the chart symbol) or an input, so the EA works on any broker suffix (EURUSD.m, EURUSDpro...).
- [ ] **Line 23**: Create indicator handles once in OnInit, check INVALID_HANDLE, release them in OnDeinit.
- [ ] **Line 26**: Check the number returned by CopyBuffer/CopyRates against the count you asked for before reading the array.
- [ ] **Line 30**: Guard the divisor (if(x <= 0) return;) before dividing.
- [ ] **Line 45**: Wrap the call: if(!trade.Buy(...)) or check trade.ResultRetcode()/result.retcode, log the code and stop retrying on hard errors.
- [ ] **Line 45, 48**: Call trade.SetExpertMagicNumber(InpMagic) (request.magic in raw OrderSend) and skip positions whose POSITION_MAGIC / symbol is not yours.
- [ ] **Line 45**: Round the lot to SYMBOL_VOLUME_STEP and clamp it between SYMBOL_VOLUME_MIN and SYMBOL_VOLUME_MAX before sending.
- [ ] **Line 45**: Add a daily loss limit (from the day's starting balance/equity) and a max equity drawdown stop that closes and stops trading.
- [ ] **Line 48**: Loop backwards: for(int i = PositionsTotal()-1; i >= 0; i--).
- [ ] **Line 45**: Before sending, check TerminalInfoInteger(TERMINAL_TRADE_ALLOWED), MQLInfoInteger(MQL_TRADE_ALLOWED) and SYMBOL_TRADE_MODE.
- [ ] **Line 45**: Run the signal logic once per bar: compare iTime(_Symbol,_Period,0) with the last bar time you stored.

5 · LIMITS

- The audit checks code safety and logic. It does not judge whether the strategy will make money.
- The tester run uses our offline test data and one period; your broker's data, spreads and fills differ.
- A clean audit means none of our checks fired, not that the EA is bug-free. Test on a demo account before going live.

EA Audit by Trading Checkup (ABN 66 763 463 348). General information about your source code, not financial advice. Your original file is not changed.