

Rsi Midline Trend Continuation

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Trend Continuation	Configurable (H1–H4 recommended)	www.algotbot.live

⚠ Important Disclaimer This document is for educational and informational purposes only. It does not constitute financial or investment advice. Trading forex, CFDs, and other leveraged instruments involves substantial risk of loss and is not suitable for all investors. Past backtest performance does not guarantee future results. Never trade with capital you cannot afford to lose.

Overview

Rsi Midline Trend Continuation is a disciplined trend-following Expert Advisor. Its core premise is simple: strong trends rarely reverse on every wobble — they pause and resume. Rather than guessing tops and bottoms, the EA trades **only in the direction of an already-established trend** and waits for a shallow momentum pullback to reset before joining the move.

The trend is defined by a fast/slow EMA relationship whose slower anchor must also be sloping the right way. The trigger is momentum resuming with the trend: the RSI reclaiming its **50 mid-line** from the pullback side. This is a continuation signal, not an oversold/overbought reversal guess — the EA never fights the prevailing direction.

Every position is protected by an ATR-based stop, a fixed reward-multiple take-profit, and risk-percent position sizing. The EA holds only one position at a time and automatically moves the stop to break-even once the trade has advanced one full unit of risk (+1R), removing exposure while letting winners run to target. All decisions are made on **closed bars** of the chart's timeframe, so behaviour is stable and repeatable in the Strategy Tester.

How It Works

1. Trend Filter

The EA first establishes whether a tradable trend exists using two exponential moving averages plus a slope check on the slow EMA:

- **Trend up:** Fast EMA is above Slow EMA *and* the Slow EMA is sloping up (its value now is higher than `SlopeLookback` bars ago).
- **Trend down:** Fast EMA is below Slow EMA *and* the Slow EMA is sloping down.

Requiring both alignment *and* slope filters out flat, choppy ranges where an EMA cross carries little directional conviction. If neither condition holds, no trade is considered.

2. The Pullback Trigger

Within a valid trend, the EA watches the RSI for a shallow pullback that resets momentum and then resumes:

- **Long entry:** in an uptrend, RSI was *below* 50 on the previous bar and closes *at or above* 50 on the just-closed bar.
- **Short entry:** in a downtrend, RSI was *above* 50 on the previous bar and closes *at or below* 50 on the just-closed bar.

Why the 50 mid-line? The RSI 50 level is momentum equilibrium. A dip below 50 (in an uptrend) marks a pause; the reclaim of 50 marks momentum turning back with the trend. This is a continuation entry, deliberately different from the classic RSI 30/70 reversal reading.

3. Entry, Stop Loss & Take Profit

On a valid long signal the EA buys at the Ask; on a short signal it sells at the Bid. Protective levels are derived from volatility:

- **Stop loss:** `AtrStopMult × ATR` away from entry. The distance is never allowed to be tighter than the broker's minimum stop level plus current spread (a safety floor).
- **Take profit:** the stop distance multiplied by `RewardRatio`, giving a fixed reward-to-risk target (default 1.8R).

4. Position Sizing

Lot size is calculated so that a full stop-out loses approximately `RiskPercent` of the account balance. The EA reads the symbol's tick size and tick value, computes the loss-per-lot at the chosen stop distance, and rounds down to a valid volume step — then clamps the result between the broker's minimum and maximum volume.

```

riskMoney   = Balance × (RiskPercent / 100)
lossPerLot  = (stopDistance / tickSize) × tickValue
lots        = floor( riskMoney / lossPerLot / volumeStep ) × volumeStep

```

5. Trade Management — Break-Even at +1R

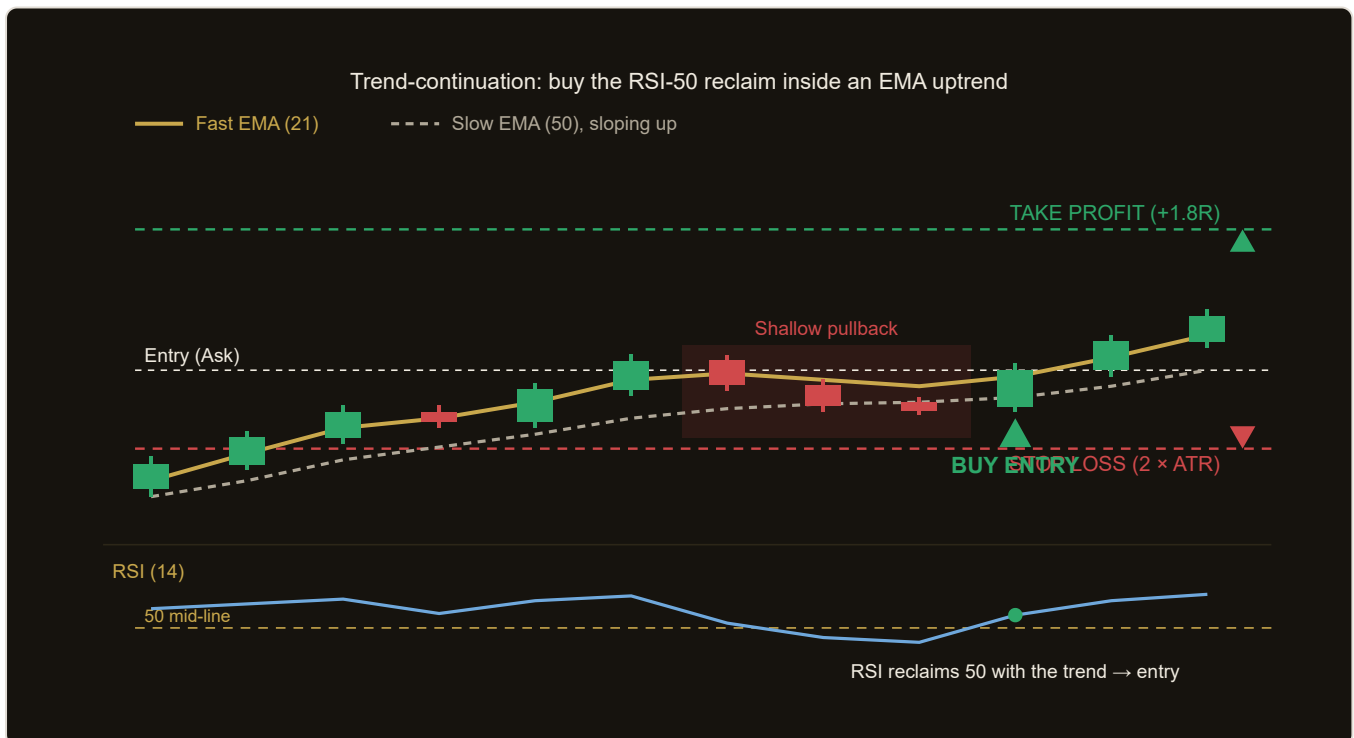
The EA manages one position at a time. Once price has advanced by one full unit of risk (the initial stop distance) in the trade's favour, the stop is pulled up to the entry price. From that point the trade is risk-free: it either runs on to the take-profit or is closed at break-even. No new position is opened while one is already active.

Walk-through — a long trade

Market is trending up (Fast EMA > Slow EMA, Slow EMA rising). Price dips and RSI slides to 46 (below 50). On the next closed bar RSI prints 55 — it has reclaimed the mid-line from below. The EA buys at the Ask, sets a stop 2×ATR below entry and a take-profit 1.8× that distance above. When price rises by one stop-distance (+1R), the stop is moved to break-even. The trade then targets the take-profit with zero remaining risk.

Strategy in Action

The illustration below shows an example of how the strategy identifies a setup and triggers its entry and exit. This is a simplified, illustrative example for educational purposes — not real market data.



Illustrative example only. Actual market behaviour varies.

Parameters

Parameter	Default	Description
FastEma	21	Fast EMA period — the responsive side of the trend filter. Automatically capped below <code>SlowEma</code> if set too high. Range 8–50, step 1.
SlowEma	50	Slow EMA period — the anchor trend line whose slope must confirm direction. Range 30–120, step 5.
RsiPeriod	14	Look-back for the RSI momentum oscillator used for the 50 mid-line reclaim trigger. Range 7–28, step 1.
SlopeLookback	5	Bars back used to measure the slow-EMA slope, ensuring the trend is sloping rather than flat. Range 2–15, step 1.
AtrPeriod	14	ATR look-back that sets the volatility-based stop distance. Range 7–30, step 1.
AtrStopMult	2.0	Stop-loss distance as a multiple of ATR. Larger values give wider, more forgiving stops. Range 1.0–4.0, step 0.25.
RewardRatio	1.8	Take-profit distance as a multiple of the stop distance (reward-to-risk). Range 1.0–3.5, step 0.1.
RiskPercent	0.75	Percent of account balance risked on a full stop-out; drives position sizing. Range 0.1–2.0, step 0.05.
Magic	730114	Unique identifier so the EA only manages positions it opened. Change it if running multiple EAs on the same account.

Recommended Settings

The defaults are a balanced starting point for liquid instruments on intraday timeframes. The strategy is timeframe-agnostic — it evaluates whatever chart it is attached to — but it performs best where trends have room to develop between pullbacks.

Suggested Starting Point

Setting	Value	Notes
Timeframe	H1-H4	Enough structure for clean EMA trends and shallow pullbacks; less noise than sub-hourly charts.
Instruments	Major FX / indices	Trending, liquid markets with tight spreads suit a continuation approach.
Risk per trade	0.5-1.0%	Default 0.75% keeps drawdowns controlled while position sizing scales with the account.
Reward ratio	1.6-2.0	Higher targets need stronger trends to reach; lower targets raise hit-rate but shrink average win.

Tip: Because the EA acts only on closed bars, results are consistent between the Strategy Tester and live trading. Optimise `AtrStopMult` and `RewardRatio` together — a wider stop usually pairs with a slightly lower reward ratio to keep the target reachable.

Optimisation caution: Fitting parameters too tightly to historical data (curve-fitting) produces backtests that look excellent but fail forward. Always validate on out-of-sample data and forward-test on a demo account before committing real capital.

How to Install on MetaTrader 5

- 1 Copy `RsiMidlineTrendContinuation.ex5` to your MT5 `MQL5\Experts\` folder
- 2 Restart MetaTrader 5 and refresh the Navigator panel
- 3 Drag the EA onto a chart matching the recommended symbol and timeframe
- 4 Configure the input parameters and click **OK**
- 5 Enable **Algo Trading** in the MT5 toolbar

Risk Warning

Trading foreign exchange, CFDs, and other leveraged financial instruments involves substantial risk of loss and is not suitable for all investors. The strategies and tools described in this document are provided for **educational purposes only** and do not constitute financial advice, investment recommendations, or solicitation to trade. Always consult a qualified financial adviser before making trading decisions. Past backtest performance is not indicative of future results.