

Volume Absorption Reversal

Expert Advisor Documentation

PLATFORM

MetaTrader 5
(MT5)

TYPE

Mean Reversion (Volume Exhaustion
Fade)

TIMEFRAME

M5 – H1 (single
timeframe)

WEBSITE

www.algotbot.live

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Overview

Volume Absorption Reversal is a mean-reversion Expert Advisor built on the classic Wyckoff "*Effort vs Result*" principle: when a large surge of participation (effort) fails to produce a matching move (result), the aggressor side is being **absorbed**, and price tends to snap back toward value.

Unlike a breakout system, Volume Absorption Reversal deliberately trades *against* the closing thrust — it fades selling climaxes at fresh lows and buying climaxes at fresh highs. To avoid the usual "catching a falling knife" failure mode, an entry is only taken inside a narrow, high-quality window where four independent conditions line up simultaneously. Every rule is expressed in ATR, bar structure, and tick volume, so the logic is point-size and timeframe agnostic — it runs on whatever single primary timeframe the chart uses and suits ranging FX majors, gold, or an index on the M5–H1 range.

Core idea: A genuine reversal shows itself as a *climax bar* — heavy volume, a fresh price extreme, but a close rejected back into the bar's range. That divergence between huge effort and no lasting result is the edge this EA is designed to harvest.

How It Works

Signals are evaluated **only on closed bars**. On each newly-closed bar, the just-closed bar becomes the *trigger* (shift 1), and all baselines — average volume, EMA "value" line, and ATR — are computed from the bars *prior* to it, so a level never sees itself. When flat, the EA looks for a setup; when in a trade, it manages the open position.

Entry Logic (long side; short is the exact mirror)

A long (buy) signal requires **all four** of the following on the trigger bar:

1. **Fresh extreme** — the bar prints the lowest low of the last `SwingBars` completed bars. There is a genuine down-thrust to fade, not mid-range noise.
2. **Climax effort** — the bar's tick volume is at least `VolSurgeMult ×` the average volume of the prior `VolLookback` bars. Real size stepped in; this is a participation spike, not a drift.
3. **Failed result** — despite the new low, the bar *closes* in the upper `CloseLoc` of its own range (a long lower wick / rejection). The selling effort was absorbed and price closed back up.
4. **Over-extension** — the new low pierces at least `StretchMult × ATR` below the EMA "value" line. Only moves already stretched from value are faded, where reversion has room and probability.

The short setup is the exact mirror: a fresh *highest high*, a climax volume surge, a close in the lower `CloseLoc` of the range (long upper wick), and a high stretched at least `StretchMult × ATR` above the EMA.

Example — long absorption fade

Suppose ATR = 20 pts, EMA (value line) = 1.10500, and `StretchMult` = 1.00. The trigger bar drops to a fresh low of 1.10230 — that is 27 pts below the EMA, more than $1 \times \text{ATR}$, so it is over-extended. Its tick volume is $2.3 \times$ the recent average (a climax), and it closes at 1.10380, back in the upper 70% of its range (rejection). All four conditions align, so a buy is placed at the Ask.

Exit Logic — Stop, Target & Break-Even

- **Structural stop loss** — placed just beyond the climax bar's extreme by `SlBufferMult × ATR`. For a long, $\text{SL} = \text{trigger low} - \text{SlBufferMult} \times \text{ATR}$. If the extreme is genuinely broken (a real continuation), the trade is closed fast and cheap.
- **Fixed take-profit** — an objective, pre-defined target at `RewardMult ×` the initial risk (R). For a long, $\text{TP} = \text{entry} + \text{RewardMult} \times (\text{entry} - \text{SL})$.
- **Break-even ratchet** — once open profit reaches **1R**, the stop is moved to the entry price. A setup that starts working can never turn into a full loss.

One position per Magic: the EA holds at most a single open position at a time (identified by its **Magic** number). It re-syncs its break-even bookkeeping automatically after a terminal restart, so an existing position is still managed correctly.

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
VolLookback	20	Window of prior bars used for the average-volume baseline — the "effort" reference. Range 10–60, step 2.
SwingBars	8	Window over which the climax bar must be a fresh local extreme (lowest low / highest high). Range 3–25, step 1.
VolSurgeMult	1.80	Climax volume as a multiple of the average — how big the participation spike must be to qualify. Range 1.20–4.00, step 0.10.
CloseLoc	0.60	Required close location within the bar's range (0 = low, 1 = high). Higher = stronger rejection / longer wick. Range 0.50–0.90, step 0.05.
EmaPeriod	50	Period of the EMA "value" line the climax bar must be stretched away from. Range 20–200, step 10.
AtrPeriod	14	ATR length used for both the over-extension filter and the structural stop buffer. Range 7–30, step 1.
StretchMult	1.00	How far (in ATR) the extreme must pierce beyond the EMA to count as over-extended. Range 0.00–4.00, step 0.25.
SIBufferMult	0.50	ATR buffer placed beyond the climax extreme for the protective stop. Range 0.10–2.00, step 0.10.
RewardMult	2.00	Take-profit as a multiple of the initial risk (R). Range 0.50–5.00, step 0.25.
Lots	0.10	Order volume in lots. Range 0.01–1.00, step 0.05.
Magic	7723	Magic number identifying this EA's positions (one position per Magic). Range 0–9,999,999, step 1.

Recommended Settings

Volume Absorption Reversal is designed for markets that spend time ranging and reverting to value rather than trending strongly. Because everything is normalised to ATR and volume, the defaults are a sound starting point across instruments and timeframes.

- **Instruments:** ranging FX majors (e.g. EUR/USD, EUR/GBP), gold (XAU/USD), or a stock index.
- **Timeframe:** a single primary timeframe in the **M5–H1** range. Lower timeframes generate more signals but noisier climaxes; higher timeframes give fewer, cleaner setups.

- **Starting point:** keep the defaults, then optimise `VolSurgeMult`, `StretchMult`, and `RewardMult` per instrument.

Tuning tips: Raise `VolSurgeMult` and `StretchMult` for fewer but higher-conviction fades; lower them for more frequent signals. A larger `CloseLoc` demands a longer rejection wick (stronger absorption). Increase `RewardMult` for a higher reward-to-risk target at the cost of a lower hit rate.

Always validate first. Backtest and forward-test on a demo account with your broker's exact symbol, spread, and tick-volume characteristics before risking real capital. Tick volume is broker-dependent, and this strategy relies on it directly.

How to Install on MetaTrader 5

- 1 Copy `VolumeAbsorptionReversal.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

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