

Volume Surge Trend Pullback

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Trend Pullback Continuation	M15 – H1	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

Volume Surge Trend Pullback is a trend-following, pullback-continuation Expert Advisor for MetaTrader 5. Rather than chasing breakouts or guessing tops and bottoms, it waits for an established trend to *pause*, lets price pull back toward its moving-average value, and then re-enters in the trend's direction only when the resumption is confirmed by real participation.

The strategy's defining feature — and its namesake — is that it will not act on a pullback reclaim unless the trigger candle carries a genuine **volume surge**: tick volume above a configurable multiple of its recent average. Requiring conviction on the trigger bar filters out the low-quality "fake" reclaims that plague simple moving-average pullback systems, where price nudges back over the average on thin, drifting volume and then rolls over again.

All decision logic evaluates **closed bars only** using new-bar detection and shift-based reads, so signals never repaint. Money and risk management are entirely ATR-based: a fixed-risk stop-loss, an R-multiple take-profit, an ATR chandelier trailing stop, a maximum-hold time exit, and strict single-position exposure control (no pyramiding).

How It Works

Every closed bar, the EA evaluates a layered set of conditions. A trade is opened only when the trend regime, the pullback-and-reclaim, both trigger confirmations, and the momentum guard all agree.

1. Trend Regime Filter

The EA first confirms a directional regime using a two-EMA stack plus a slope check on the slow EMA:

- **Uptrend:** the fast EMA is above the slow EMA *and* the slow EMA is higher than it was `SlopeLookback` bars ago (rising baseline).
- **Downtrend:** the fast EMA is below the slow EMA *and* the slow EMA is falling.

If neither condition holds, the market is treated as rangebound and no new trades are considered.

2. Pullback & Reclaim of the Fast EMA

Within a valid trend, the EA looks for a counter-trend dip that resolves back in the trend's favour on the just-closed bar:

- **Long reclaim:** the previous bar closed *below* the fast EMA, and the current (just-closed) bar closes back *above* it.
- **Short reclaim:** the previous bar closed above the fast EMA, and the current bar closes back below it.

3. Two Confirmations on the Trigger Bar

A reclaim alone is not enough. The trigger candle must additionally show **both** of the following:

- **Momentum break:** a bullish candle (close > open) that closes above the prior bar's high for longs, or a bearish candle that closes below the prior bar's low for shorts — the candle must break prior structure, not merely close green/red.
- **Volume surge:** the trigger bar's tick volume must exceed `VolMultiplier` × the average volume of the preceding `VolPeriod` bars. (If volume data is unavailable, this check passes so the strategy still functions.)

Why the volume filter matters: A moving-average reclaim on shrinking volume usually reflects drift, not demand. By demanding a burst of participation on the exact bar that reclaims the EMA and breaks structure, the EA aligns its entries with the moments when institutional flow is most likely re-entering the trend.

4. Over-Extension Guard (RSI)

As a final filter, longs are blocked when RSI is at or above `RsiUpper` (default 72) and shorts are blocked when RSI is at or below `RsiLower` (default 28). This prevents chasing a move that is already stretched and prone to mean-revert against a fresh entry.

5. Entry, Stops & Targets

When all conditions align, the EA submits a single market order sized at `Lots`. Risk is measured in ATR units of the just-closed bar:

- **Stop-loss:** `AtrSlMult` × ATR from the entry price (the fixed-risk "R").
- **Take-profit:** `RewardRisk` × the stop distance (a fixed R-multiple target, default 2R).

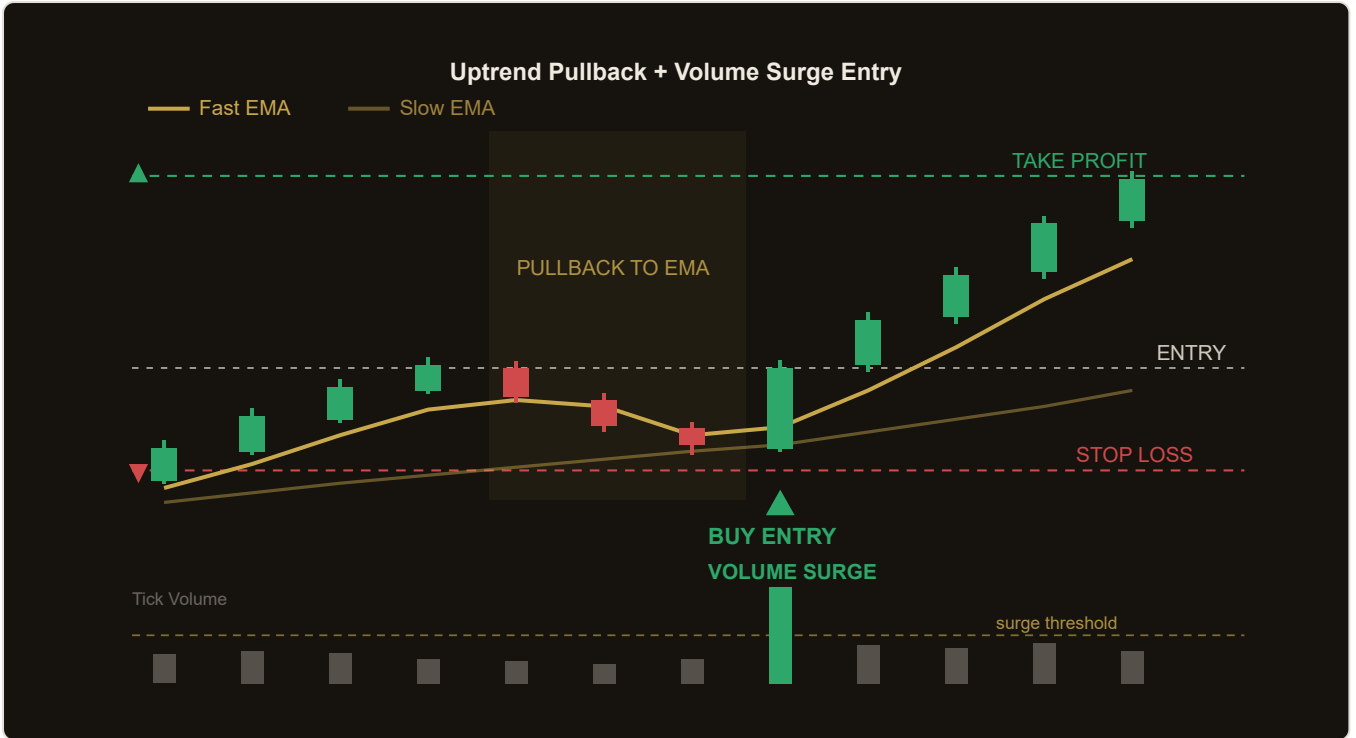
6. Trade Management

- **ATR chandelier trailing stop:** while a trade is open, the stop is ratcheted in the trade's favour only, trailing `TrailAtrMult` × ATR behind price. It never loosens.
- **Time exit:** a position held for `MaxHoldBars` bars without resolving is closed at market to free up capital.
- **Single-position exposure control:** only one position (per symbol + magic number) exists at a time — there is no pyramiding, which caps exposure and simplifies money management.

No repainting: Every indicator read and candle comparison uses closed bars (shift 1 = newest closed bar, shift 2 = the bar before it). The forming bar is used only to detect that a new bar has opened. Signals that appear in a backtest will appear identically in live trading.

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. It depicts an uptrend: price rallies, pulls back to the rising fast EMA, and then a strong bullish candle with a clear volume surge reclaims the EMA and breaks the prior high, triggering the long entry.



Illustrative example only. Actual market behaviour varies.

Parameters

The following inputs form the headline optimization set. Each row lists the default value and the tunable range (minimum, maximum, and step) used for backtesting and optimization.

Parameter	Default	Description
EmaFast	20	Fast EMA period. Price must pull back below and then reclaim this EMA on the trigger bar. Range 10–40, step 2.
EmaSlow	50	Slow EMA period defining the trend baseline; must be rising (up) or falling (down) to confirm the regime. Range 30–120, step 5.
SlopeLookback	5	Number of bars back used to measure the slow-EMA slope (its direction). Range 2–15, step 1.
RsiPeriod	14	RSI period used as the over-extension guard. Range 7–21, step 1.
AtrPeriod	14	ATR period driving stop-loss, take-profit and trailing distances. Range 7–28, step 1.
VolPeriod	20	Lookback length for the average tick-volume baseline (bars before the trigger). Range 10–50, step 5.
VolMultiplier	1.5	Volume-surge multiplier. Trigger-bar volume must exceed this × the average to qualify. Range 1.0–3.0, step 0.1.
AtrSIMult	1.5	Stop-loss distance as a multiple of ATR (the fixed-risk "R"). Range 0.8–3.0, step 0.1.
RewardRisk	2.0	Take-profit expressed as an R-multiple of the stop distance. Range 1.0–4.0, step 0.25.
TrailAtrMult	2.0	ATR chandelier trailing-stop distance (multiple of ATR). Range 1.0–4.0, step 0.25.
MaxHoldBars	40	Maximum bars to hold a trade before a time-based exit closes it. Range 10–150, step 5.
Lots	0.10	Fixed trade volume in lots. Range 0.01–1.0, step 0.05.

Secondary tunables: Beyond the headline set, the EA exposes `RsiUpper` (default 72, blocks longs above this RSI), `RsiLower` (default 28, blocks shorts below this RSI), `MaxSpread` (default 0 — the spread filter is disabled; set to a value in points to skip entries in wide spreads), and `Magic` (default 20250705, the order identifier). These are kept out of the headline set to keep optimization lean.

Recommended Settings

The strategy is designed for liquid instruments where tick volume is a meaningful proxy for participation. Because it trades pullbacks within a trend, it performs best on timeframes with enough structure to define a trend yet enough bars for the volume average to be reliable.

SYMBOLS

- **Major FX pairs** (e.g. EUR/USD, GBP/USD, USD/JPY) — tight spreads and steady tick volume.
- **Index CFDs and metals** (e.g. US30, XAU/USD) where trends are pronounced and volume surges are clear.

TIMEFRAME

- **M15 to H1** is the intended operating range. Lower timeframes generate more signals but are noisier; H1 tends to produce cleaner, higher-conviction pullbacks.

Example starting configuration (EUR/USD, H1)

Keep `EmaFast=20`, `EmaSlow=50` for a classic trend stack. Leave `VolMultiplier=1.5` to require a moderate surge, `AtrSlMult=1.5` and `RewardRisk=2.0` for a 2R target, and `TrailAtrMult=2.0` to let winners run under a chandelier trail. Set `Lots` to match a per-trade risk you are comfortable with given your account size and the ATR of the symbol.

Tuning tip: If entries feel too frequent or too weak, raise `VolMultiplier` toward 2.0–2.5 to demand a stronger surge. If they feel too rare, lower it toward 1.2. Widen `AtrSlMult` in volatile conditions to avoid premature stop-outs, and adjust `MaxHoldBars` to match how long moves typically persist on your chosen timeframe.

Always validate first. Before running on a live account, backtest across multiple symbols and market regimes and forward-test on a demo account. Tick volume is broker-dependent, so results can differ between brokers. Position sizing via `Lots` is fixed — ensure it is appropriate for your account and risk tolerance.

How to Install on MetaTrader 5

- 1 Copy `VolumeSurgeTrendPullback.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

Compiling from source: If you have `VolumeSurgeTrendPullback.mq5`, place it in `MQL5\Experts\`, open it in MetaEditor, and press **Compile** (F7) to produce the `.ex5` before attaching it to a chart.

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.