

Settlement Pressure Continuation

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Order-Flow Continuation

TIMEFRAME

Any (single timeframe)

WEBSITE

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

Settlement Pressure Continuation is an original, first-principles Expert Advisor built entirely from raw OHLC data. It uses no published indicator, no price-action pattern, no support/resistance, and no SMC/ICT/Wyckoff concepts. Instead of reading close-to-close change the way conventional momentum tools do, it reads *where price chose to settle inside each bar's own range* and weights every bar by the energy it expended — its range.

The core hypothesis: when participants repeatedly force the close toward one extreme of *expanding* bars, that reveals a persistent order-flow imbalance which tends to **continue** for several bars before neutralising. A doji or a bar that closes mid-range carries little conviction and should barely count; a wide bar that slams shut at its high carries a lot. Weighting settlement by range is what encodes that conviction.

From this idea the EA computes a single, dimensionless quantity it calls the **settlement pressure**, **P**, and trades in the direction of an accelerating imbalance — while using a self-computed volatility to size its risk and a dynamic exit that banks or cuts the moment the edge neutralises.

What makes it different: Most indicators average *price*. **P** is not a moving average of price — it is the ratio of net close-vs-midpoint displacement to the total range traversed. It answers a different question: not "where has price gone?" but "how insistently has price been settling toward one extreme, relative to how hard it worked to get there?"

How It Works

The settlement pressure P

For each bar i , define its intrabar settlement relative to the bar's own geometric centre $M = (High + Low) / 2$:

$$s_i = (2 \cdot Close - High - Low) / (High - Low) \quad \in [-1, +1]$$

Here $+1$ means the bar closed exactly at its high, -1 means it closed exactly at its low, and 0 means it settled at its midpoint. Each bar's settlement is then **energy-weighted** by its range $R = High - Low$ and averaged over the last `Window` bars. The weights cancel algebraically, collapsing to a clean, dimensionless ratio:

$$P = \frac{\sum (2 \cdot Close - High - Low)}{\sum (High - Low)} \quad \in [-1, +1]$$

- **P near +1** — closes persistently pinned high within wide bars → bullish imbalance.
- **P near -1** — the mirror image → bearish imbalance.
- **P near 0** — balanced / indecisive settlement, no tradeable edge.

Entry logic (distinct long and short)

A fresh position is opened only when the imbalance is both strong *and* accelerating, and the most recent closed bar agrees with the direction:

- **LONG** when $P \geq +EntryPressure$ *and* P is rising (more extreme than it was `ConfirmBars` bars ago) *and* the last closed bar itself settled above its own midpoint ($2 \cdot Close - High - Low > 0$).
- **SHORT** when $P \leq -EntryPressure$ *and* P is falling *and* the last closed bar settled below its own midpoint.

The "rising / falling versus `ConfirmBars` ago" clause is what demands the imbalance be *accelerating* rather than stale — the EA wants to join a building pressure, not a fading one.

No repaint: The EA acts once per newly-closed bar. Shift 0 is the still-forming bar; when its time advances, the bar at shift 1 has just closed — that completed bar is the one evaluated. Every decision is made on finalised data only.

Dynamic, self-adapting risk

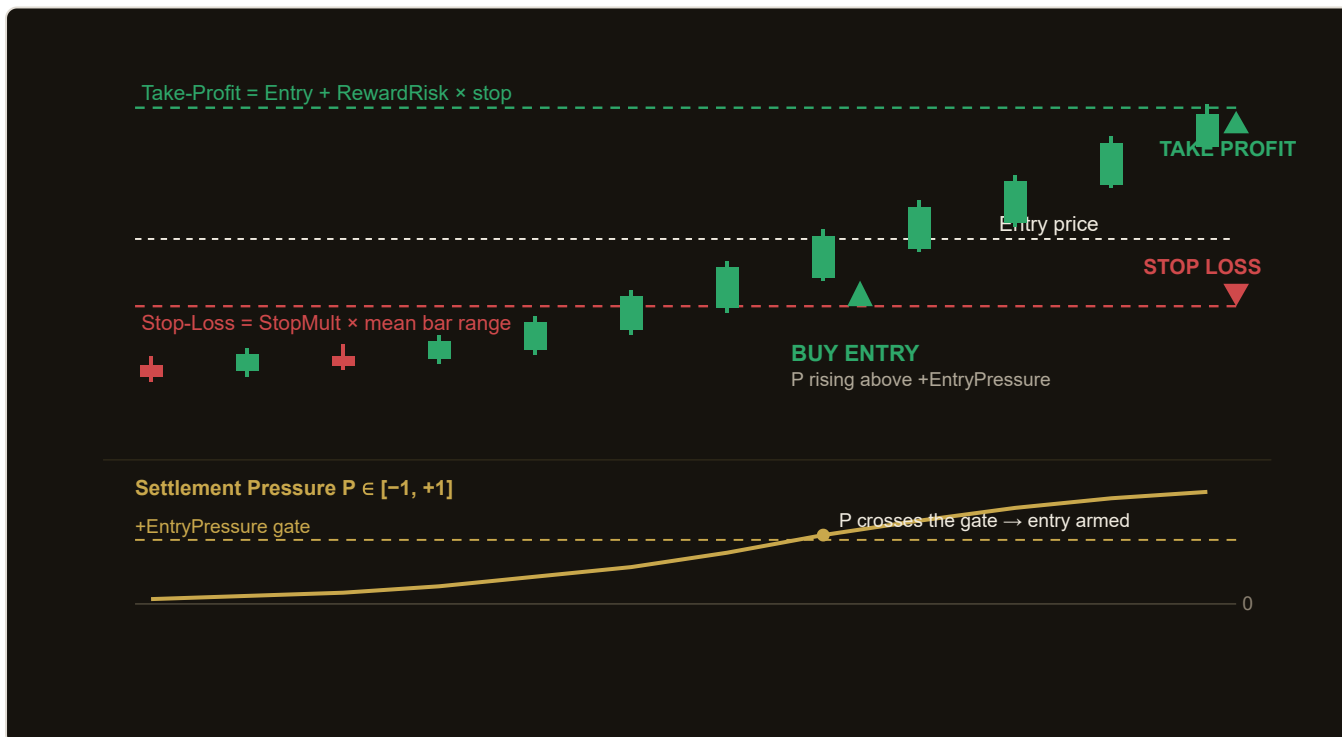
- **Self-computed volatility:** the stop distance scales to the mean raw bar range over `RangePeriod` bars — the strategy's own measure of scale, with no external indicator. The same rules therefore auto-size in calm versus violent regimes.
- **Stop & target:** `stop distance = StopMult × mean bar range`, and `take-profit distance = RewardRisk × stop distance`.
- **Dynamic exit:** beyond the hard SL/TP, the position is closed the instant `P` crosses back through zero — i.e. the settlement edge that justified the trade has neutralised. This banks or cuts early instead of always waiting for a fixed level.

Position management

The EA manages a single position at a time per magic number (`42071` by default). While a position is open it evaluates only the dynamic zero-cross exit; new entries are considered only when flat. The strategy is symbol- and timeframe-agnostic — every bar read uses the primary timeframe, so it runs on whatever chart it is attached to.

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.

Reading the illustration

Early bars close mid-range (settlement pressure hovers near zero). As bars expand and close ever nearer their highs, **P** climbs and pushes above the **+EntryPressure** gate while still rising — an *accelerating* bullish imbalance. That arms the long. The stop sits one **StopMult × mean-range** below entry and the target sits **RewardRisk ×** further above. Price continues in the direction of the imbalance and reaches take-profit; had **P** instead collapsed back through zero first, the dynamic exit would have closed the trade early.

Parameters

Parameter	Default	Description
Window	20	Number of closed bars N in the energy-weighted settlement pressure P . Range 8–40, step 2. Larger = smoother, slower to react.
EntryPressure	0.30	Magnitude gate: P must reach this value before an entry is allowed (P lives in $[-1, +1]$). Range 0.10–0.70, step 0.05. Higher = fewer, more insistent signals.
ConfirmBars	3	Acceleration gate: P must be more extreme than it was this many bars ago. Range 1–8, step 1. Higher demands a longer, cleaner build.
RangePeriod	14	Lookback for the self-computed volatility (mean raw bar range) used to size stops. Range 5–40, step 1.
StopMult	2.0	Stop distance = StopMult × mean bar range . Range 0.5–4.0, step 0.1. Higher = wider stops, more breathing room.
RewardRisk	2.0	Take-profit distance = RewardRisk × stop distance . Range 0.5–5.0, step 0.25.
Lots	0.10	Fixed trade size in lots. Range 0.01–1.0, step 0.05.
Magic	42071	Magic number used to identify and manage this EA's positions. One position at a time per magic.

Recommended Settings

The strategy is symbol- and timeframe-agnostic, so treat the defaults as a balanced starting point and validate on your own instrument and timeframe before any live use.

- **Timeframe:** Because stops auto-scale to self-computed volatility, the EA works across timeframes. Intraday charts (M15–H1) tend to produce more, faster setups; H4–D1 produce fewer, more deliberate ones. Choose based on how frequently you want it to trade.

- **Trend / continuation instruments:** The logic profits when imbalances persist, so instruments and sessions that trend cleanly suit it best; choppy, mean-reverting conditions will trip the dynamic zero-cross exit more often.
- **Window & EntryPressure:** Raise both for a stricter, lower-frequency profile; lower them to react sooner at the cost of more marginal entries.
- **StopMult & RewardRisk:** Keep `RewardRisk ≥ 1.5` so winners can outrun the wider stops that `StopMult` creates.

Tip: Always run the MT5 Strategy Tester across several months of history on your chosen symbol and timeframe before trading live. Use the optimiser to sweep `Window`, `EntryPressure`, and `ConfirmBars` together — they jointly control how strong and how accelerating an imbalance must be before the EA commits.

How to Install on MetaTrader 5

- 1 Copy `SettlementPressureContinuation.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.