

Vwap Pullback Engulfing

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Trend Continuation (VWAP Pullback)

TIMEFRAME

Intraday M5–M15

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

Vwap Pullback Engulfing is a session-anchored VWAP trend-*continuation* system. Its only trigger is a candlestick pattern — the engulfing bar. It uses **no** moving averages, RSI, ATR, or any other indicator. The entire decision rests on just two things: the day's Volume Weighted Average Price (VWAP) and raw candle geometry.

Intraday, institutions benchmark their fills against VWAP. When price trends **above** VWAP, the line behaves as dynamic **support** — pullbacks into it tend to get bought. When price trends **below** VWAP, it behaves as dynamic **resistance** — rallies into it tend to get sold. Rather than guess the turn, the strategy waits for a pullback to actually reach VWAP and for an engulfing candle to confirm that the crowd has re-engaged in the trend direction off that line.

The VWAP is **session-anchored**: it resets at the start of each UTC day and is weighted by tick volume, accumulating bar-by-bar from the session open:

$$\begin{aligned}tp &= (\text{High} + \text{Low} + \text{Close}) / 3 \\ \text{VWAP} &= \Sigma(\text{tp} \times v) / \Sigma v \quad (\text{accumulated from the session open})\end{aligned}$$

Stops and targets are structural and indicator-free: the stop sits a small buffer beyond the candle extreme that VWAP just defended, and the take-profit is a fixed reward:risk projection of that stop distance. Only one

position per magic number is held, so the protective bracket manages every exit.

Natural home: a liquid FX major or index (e.g. EURUSD, US500, or XAUUSD) on an intraday M5–M15 chart. The code itself is timeframe-agnostic and runs on whatever `PrimaryTimeframe` is selected at backtest time.

How It Works

On every tick the EA checks whether a fresh primary bar has just closed. It acts at most once per closed bar. It then rebuilds the session VWAP from the day's open up to the just-closed bar and evaluates a single, symmetric set of conditions for a long or a short.

Building the signal

- **Session VWAP** is recomputed each new bar over every same-UTC-day bar, weighted by tick volume. This yields the true session VWAP regardless of when the EA was attached, and resets cleanly at each new day.
- **Establishment window** — the EA refuses to trade until at least `MinSessionBars` bars have printed since the session open, giving VWAP time to settle.
- **Signal bar (shift 1)** is the bar that just closed; the **prior bar (shift 2)** is the one being engulfed. A **trend-reference bar** at shift `1 + TrendLookback` confirms the established regime.

Long entry — uptrend continuation

A buy is taken when **all** of the following hold:

- **Established above-VWAP regime** — the close `TrendLookback` bars ago was already above VWAP (a pullback within a trend, not a fresh reversal cross).
- **Pullback tagged VWAP and reclaimed it** — the signal bar's low pierced to/through VWAP (`Low ≤ VWAP`) and the bar closed back above it (`Close > VWAP`): VWAP held as support.
- **Bullish engulfing & decisive** — the prior bar is bearish, the signal bar is bullish and its body fully engulfs the prior body (`Close ≥ priorOpen` and `Open ≤ priorClose`), with the signal body at least `MinBodyRatio` × the prior body.

Entry is at the Ask. The stop is placed just under the defended low (`Low - buffer`); the take-profit is a `RewardRisk` multiple of that risk above entry.

Short entry — downtrend continuation

The exact mirror image: an established below-VWAP regime, a rally that tags VWAP from below (`High ≥ VWAP`) and rejects it by closing back below (`Close < VWAP`), confirmed by a decisive **bearish engulfing** bar. Entry is at the Bid, the stop sits just above the defended high (`High + buffer`), and the target is the `RewardRisk` projection below entry.

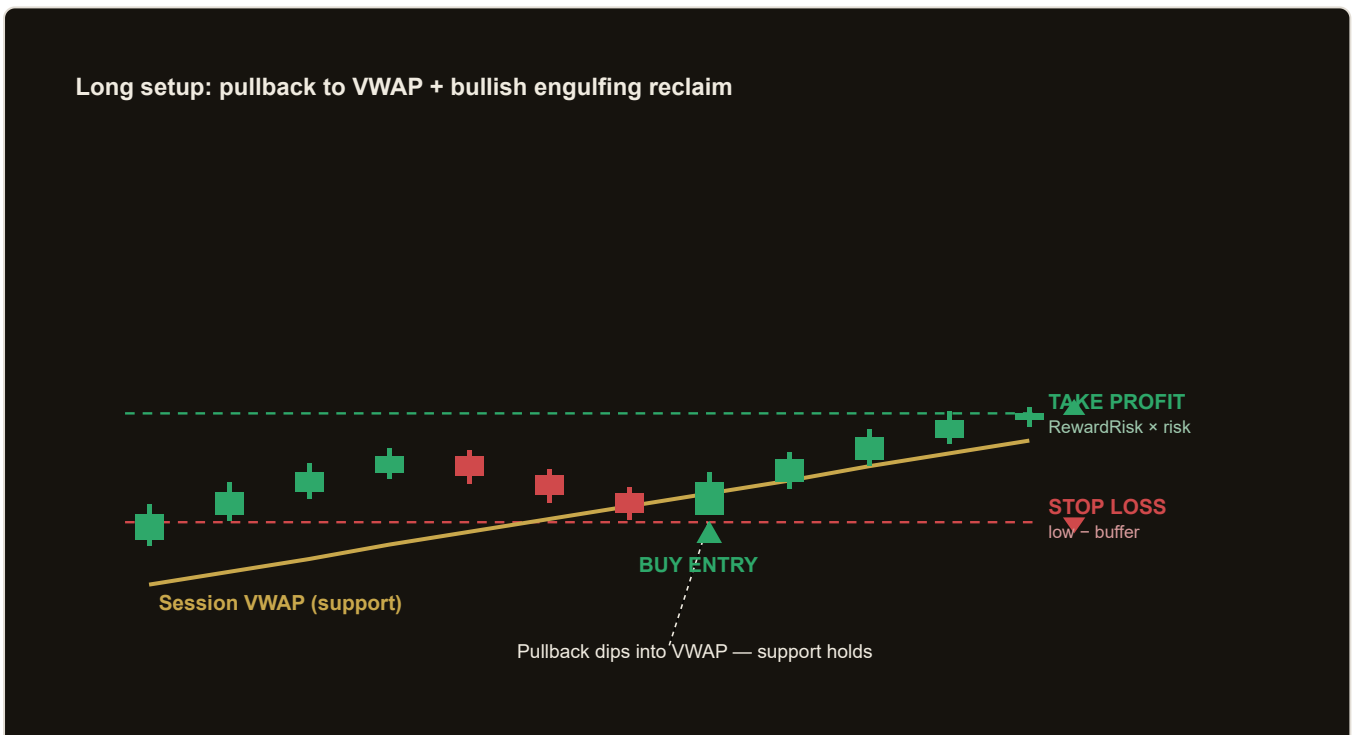
Stops, targets & position management

- **Structural stop** — $\text{buffer} = (\text{StopBufferPct} / 100) \times \text{signal-bar range}$, placed beyond the candle extreme that VWAP just defended.
- **Fixed reward:risk target** — $\text{TP} = \text{entry} \pm \text{RewardRisk} \times \text{risk}$, where **risk** is the entry-to-stop distance.
- **One position per magic** — while a position is open, no new entries are taken; the stop and target manage the exit entirely.
- **Spread filter** — new entries are skipped whenever the current spread (points) exceeds **MaxSpreadPoints**.

Note: because both the stop and the target are derived purely from the signal candle's own geometry, no indicator handles are created or released. The exit bracket is fully defined the moment the order is sent.

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
MinSessionBars	10	Bars that must elapse after the session open before VWAP is trusted and trading is allowed. Integer, range 3–60, step 1.
TrendLookback	3	How many bars back the close must already be on the trend side of VWAP — confirms a pullback <i>within</i> a trend rather than a fresh reversal cross. Integer, range 1–20, step 1.
MinBodyRatio	1.0	Engulfing strength: the signal bar's body must be at least this multiple of the engulfed (prior) body. Numeric, range 0.5–3.0, step 0.1.
StopBufferPct	20.0	Stop buffer beyond the signal bar's defended extreme, expressed as a percentage of that bar's range. Numeric, range 0.0–100.0, step 5.0.
RewardRisk	1.8	Take-profit distance as a multiple of the (structural) stop distance. Numeric, range 0.5–5.0, step 0.1.
MaxSpreadPoints	60	Skip new entries when the current spread (in points) is wider than this. Integer, range 5–300, step 5.
Lots	0.10	Trade volume in lots. Numeric, range 0.01–1.0, step 0.05.
Magic	4920	Magic number used to tag and manage this EA's positions independently. Integer, range 0–9,999,999, step 1.

Recommended Settings

The defaults are tuned for a liquid intraday instrument on an M5–M15 chart. Use them as a starting point and validate on your broker's data before committing capital.

- **Symbol & timeframe** — a liquid FX major or index such as EURUSD, US500, or XAUUSD on M5 or M15, where session VWAP carries genuine institutional meaning.
- **MinSessionBars** — keep at 10 for M5/M15 so VWAP is meaningful before the first trade; raise it on faster timeframes where the early session is noisier.
- **TrendLookback** — 3 confirms an established trend without demanding too long a history; increase it to filter for stronger, more persistent trends.
- **MinBodyRatio** — 1.0 requires a true engulfing; raise toward 1.5–2.0 to demand a more decisive reclaim/rejection candle and cut marginal signals.
- **RewardRisk** — 1.8 balances hit-rate against payoff; lower it for a higher win rate, raise it for fewer but larger winners.

- **MaxSpreadPoints** — set to match your instrument's typical spread so entries are skipped during costly, illiquid conditions (news, rollover).

Example — EURUSD M5

Run with the defaults (MinSessionBars 10, TrendLookback 3, MinBodyRatio 1.0, StopBufferPct 20, RewardRisk 1.8, MaxSpreadPoints 60, Lots 0.10). The EA waits for the day's VWAP to establish, then trades only pullbacks that tag VWAP and reclaim/reject it with a decisive engulfing bar — one position at a time, each with a structural stop and a 1.8:1 target.

Tip: Because every stop is derived from the signal candle's own range, position size in lots should be chosen with the typical candle range in mind so that per-trade risk stays within your account's tolerance. Always optimise on out-of-sample data, not just the in-sample period.

How to Install on MetaTrader 5

- 1 Copy `VwapPullbackEngulfing.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

Before going live: run the EA in the MT5 Strategy Tester across several months of history for your chosen symbol and timeframe, then forward-test on a demo account. Confirm the spread filter and lot size suit your broker's conditions.

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.