

Three Bar Reversal

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Price-Action Swing Reversal

TIMEFRAME

M15 – H1

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

Three Bar Reversal is a pure price-action Expert Advisor that trades the classic **1–2–3 swing reversal** at a fresh range extreme. No oscillators or moving averages drive the entry — three consecutive raw candles form the entire signal. The strategy waits for the market to sweep resting liquidity beyond a recent swing high or low, then enters only after price snaps decisively back through that extreme.

The result is a selective, counter-trend swing strategy with a mean-reversion flavour: it fades exhaustion moves at the edges of a range rather than chasing momentum. Every trade carries a structural stop placed just beyond the swept extreme and a fixed reward-to-risk target, so both risk and reward are defined the moment the position opens.

The EA reads only the chart's primary symbol and timeframe, so it can be attached to any liquid instrument. It was tuned for **XAU/USD** and **GBP/USD** on the **M15–H1** range, where clean liquidity sweeps and reversals are common.

How It Works

The strategy evaluates its logic **once per freshly-closed bar**. On each new bar it inspects the three most-recently closed candles — labelled candle 1, candle 2 and candle 3 — against the surrounding swing

structure and an ATR-based momentum filter.

The Three-Candle Pattern

- **Candle 1** (shift 3) — the last bar of the prevailing push into the extreme.
- **Candle 2** (shift 2) — the *sweep*. It undercuts candle 1 and prints the lowest low (or highest high) of the entire swing window, a capitulation / stop-run that clears resting liquidity beyond support or resistance.
- **Candle 3** (shift 1) — the *confirmation*. A strong bar that closes back through candle 2's entire range. The market rejected the new extreme and snapped the range shut. The reversal is only taken once this close-through prints.

Entry Logic

LONG (BULLISH 1–2–3 OFF A SWEEP SWING LOW)

- Candle 2's low is the **lowest low** of the swing window *and* lies below candle 1's low (the sweep).
- Candle 3 is **bullish** (closes above its open).
- Candle 3 **closes above candle 2's entire high**.
- Candle 3's body is at least $\text{MinBodyAtr} \times \text{ATR}$ (momentum filter).

When all conditions align, the EA buys at the current Ask.

SHORT (BEARISH 1–2–3 OFF A SWEEP SWING HIGH)

- Candle 2's high is the **highest high** of the swing window *and* lies above candle 1's high (the sweep).
- Candle 3 is **bearish** (closes below its open).
- Candle 3 **closes below candle 2's entire low**.
- Candle 3's body is at least $\text{MinBodyAtr} \times \text{ATR}$ (momentum filter).

When all conditions align, the EA sells at the current Bid.

Why the ATR body filter matters. The three-bar structure plus a minimum body on the confirmation candle is what separates a genuine reversal from a single noisy wick. A weak candle 3 — even one that technically closes through the range — is rejected, so marginal signals are cut hard.

Stop Loss & Take Profit

Risk is anchored to the swept extreme, then padded with ATR so the stop sits just beyond the liquidity that was cleared:

Long: $SL = \text{candle2.Low} - \text{SlAtrMult} \times \text{ATR}$
 $\text{risk} = \text{Entry} - SL$
 $TP = \text{Entry} + \text{RiskReward} \times \text{risk}$

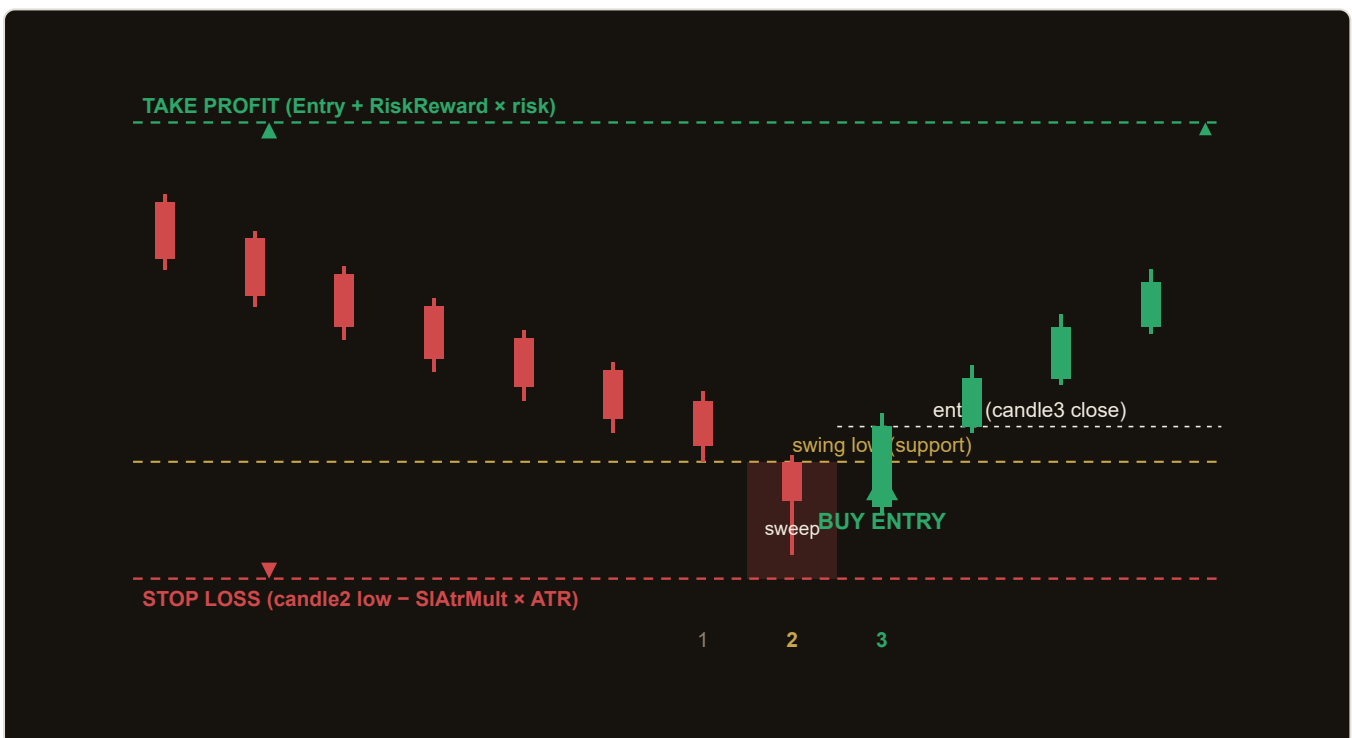
Short: $SL = \text{candle2.High} + \text{SlAtrMult} \times \text{ATR}$
 $\text{risk} = SL - \text{Entry}$
 $TP = \text{Entry} - \text{RiskReward} \times \text{risk}$

The take-profit is a fixed multiple of the measured risk, so every trade targets the same reward-to-risk ratio set by **RiskReward**. If the computed risk is not positive, the signal is skipped.

One position at a time. The EA holds a single open position per symbol under its own magic number (5307). While a trade is live, new signals are ignored until it closes at either the stop or the target.

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 chart

A downtrend drives price into a swing low. Candle 2 spikes below that support (the sweep, shaded red), clearing liquidity. Candle 3 is a strong bullish bar that closes back above candle 2's high — the confirmation — and the EA buys at that close. The stop sits just below the swept low; the target is placed at **RiskReward** times the risk above entry.

Parameters

Parameter	Default	Description
Lots	0.10	Fixed trade volume (lot size) used for every position. Range 0.01 – 1.00, step 0.01.
SwingLookback	12	Number of bars in the swing window ending at candle 2. Defines how far back the sweep extreme is measured. Range 5 – 40, step 1.
AtrPeriod	14	Period of the ATR indicator used for the momentum body filter and the stop-loss padding. Range 7 – 30, step 1.
MinBodyAtr	0.25	Minimum body of the confirmation candle (candle 3) expressed as a multiple of ATR. Higher values demand a stronger reversal bar. Range 0.00 – 1.50, step 0.05.
SIATRmult	0.40	Extra stop-loss padding placed beyond the swept extreme, in multiples of ATR. Range 0.00 – 2.00, step 0.10.
RiskReward	2.0	Reward-to-risk ratio that sets the take-profit distance relative to the measured risk. Range 1.0 – 5.0, step 0.5.
Magic	5307	Unique magic number tagging this EA's orders so it manages only its own positions.

Recommended Settings

The defaults are a balanced starting point tuned for gold and major FX pairs. Adjust to match the volatility and character of your chosen instrument.

- **Symbols:** XAU/USD (gold) or GBP/USD — liquid instruments that produce clean liquidity sweeps and sharp reversals.
- **Timeframe:** M15 to H1. Lower timeframes generate more signals but more noise; higher timeframes give cleaner but rarer setups.
- **SwingLookback:** 12 works well on M15–H1. Increase it to require deeper, more significant sweeps; decrease it for a more reactive, higher-frequency read.

- **MinBodyAtr:** raise toward 0.40–0.60 to filter out weak confirmation bars in choppy conditions; lower it in strongly trending regimes.
- **RiskReward:** 2.0 keeps targets ambitious but reachable. A lower ratio raises win rate at the cost of average reward.

Tip — always backtest first. Run the EA through the MT5 Strategy Tester on several years of history for your exact symbol and timeframe before going live. Optimise `SwingLookback` , `MinBodyAtr` and `RiskReward` together, and confirm the results hold on out-of-sample data.

How to Install on MetaTrader 5

- 1 Copy `ThreeBarReversal.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

Note. The EA acts only on the open of a freshly-closed bar, so it needs live (or tester) tick data to evaluate signals. Ensure the chart symbol matches the instrument you intend to trade — the strategy reads only the chart's own symbol and timeframe.

Risk Warning

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