

Bar Conviction Trend Rider

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Trend Following / Momentum

TIMEFRAME

M30 – H1

WEBSITE

www.algotbot.live

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Overview

Bar Conviction Trend Rider is a trend-following, momentum-continuation Expert Advisor for MetaTrader 5. Rather than fading extremes or chasing raw breakouts, it joins an already-established trend at the precise moment the market shows fresh, volume-backed conviction in the trend's direction.

The engine of the strategy is the *Close Location Value* (CLV) — a classic measure of where each candle closes within its own range:

$$\text{CLV} = ((\text{Close} - \text{Low}) - (\text{High} - \text{Close})) / (\text{High} - \text{Low}) \rightarrow \text{range } [-1, +1]$$

A CLV near **+1** means the bar slammed shut on its highs — buyers won the auction. A CLV near **-1** means it sealed on its lows — sellers won. By smoothing CLV over a short window, Bar Conviction Trend Rider maintains a running, **non-repainting** read of who is genuinely in control. Because it only ever reads fully-closed bars, a signal never changes after the fact.

The edge in one sentence: sustained conviction in the direction of the higher-degree trend tends to continue — so the EA waits for the crowd to reveal decisive, one-sided intent and then rides the continuation with a volatility-scaled stop and target.

How It Works

Every signal is evaluated only once per bar, on the **just-closed bar**. To arm a trade, a five-part confluence stack must fully agree — this acts as a strict false-signal filter, so the EA stays flat unless every condition lines up.

Entry Logic — the Confluence Stack

1. **Regime** — price must be above a slow trend EMA for longs (below it for shorts). This defines the tradable trend direction.
2. **Conviction** — the smoothed CLV must be beyond the threshold (`+ConvictionThreshold` for longs, `-ConvictionThreshold` for shorts), proving the crowd is decisively one-sided.
3. **Ignition** — the just-closed bar's own CLV must agree with the trade direction *and* the bar must have closed beyond the prior close. Momentum is happening *now*, not stale.
4. **Volume** — the signal bar's tick volume must exceed its moving average, confirming real participation behind the move rather than a thin drift.
5. **Volatility** — ATR must be greater than zero so stops and targets are well-defined.

A long entry fires when ALL of the following are true:

- Signal-bar close > Trend EMA (*bullish regime*)
- Smoothed conviction \geq `ConvictionThreshold` (*sustained buying*)
- Signal-bar CLV > 0
and
close > previous close (*fresh ignition*)
- Signal-bar tick volume > volume moving average (*real participation*)

A short entry is the exact mirror image, with every inequality reversed.

Exit Logic — ATR-Scaled Risk

All exits are scaled to volatility using the Average True Range (ATR), which keeps behaviour consistent across symbols and timeframes:

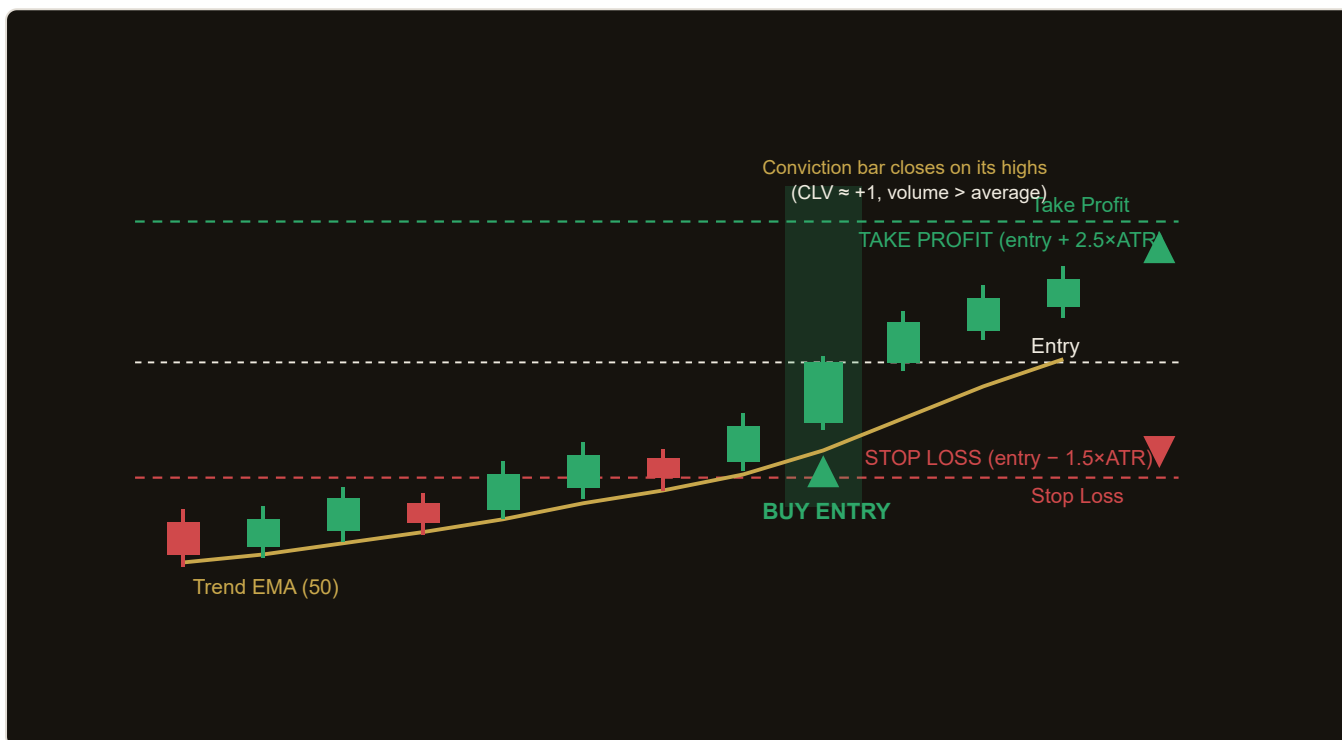
- **Stop-loss** = entry $-/+$ `AtrMultSL × ATR`
- **Take-profit** = entry $+/-$ `AtrMultTP × ATR`, giving a fixed reward:risk of `AtrMultTP / AtrMultSL` (2.50 / 1.50 \approx **1.67 : 1** at defaults).
- **Trailing stop** — once a position is in profit, the stop is ratcheted to `AtrMultTrail × ATR` behind price. It *only ever tightens*, never loosening, letting winners run while protecting open gains. Trailing is checked on every tick so open winners are protected intrabar.

Position Management

- **One position per Magic number** at a time — no pyramiding and no averaging into losers.
- **Fixed-lot sizing** via the `Lots` input.
- All calculations read the primary chart timeframe only, and the EA acts strictly on closed-bar data.

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.

Price is riding above the rising trend EMA (bullish regime). After a shallow pullback, a decisive bullish bar closes right on its highs with above-average volume — conviction, ignition and participation all confirm at once. The EA buys at the next ask, sets an ATR-scaled stop below and target above, then trails the stop upward as the continuation unfolds.

Parameters

Parameter	Default	Description
TrendEmaPeriod	50	Slow EMA period that defines the tradable trend regime. Range 20–200, step 10.
ConvictionPeriod	5	Window over which per-bar CLV is smoothed into the conviction reading. Range 2–20, step 1.
ConvictionThreshold	0.30	How decisive smoothed conviction must be ($ CLV $ beyond this) to arm a trade. Range 0.05–0.80, step 0.05.
VolumeMaPeriod	20	Tick-volume moving-average window used as the participation filter. Range 5–60, step 5.
AtrPeriod	14	ATR window used for stops, targets and the trailing distance. Range 5–30, step 1.
AtrMultSL	1.50	Stop-loss distance as a multiple of ATR. Range 0.50–4.00, step 0.25.
AtrMultTP	2.50	Take-profit distance as a multiple of ATR (reward:risk = $AtrMultTP / AtrMultSL$). Range 0.50–6.00, step 0.25.
AtrMultTrail	1.50	Trailing-stop distance behind price as a multiple of ATR. Range 0.50–4.00, step 0.25.
Lots	0.10	Fixed lot size for each position. Range 0.01–1.00, step 0.05.
Magic	5313	Magic number identifying this EA's trades (one position per Magic). Range 0–9,999,999, step 1.

Recommended Settings

Bar Conviction Trend Rider is timeframe-agnostic, but it is designed for markets that trend cleanly. A trending FX major or metal makes the most natural playground.

- **Symbols:** EURUSD, XAUUSD, or another liquid, trending FX major / metal.
- **Timeframe:** M30 to H1, where conviction bars carry meaningful weight and noise is reduced.
- **Defaults:** the shipped values are a balanced starting point — a 50-period trend EMA, 5-bar conviction smoothing, a 0.30 conviction threshold, and a 1.67:1 reward:risk profile.

Tuning tips: raise `ConvictionThreshold` toward 0.40–0.50 for fewer, higher-quality signals in choppy conditions; lower it toward 0.20 to catch more continuation moves in strongly trending markets. Widen `AtrMultSL` on volatile instruments to avoid being stopped by noise, and adjust `AtrMultTP` to reshape the reward:risk ratio.

Always validate first. Backtest and forward-test on a demo account with your specific broker, symbol and timeframe before committing real capital. Spread, commission and tick-volume characteristics vary between brokers and directly affect this strategy's edge.

How to Install on MetaTrader 5

- 1 Copy `BarConvictionTrendRider.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.