

Atr Envelope Reclaim

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Trend Pullback Continuation	H1 / H4	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

Atr Envelope Reclaim is a trend-aligned, pullback-continuation Expert Advisor for MetaTrader 5. Rather than trying to catch tops and bottoms, it waits for an established trend and then buys shallow dips (or sells shallow rallies) at the precise moment price snaps back into a volatility envelope.

The core idea is simple: the EA builds a volatility band of $\pm(\text{EnvMult} \times \text{ATR})$ around a trend EMA. In a confirmed trend, price will occasionally over-extend a wick into the far side of the envelope on a shallow pullback, then “reclaim” it by closing back inside on a candle that pushes in the trend direction. That reclaim is treated as a high-probability continuation entry, while an RSI guard prevents the EA from chasing moves that are already exhausted. Every trade is filtered so the EA acts *with* the EMA slope — it never fades a live trend.

In one sentence: Trade the direction of the trend, enter only when a pullback wick pierces the envelope and the candle closes back inside, and skip the signal if RSI shows the move is already stretched.

How It Works

1. The Volatility Envelope

On each completed bar the EA computes three indicators on the current symbol and timeframe:

- **Trend EMA** — an exponential moving average of closing prices (`EmaPeriod` , default 34) that defines the trend and the centre of the envelope.
- **ATR** — the Average True Range (`AtrPeriod` , default 14) which measures volatility and sets both the envelope width and the stop / target distances.
- **RSI** — the Relative Strength Index (`RsiPeriod` , default 14) used as an anti-chase filter.

The envelope bands are placed a multiple of ATR above and below the EMA:

```
upper = EMA + (EnvMult × ATR)
lower = EMA - (EnvMult × ATR)
```

2. Trend Filter (slope)

The EA measures the EMA slope by comparing the current EMA to its value `SlopeLookback` bars ago (default 5). A trade is only considered when both the slope and the close agree on direction:

- **Uptrend:** `EMA now > EMA ago` *and* the bar closes above the EMA.
- **Downtrend:** `EMA now < EMA ago` *and* the bar closes below the EMA.

3. The Reclaim Entry

Within a valid trend, the EA looks for a bar whose wick pierced the far envelope band but whose body closed back inside, in the trend's direction:

- **Long (buy the dip):** in an uptrend, the bar's low touched or dropped below the *lower* band (`low ≤ lower`) but the close finished back above it (`close > lower`), the candle is bullish (`close > open`), and RSI is below `50 + RsiBand` .
- **Short (sell the rip):** in a downtrend, the bar's high touched or exceeded the *upper* band (`high ≥ upper`) but the close finished back below it (`close < upper`), the candle is bearish (`close < open`), and RSI is above `50 - RsiBand` .

Why the RSI band? The `RsiBand` guard keeps the EA from entering when momentum is already over-extended. A smaller band is stricter (fewer, cleaner entries); a larger band is looser (more entries, including later ones). With the default of 15, longs require RSI below 65 and shorts require RSI above 35.

4. Exits — Stop Loss & Take Profit

Exits are fully mechanical and set at order time as ATR multiples from the fill price. There is no trailing stop; the trade runs until either level is hit:

Long: $SL = \text{entry} - (SL_{\text{AttrMult}} \times ATR)$ $TP = \text{entry} + (Tp_{\text{AttrMult}} \times ATR)$
Short: $SL = \text{entry} + (SL_{\text{AttrMult}} \times ATR)$ $TP = \text{entry} - (Tp_{\text{AttrMult}} \times ATR)$

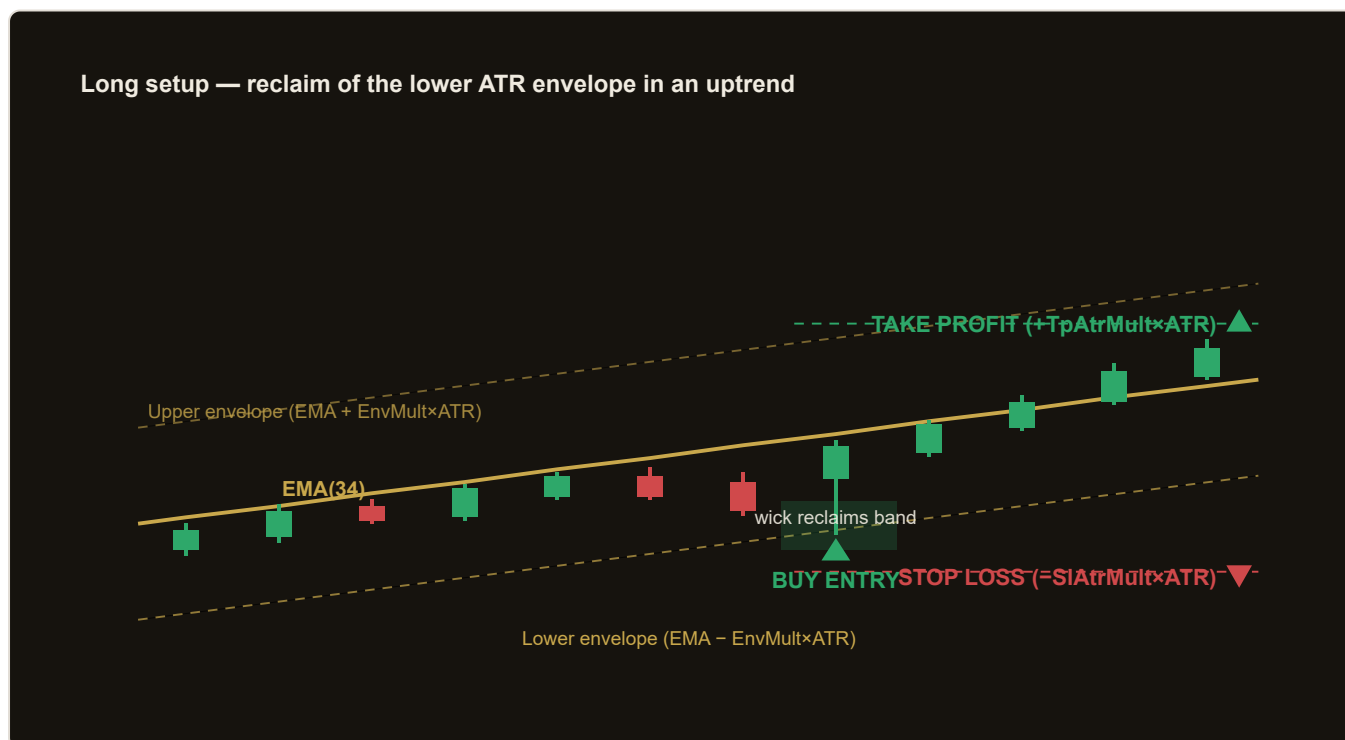
With the defaults (`SLAttrMult` 1.5, `TpAttrMult` 3.0) each trade risks $1.5 \times ATR$ to make $3.0 \times ATR$ — a 1:2 reward-to-risk ratio.

5. Trade Management

- **One position at a time:** the EA holds at most a single position per magic number on the symbol. No new signal is taken while a position is open — the SL / TP handle the exit.
- **One evaluation per bar:** logic runs only once per newly-formed bar, so intrabar noise is ignored.
- **Magic number:** all orders are tagged with `Magic` (default 720104) so the EA only manages its own trades.

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

The EMA is rising and price is trading above it — a confirmed uptrend. On the highlighted candle, a shallow pullback wicks down into the lower ATR envelope, but the candle closes back *above* the band with a bullish body and RSI is not yet stretched. That reclaim triggers a *BUY ENTRY*. The stop is placed $SlAtrMult \times ATR$ below the fill and the target $TpAtrMult \times ATR$ above it, giving the illustrated 1:2 risk-to-reward as the trend continues.

Parameters

Parameter	Default	Description
EmPeriod	34	Trend EMA period — the centre of the envelope and the trend reference. Range 10–120, step 2.
AtrPeriod	14	ATR period used for the envelope width and the SL / TP distance unit. Range 5–40, step 1.
EnvMult	2.0	Envelope multiplier (\times ATR). Sets how far the bands sit from the EMA. Range 0.5–4.0, step 0.1.
SlopeLookback	5	Number of bars back used to measure the EMA slope (trend direction). Range 1–30, step 1.
RsiPeriod	14	RSI period for the anti-chase momentum filter. Range 5–40, step 1.
RsiBand	15.0	RSI band around 50 (chase guard). Longs need $RSI < 50 + \text{band}$; shorts need $RSI > 50 - \text{band}$. Range 0.0–40.0, step 1.0.
SlAtrMult	1.5	Stop-loss distance as a multiple of ATR from the entry price. Range 0.5–5.0, step 0.1.
TpAtrMult	3.0	Take-profit distance as a multiple of ATR from the entry price. Range 0.5–8.0, step 0.1.
Lots	0.10	Fixed trade volume in lots. Range 0.01–1.0, step 0.01.
Magic	720104	Magic number identifying and isolating this EA's positions.

Recommended Settings

The defaults are a balanced starting point for liquid instruments on intraday timeframes. As with any strategy, validate on your broker's data before going live.

- **Symbols:** major FX pairs (e.g. EUR/USD, GBP/USD) or index CFDs with clean, trending behaviour and tight spreads.
- **Timeframe:** H1 is the primary target; H4 works for slower, higher-conviction signals.
- **Risk-to-reward:** keep `TpAtrMult` at roughly twice `SlAtrMult` to preserve the 1:2 profile that the defaults are built around.
- **Envelope width:** in choppy markets, raise `EnvMult` so only deeper pullbacks qualify; in strongly trending markets, a lower value catches shallower dips.

Tip: Because both the envelope and the stop/target scale with ATR, the EA adapts automatically to changing volatility — wider bands and stops in fast markets, tighter ones when volatility contracts. Use the Strategy Tester to optimise `EnvMult`, `RsiBand` and the SL/TP multiples together, since they interact.

Position sizing: `Lots` is a fixed volume — it does not scale to account equity. Size it to your account and risk tolerance, and remember that the actual money risk per trade depends on the ATR-based stop distance, which varies with volatility.

How to Install on MetaTrader 5

- 1 Copy `AtrEnvelopeReclaim.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.