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Arnaud Legoux Trend Reclaim

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Trend Following (Pullback Continuation)	H1–H4	www.algobot.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

Arnaud Legoux Trend Reclaim is a trend-following, pullback-continuation Expert Advisor built around the **Arnaud Legoux Moving Average (ALMA)** — a Gaussian-weighted, phase-offset average that trims lag while staying smooth. Unlike a simple or exponential moving average (which weight either flatly or exponentially toward the last bar), ALMA lays a bell-shaped weighting over its window and slides the peak of that bell with an `Offset` parameter: peak near the newest bar makes it responsive with low lag; peak toward the centre makes it smooth. A separate `Sigma` parameter sets how wide the bell is — small values focus the weight (responsive), large values spread it out (smoother).

The EA runs **two ALMAs that share the same offset and sigma but use different windows**:

- **Fast ALMA** (short window) — a low-lag price tracker.
- **Slow ALMA** (long window) — the trend spine, or baseline.

Rather than chasing fresh breakouts, the strategy waits for price to pull back *into* an established trend and then **reclaim** the spine in the trend's direction. A volatility-scaled slope gate keeps the system out of flat, choppy markets where such reclaims would only whipsaw. Every trade is protected by an ATR-based stop-loss and a reward-multiple take-profit, and only one position per magic number is ever open at a time.

> **Core idea:** A trend that pauses and dips is not the same as a trend that ends. When the slow ALMA spine is clearly moving and the fast ALMA slips back to it and then crosses back through, the pullback has been reclaimed — the EA joins the trend at a lower-risk continuation point rather than at an extended breakout.

How It Works

1. The Two ALMA Lines

Both lines are computed over closed-bar closes. For a window of `N` closes, ALMA places a Gaussian weight `w(i) = exp(-(i - m)² / (2s²))` on each bar, where `m = Offset × (N - 1)` positions the weight peak and `s = N / Sigma` controls its width. The weighted average leads a plain moving average while remaining smooth. The **Fast ALMA** uses `FastWindow` closes; the **Slow ALMA** (spine) uses `SlowWindow` closes.

> **Input guards:** On initialization the EA enforces sensible relationships. If `FastWindow ≥ SlowWindow`, the fast window is reset to `max(2, SlowWindow / 3)` so the fast line is genuinely faster. If `Sigma ≤ 0`, it is reset to `6.0`.

2. Trend Regime — a Genuine Gate

The spine's slope is measured as its travel over the last `SlopeBars` bars: `slope = slowNow - slowPast`. This travel is then compared to volatility. The trend is only accepted when the spine has moved at least `MinSlopeAtr × ATR` in one direction:

- **Uptrend** when `slope ≥ +MinSlopeAtr × ATR`.
- **Downtrend** when `slope ≤ -MinSlopeAtr × ATR`.

If the spine has not travelled far enough relative to current volatility, no trade is considered on that bar. Requiring the move to be meaningful *relative to volatility* is what keeps the system out of flat or chopping conditions where reclaims are noise.

3. Entry — Reclaim After a Pullback

The entry is a **continuation** signal, not a fresh breakout. Once the trend regime is confirmed, the EA looks for the fast ALMA to cross back through the spine, having previously dipped to the other side of it:

- **Long:** spine rising; on the prior bar the fast ALMA had slipped to or below the spine (a pullback into the trend), and on the just-closed bar the fast ALMA crosses back **above** the spine while the bar's close is above the spine. The dip has been reclaimed in the trend direction → buy.
- **Short:** the mirror image — spine falling; the fast ALMA had popped to or above the spine, then crosses back **below** it with a close under the spine. The rip has been reclaimed → sell.

```
reclaimUp   = fastPrev <= slowPrev  AND  fastNow > slowNow
reclaimDown = fastPrev >= slowPrev  AND  fastNow < slowNow

LONG  : up   AND reclaimUp   AND close > slowNow
SHORT : down AND reclaimDown AND close < slowNow
```

4. Exit — Volatility-Scaled Stop and Target

Risk is scaled to volatility using ATR. When a trade is opened:

- **Stop-loss** is placed `AtrStopMult × ATR` away from entry (below for longs, above for shorts).
- **Take-profit** is a fixed `RewardRatio` multiple of that stop distance, so winners in a live trend can run.

There is no discretionary trade management: the ATR stop and target manage the exit, and the EA holds **only one position per magic number** at a time. A new signal is ignored while a position is open.

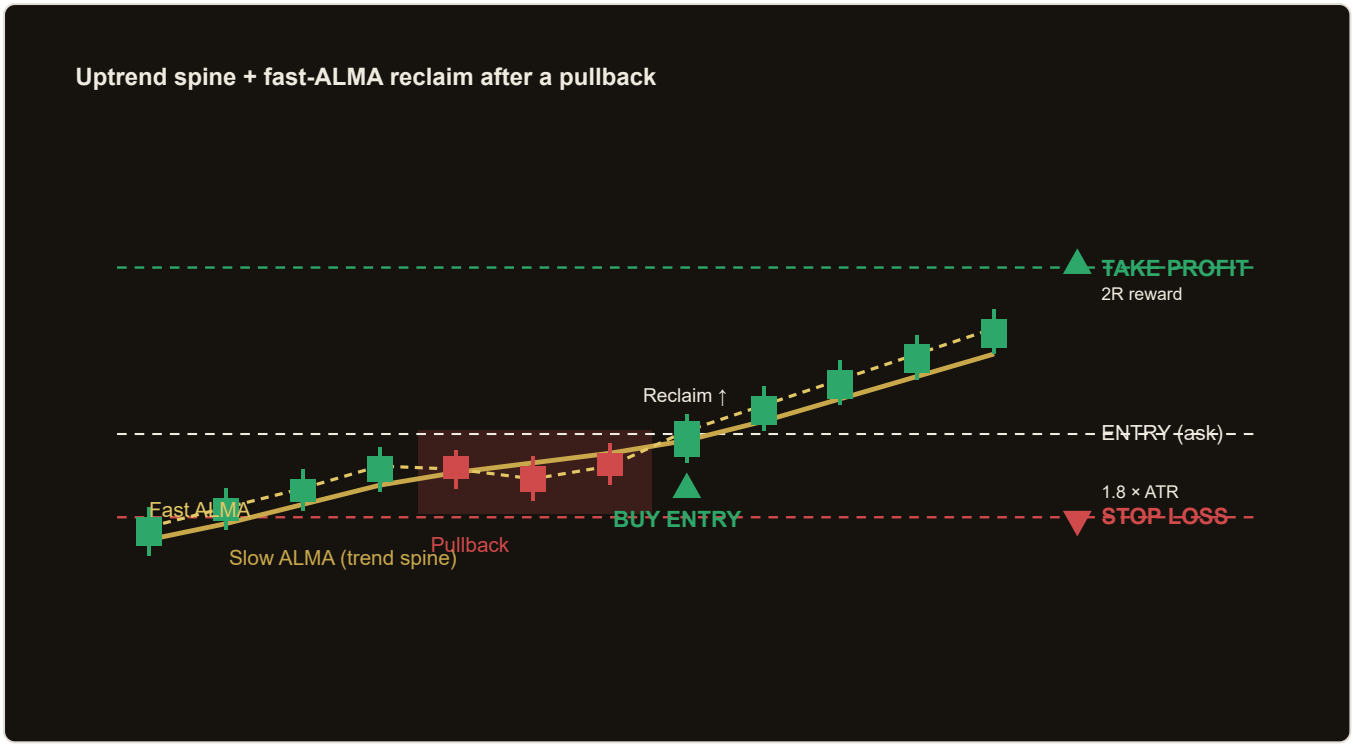
> **Worked long example**
>
> Suppose ATR = 20 pips, `AtrStopMult = 1.8` and `RewardRatio = 2.0`. The spine is rising, the fast ALMA dips to the spine and then crosses back above it with the bar closing above the spine. Entry is taken at the ask. The stop is set 1.8 × 20 = 36 pips below entry, giving a risk distance of 36 pips; the take-profit is placed 2.0 × 36 = 72 pips above entry. The trade risks 36 pips to make 72.

Execution Cadence

All signal evaluation happens **once per newly-closed bar**. The EA maintains a rolling buffer of closed bars and requires `max(SlowWindow + SlopeBars + 3, AtrPeriod + 2)` bars of history before it will act. Every read uses the chart's primary symbol and timeframe, so the EA runs on whatever timeframe 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.

Parameters

Parameter	Default	Description
FastWindow	`9`	Fast ALMA window — the low-lag price tracker. Range 4–30, step 1.
SlowWindow	`30`	Slow ALMA window — the trend spine / baseline. Range 15–80, step 5.
Offset	`0.85`	ALMA phase offset (0..1): higher values move the Gaussian weight peak nearer the newest bar, making the line more responsive. Range 0.50–0.95, step 0.05.
Sigma	`6.0`	ALMA Gaussian width: smaller is focused / responsive, larger is smoother. Range 2.0–12.0, step 1.0.
SlopeBars	`5`	Number of bars over which the spine's slope (trend strength) is measured. Range 2–20, step 1.
MinSlopeAtr	`0.30`	Minimum spine travel over SlopeBars, in ATR multiples, required to accept the trend regime. Range 0.00–2.00, step 0.10.
AtrPeriod	`14`	ATR lookback used for volatility-scaled risk. Range 5–40, step 1.
AtrStopMult	`1.8`	Stop-loss distance as a multiple of ATR. Range 0.5–5.0, step 0.1.
RewardRatio	`2.0`	Take-profit distance as a multiple of the stop distance. Range 1.0–5.0, step 0.5.
Lots	`0.10`	Order volume in lots. Range 0.01–1.00, step 0.05.
Magic	`20714`	Magic number identifying this EA's positions. Range 0–9,999,999, step 1.

Recommended Settings

The strategy is designed for trending instruments where pullbacks are orderly. A trending FX major or metal — such as **EURUSD** or **XAUUSD** — on the **H1 to H4** timeframes is a natural playground, but because every bar read uses the chart's primary timeframe, it runs on whatever timeframe you attach it to.

TUNING GUIDANCE

- **Responsiveness vs. smoothness:** raise `Offset` and lower `Sigma` for a faster, more reactive pair of lines; lower `Offset` and raise `Sigma` for smoother lines that trade less often but whipsaw less.
- **Trend strictness:** increasing `MinSlopeAtr` demands a stronger, more established trend before any reclaim is taken — fewer but higher-conviction signals. Setting it to `0.00` removes the volatility gate entirely (not recommended in ranging markets).

- **Spine and pullback depth:** a wider `SlowWindow` gives a steadier spine and rarer signals; a wider `SlopeBars` measures trend over a longer horizon.
- **Risk shape:** `AtrStopMult` sets how much room a trade is given against volatility, while `RewardRatio` sets the target relative to that room. Values above 2.0 let winners run further at the cost of a lower hit rate.

> **Tip:** Always validate any parameter set in the MT5 Strategy Tester on your chosen symbol and timeframe before considering live use. Because risk is ATR-scaled, the same settings adapt across instruments of different volatility, but the trend character of each market still differs.

> **Position sizing:** The `Lots` value is a fixed volume — it does not automatically scale to account equity. Choose a lot size appropriate for your balance and risk tolerance, and remember that only one position per magic number is held at a time.

How to Install on MetaTrader 5

1. Copy `ArnaudLegouxTrendReclaim.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.