

Exhaustion Cascade Fade

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Mean Reversion (Climax Fade)

TIMEFRAME

M1 / M5

WEBSITE

www.algotbot.live

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Overview

Exhaustion Cascade Fade is a pure price-action, mean-reversion scalping Expert Advisor. It uses *no indicators of any kind* — no moving averages, no RSI, no ATR. Every decision is made from raw candle geometry: the open, high, low, and close of recently closed bars.

The strategy hunts for a **cascade** — a short run of consecutive same-direction candles that keep punching to new extremes (lower lows in a sell-off, higher highs in a rally). This is panic-style, one-way order flow. The run ends in a **climax** bar: the widest candle of the run and a genuine blow-off, where the last weak hands are flushed and liquidity is exhausted. At that point the move is most vulnerable to a snap-back.

Crucially, the EA does **not** try to catch the falling knife. It waits for the first bar that decisively rejects the cascade — a **recovery** candle that closes back through the climax bar's far extreme — and only then fades the exhausted move in the opposite direction, scalping the reversion. The stop-loss sits just past the cascade's extreme (the price level at which the exhaustion thesis would be proven wrong), and the take-profit is a fixed multiple of that structural risk.

In one sentence: wait for a violent one-way run to climax and exhaust itself, confirm the reversal with a recovery candle, then fade the snap-back with a tight structural stop and a fixed reward-to-risk target.

How It Works

Building blocks (raw candle geometry)

The EA keeps a rolling buffer of closed bars and acts **once per newly-closed bar**. On each new bar it inspects four contiguous segments of recent history:

- **Recovery bar (signal):** the bar that just closed — the potential reversal trigger.
- **Cascade run:** the `StreakLength` bars immediately before it.
- **Climax bar:** the last bar of the run — the blow-off that must be the widest of the run.
- **Baseline:** a quiet stretch of `BaselineLookback` bars preceding the cascade, used to measure the "normal" average bar range.

Defining a valid cascade

For a setup to qualify, every condition below must hold:

- **Directional run:** all `StreakLength` cascade bars share one direction — bearish bars each making a *new lower low* (sell cascade), or bullish bars each making a *new higher high* (buy cascade).
- **Accelerating blow-off:** the climax (final) bar is the *widest* candle of the run — no earlier bar in the run may be as wide or wider.
- **Genuine exhaustion:** the climax range must be at least `ClimaxFactor` × the average bar range of the quiet baseline. This filters out runs that are merely noise and keeps only true panic blow-offs.

Entry logic

LONG — fade a selling climax: after a valid down-cascade, the just-closed recovery bar must be *bullish* (`Close > Open`) and close *above the climax bar's high*. Sellers are spent; the EA buys the snap-back at the Ask.

SHORT — fade a buying climax: the exact mirror. After a valid up-cascade, the recovery bar must be *bearish* (`Close < Open`) and close *below the climax bar's low*. Buyers are spent; the EA sells the snap-back at the Bid.

Worked example — LONG (fade a selling climax)

Three consecutive red bars each print a fresh lower low. The third (climax) is the widest of the run and its range is 1.6× the recent baseline average — a clear blow-off. The next bar closes green and pushes back above the climax bar's high. The EA buys at the Ask, places the stop just below the lowest point of the cascade, and sets the take-profit at 1.30× that risk distance above entry.

Exit logic — stop-loss & take-profit

Every position is fully bracketed at entry; there is no trailing or break-even logic. One position per magic number is allowed at a time — the structural stop and target manage the exit.

- **Stop-loss (LONG):** placed at $\text{cascade low} - \text{BufferFrac} \times \text{climaxRange}$, i.e. just past the lowest point of the run. If price breaks below this, the exhaustion thesis was wrong.
- **Stop-loss (SHORT):** placed at $\text{cascade high} + \text{BufferFrac} \times \text{climaxRange}$, just past the highest point of the run.
- **Take-profit:** a fixed RewardRatio multiple of the structural stop distance, measured from the entry price. With the default $\text{RewardRatio} = 1.30$, every 1 unit of risk targets 1.3 units of reward.

Trade filters

- **Spread gate:** the trade is skipped if the live spread exceeds MaxSpreadPoints . Because this is a fast scalp, a wide spread quickly erodes the small edge.
- **One trade per magic:** while a position from this EA is open on the symbol, no new entries are taken.
- **Warm-up:** the EA needs at least $\text{StreakLength} + \text{BaselineLookback} + 3$ closed bars of history before it will evaluate any signal.

Why wait for the recovery bar? Fading a climax the instant it prints means catching a falling knife — the move can keep extending. Requiring a close back through the climax extreme provides objective evidence that the one-way flow has actually reversed before any risk is committed.

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
StreakLength	3	Number of consecutive same-direction "new extreme" bars that define a cascade. Range 2–6, step 1. Higher values demand a longer, more committed one-way run before a fade is considered.
ClimaxFactor	1.50	The climax bar's range must be at least this multiple of the pre-cascade average bar range. Range 1.00–4.00, step 0.10. Higher values require a more violent blow-off.
BaselineLookback	10	Number of quiet bars before the cascade used to compute the average-range baseline. Range 5–40, step 1.
BufferFrac	0.20	Stop-loss buffer placed beyond the cascade extreme, expressed as a fraction of the climax range. Range 0.00–1.00, step 0.05. Larger values give the stop more breathing room.
RewardRatio	1.30	Take-profit distance as a multiple of the structural stop distance. Range 0.50–4.00, step 0.10. The default targets 1.3 units of reward per 1 unit of risk.
MaxSpreadPoints	25	Maximum live spread (in points) at which a trade is allowed. Range 1–200, step 1. Skips entries when execution cost is too high for the scalp.
Lots	0.10	Fixed order volume in lots. Range 0.01–1.00, step 0.01. Size this to your account and risk tolerance.
Magic	5273	Unique EA identifier used to track and manage this strategy's positions. Range 0–9,999,999, step 1. Use a distinct value per EA instance on the same account.

Recommended Settings

This EA is designed for fast, tight-spread instruments on low timeframes, where climax-and-reversion behaviour is frequent and execution costs stay low.

- **Symbols:** liquid, tight-spread pairs such as EUR/USD or USD/JPY.
- **Timeframe:** M1 or M5 (a single primary timeframe — the EA does not combine timeframes).
- **Spread:** keep `MaxSpreadPoints` in line with your broker's typical spread on the chosen pair; an unnecessarily high cap erodes the scalp edge.
- **Account:** a low-latency, low-commission account (e.g. an ECN/raw-spread setup) suits the scalping style best.

Tuning tips: Raise `ClimaxFactor` and/or `StreakLength` to be more selective and trade only the most extreme exhaustion events (fewer, higher-conviction setups). Widen `BufferFrac` if stops are being clipped by the volatility of the blow-off itself. Always re-optimize on the specific symbol and timeframe you intend to trade.

Backtest before live use. Counter-trend scalping is sensitive to spread, slippage, and execution speed. Validate any parameter set with high-quality tick data and a realistic cost model, then forward-test on a demo account before committing real capital.

How to Install on MetaTrader 5

- 1 Copy `ExhaustionCascadeFade.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

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