

Three Drive Exhaustion

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Price-Action Reversal	M30 – H1	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 Drive Exhaustion is a pure price-action reversal Expert Advisor. It uses **no indicators, moving averages, oscillators or volume** — every decision is taken from raw OHLC data, fractal swing pivots, and horizontal price levels alone.

The strategy is built around the classic **“three drives”** (or three pushes) pattern. A trend that has run too far often prints three successively more extreme swing pivots while momentum quietly fades. When the third push can no longer cover the ground the previous push did, the move is considered *exhausted* and the late crowd is trapped. The EA does not blindly fade the move — it waits for the market to **confirm the turn by breaking structure** through the last protected swing before committing to a trade.

Because all measurements are expressed as fractions of the move’s own structure (rather than fixed points, pips or ATR), the strategy automatically scales to any symbol and timeframe. A natural fit is a clean, trending instrument such as **XAUUSD** or **EURUSD** on the **M30–H1** range, traded counter-trend at exhaustion points.

How It Works

The EA maintains a rolling buffer of closed bars and recomputes its confirmed swing pivots on every newly-closed bar. A swing pivot is a strict local extreme that has `PivotLeftRight` bars on each side that do not

equal or exceed it — this guarantees the pivot is fully confirmed before it is ever used. The strategy evaluates a short setup first, then a long setup; the two are exact mirror images.

Short Setup — Three Drives Up, Then Break of Structure Down

A short is taken when an exhausted up-move reverses through structure. All of the following conditions must be true:

- **Three ascending drives:** the last three confirmed swing highs ascend, $H1 < H2 < H3$.
- **Decelerating momentum:** the third advance is weaker than the second — $gainBC < DeceIFactor \times gainAB$, where $gainAB = H2 - H1$ and $gainBC = H3 - H2$.
- **Trend context:** the higher-lows between the drives are ascending (the protected low sits above the earlier swing low).
- **Third drive still the high:** no later bar has exceeded $H3$.
- **Break-of-structure trigger:** the just-closed bar closes *below* the protected swing low located between drive 2 and drive 3. This lower-low confirms the turn and fires the sell.

Long Setup — Three Drives Down, Then Break of Structure Up

The long setup is the exact mirror of the short:

- **Three descending drives:** the last three confirmed swing lows descend, $L1 > L2 > L3$.
- **Decelerating momentum:** $dropBC < DeceIFactor \times dropAB$.
- **Trend context:** the lower-highs between the drives are descending.
- **Third drive still the low:** no later bar has undercut $L3$.
- **Break-of-structure trigger:** the just-closed bar closes *above* the protected swing high between drive 2 and drive 3, confirming the turn and firing the buy.

Exits, Stop-Loss & Take-Profit

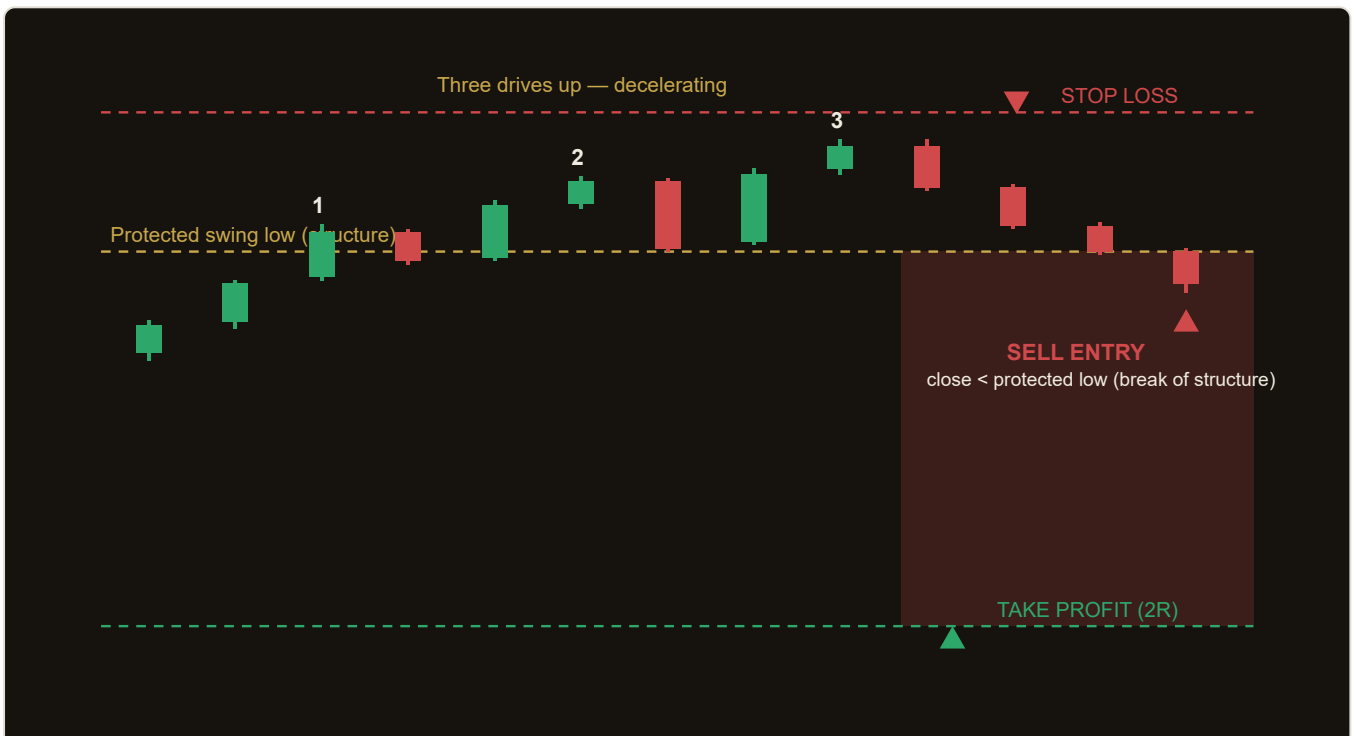
Risk is managed entirely by a **structural stop** and a fixed reward-to-risk target, both placed at order-send time and managed thereafter by the broker:

- **Stop-loss** is placed just beyond the third-drive extreme, with a buffer equal to $StopBufferFrac$ of the drive's height. For a short: $SL = H3 + StopBufferFrac \times (H3 - protectedLow)$. Because the buffer is a fraction of the move's own size, it self-scales to any symbol or timeframe — no point-size or ATR is required.
- **Take-profit** is a fixed multiple of the structural stop distance: $TP = entry - RewardRatio \times risk$ for a short (and the mirror for a long).
- **One position per magic number** at a time. Once a trade is open, the EA stops looking for new setups until the broker's SL or TP closes it.

Note — confirmation over prediction. The EA never sells the high or buys the low directly. It waits for price to *break structure* through the last protected swing before entering, trading the confirmed reversal rather than guessing the exact turning point. The `MaxWaitBars` filter discards setups where that confirmation arrives too late, keeping every entry fresh.

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. It depicts a **short**: three decelerating drives up, followed by a close below the protected swing low (break of structure) that fires the sell.



Illustrative example only. Actual market behaviour varies.

Parameters

All inputs are exposed in the MT5 EA properties dialog. Defaults are shown below alongside the valid range for each input.

Parameter	Default	Description
PivotLeftRight	3	Bars required on each side of a bar for it to qualify as a confirmed swing pivot. Higher values demand cleaner, more significant swings. Range 2–8.
DecelFactor	1.00	Deceleration filter. The third drive must add less than this fraction of the ground the second drive added ($\text{gainBC} < \text{DecelFactor} \times \text{gainAB}$). Lower values require more obvious exhaustion. Range 0.40–1.50.
StopBufferFrac	0.20	Stop-loss buffer placed beyond the third-drive extreme, expressed as a fraction of the drive's height. Self-scales to any symbol/timeframe. Range 0.00–1.00.
RewardRatio	2.00	Take-profit distance as a multiple of the structural stop distance (reward-to-risk). Range 1.00–5.00.
MaxWaitBars	12	Maximum bars allowed between the third drive and the break-of-structure trigger. Keeps the setup fresh and discards stale patterns. Range 4–40.
Lots	0.10	Order volume in lots for each trade. Range 0.01–1.00.
Magic	7401	Unique magic number identifying this EA's positions, enforcing the one-position-per-magic rule. Range 0–9,999,999.

Recommended Settings

The defaults are tuned for a clean, trending instrument on the M30–H1 range traded counter-trend at exhaustion points. Use the following as a sensible starting point before optimising on your own data:

- **Symbol:** XAUUSD or EURUSD — instruments that trend cleanly and print well-defined swing structure.
- **Timeframe:** M30 to H1. The strategy reads every bar with the chart's primary timeframe, so simply attach it to the timeframe you want it to trade.
- **PivotLeftRight = 3:** a balanced setting. Raise it on noisier symbols to filter out minor swings; lower it for more frequent (but less significant) setups.
- **DecelFactor = 1.00:** requires the third drive to be strictly weaker than the second. Tighten toward 0.60–0.80 to demand clearer exhaustion and fewer trades.
- **RewardRatio = 2.00:** a 2:1 target. Combined with the structural stop, this keeps the risk profile favourable even at modest win rates.

Example — a short trade

Price prints three ascending highs at 1.0850, 1.0905 and 1.0935 (the third advance of 30 pips is smaller than the prior 55 pips — momentum is decelerating). The protected swing low between drives 2 and 3 sits at 1.0890. When the next bar *closes* at 1.0884 — below 1.0890 — the EA sells. With a drive height of 45 pips and `StopBufferFrac = 0.20`, the stop is placed ~9 pips above 1.0935; the take-profit is set `RewardRatio = 2.00` × that risk below the entry.

Tip. Always run a fresh optimisation and forward-test on the specific symbol and timeframe you intend to trade. Because every threshold scales to the move's own structure, the same parameter set often transfers reasonably across instruments — but it should still be validated before going live.

How to Install on MetaTrader 5

- 1 Copy `ThreeDriveExhaustion.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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