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Tiered Breakout Retest

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Multi-Timeframe Price-Action Breakout	M15 primary (H3 synthetic)	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

Tiered Breakout Retest is a pure price-action, multi-timeframe breakout system. It uses **no indicators whatsoever** — every decision is made from raw candle structure. The strategy works on two cooperating tiers that must agree before a trade is taken.

Because the strategy needs a higher timeframe but should only depend on a single chart feed, it builds that higher timeframe *internally*. Every `HtfFactor` completed primary bars are aggregated into one synthetic higher-timeframe (HTF) candle. Structure is then tracked on this synthetic series, while entries are timed on the live primary candles.

- **Higher tier (the signal):** watches the synthetic HTF series for a *break of structure* (BOS). When an HTF candle *closes* beyond the most recent opposing fractal swing, it sets a directional bias (long or short) and records the broken level.
- **Lower tier (the confirmation):** on the primary timeframe, waits for a momentum candle that breaks the prior bar's extreme in the bias direction while still holding on the correct side of that broken HTF level — a reclaim / retest. That candle triggers the entry.

Stops are placed at the most recent primary swing (a true structure stop) padded by a fraction of the trigger candle's range, and the target is a fixed reward multiple of that measured risk. Long and short logic are fully mirrored, and only one position is held at a time.

How It Works

1. Building the synthetic higher timeframe

The backtest engine feeds only the primary timeframe. To obtain a higher timeframe without a second data source, the EA aggregates bars: it tracks a running high, low and close, and after exactly `HtfFactor` primary bars it finalizes one synthetic HTF candle and appends it to the HTF series. With the default `HtfFactor = 12`, twelve primary candles become one HTF candle (e.g. M15 → roughly H3).

2. Higher-tier signal — break of structure (BOS)

On the synthetic HTF series the EA locates the most recent *confirmed fractal swing*. A swing high is a candle whose high is strictly above the `PivotLeftRight` candles on each side; a swing low mirrors this on the lows. The bias is then set when the latest HTF candle *closes* beyond that swing:

- **Bullish BOS:** HTF close above the most recent swing high → bias becomes **Long**, and the swing high becomes the broken level (the reclaim line).
- **Bearish BOS:** HTF close below the most recent swing low → bias becomes **Short**, and the swing low becomes the broken level.

> **Bias invalidation.** The bias is not permanent. If a later HTF candle closes back through the broken level — below it while long, or above it while short — the bias is cleared to *None* and the EA stands aside until a fresh break of structure forms.

3. Lower-tier confirmation — the reclaim/retest entry

Once a bias exists, the EA inspects the two newest completed primary bars: the *trigger* (newest) and the *prior* bar. A long entry requires all of the following on the trigger candle:

- It is bullish — `close > open` (a momentum candle).
- Its close breaks the prior bar's high — `close > prior.High`.
- Its close still holds above the broken HTF level — `close > biasLevel` (the reclaim holds).

Short entries are the exact mirror: a bearish trigger whose close breaks the prior low and stays below the broken level. Only **one entry is allowed per BOS event** — after a trade fires, no further entries are taken until a new break of structure resets the bias.

4. Stops, targets and sizing

The stop is anchored to real structure rather than a fixed distance:

- **Long:** stop = lowest low of the last `ConfirmSwingBars` primary bars, minus a buffer of `BufferFrac × (trigger range)`. Entry is at the Ask.

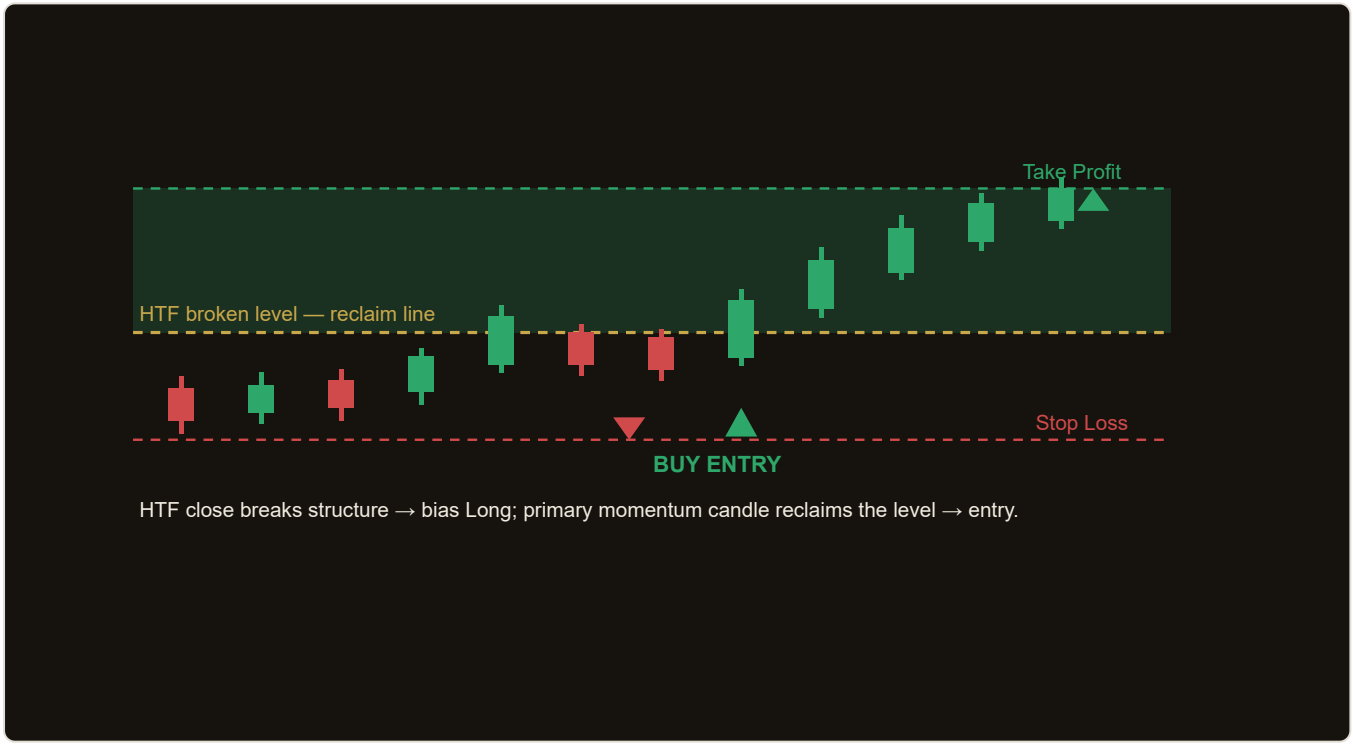
- **Short:** stop = highest high of the last `ConfirmSwingBars` primary bars, plus the same buffer. Entry is at the Bid.

Risk is the distance from entry to stop. The take-profit is set at a fixed reward multiple of that risk: `TP = entry ± RewardMultiple × risk`. If the measured risk is zero or negative the trade is skipped. There is no trailing stop or partial exit — each position runs to its stop or target.

> **Worked long example**
>
> An HTF candle closes above a prior swing high → bias turns *Long* with the swing high as the reclaim line. Price dips back, then a bullish primary candle closes above the previous bar's high *and* above the reclaim line. Entry fires at the Ask. The stop sits just below the recent 5-bar swing low (default `ConfirmSwingBars = 5`) padded by 25% of the trigger range, and the target is placed 2× that risk above entry (`RewardMultiple = 2.0`).

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
HtfFactor	`12`	Number of primary bars aggregated into one synthetic higher-timeframe candle. Larger values build a higher, slower HTF. Range 4–48, step 2.
PivotLeftRight	`2`	Fractal pivot strength on the HTF series — how many candles on each side a swing high/low must dominate to count as a confirmed pivot. Range 1–5, step 1.
ConfirmSwingBars	`5`	Primary-timeframe lookback used to find the structure stop (lowest low / highest high) at entry. Range 2–20, step 1.
RewardMultiple	`2.0`	Reward-to-risk multiple. Take-profit distance = this × the measured entry-to-stop risk. Range 1.0–5.0, step 0.5.
BufferFrac	`0.25`	Stop padding expressed as a fraction of the trigger candle's range, added beyond the structure swing. Range 0.0–1.0, step 0.05.
Lots	`0.10`	Fixed trade volume in lots. Range 0.01–1.0, step 0.05.
Magic	`7420`	Magic number used to tag and identify this EA's orders so it manages only its own positions.

Recommended Settings

The strategy is timeframe-agnostic but is designed around a primary chart that, when multiplied by `HtfFactor`, yields a meaningful higher timeframe. A practical starting point:

- **Symbol:** a liquid major FX pair (e.g. EURUSD, GBPUSD) or a major index CFD with clean swing structure.
- **Primary timeframe:** M15. With `HtfFactor = 12` this builds a synthetic ~H3 structure series.
- **RewardMultiple:** keep at **2.0** to start; raise toward 3.0 for trend-heavy instruments, lower toward 1.5 for choppier ranges.
- **PivotLeftRight: 2** balances responsiveness and noise; increase to 3–4 to demand cleaner, more significant HTF swings.
- **BufferFrac: 0.25** gives the stop a little room beyond structure; widen it on volatile symbols to avoid premature stop-outs.

> **Tip.** Always optimize and forward-test on a demo account first. Because the HTF is built by aggregation, changing `HtfFactor` changes the entire structure picture — re-validate the rest of the settings whenever you adjust it.

How to Install on MetaTrader 5

1. Copy `TieredBreakoutRetest.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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