

Engulfing Breakout Hedge

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Price-Action Breakout & Hedge

TIMEFRAME

M5 – M30

WEBSITE

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

Engulfing Breakout Hedge is a pure price-action Expert Advisor — it uses *no* indicators of any kind (no moving averages, RSI, ATR, or Bollinger Bands). Instead it fuses six discretionary trading tools into one automated system: rolling floor **pivots**, the **engulfing** candle pattern, a momentum **breakout** trigger, a false-break **reversal** hedge, intraday **scalping** management, and a managed money **basket**.

The edge thesis is the deliberate mirror of a pivot-fade. Most range traders sell resistance and buy support; when a level finally gives way, the stops of that crowd plus fresh momentum produce a clean directional thrust. The EA only takes that thrust when it is stamped by an engulfing candle that opens around the pivot and closes decisively through it — the most reliable break-of-level confirmation available in raw price action.

The classic failure mode of breakout trading is the **false break**: price pokes through the level, traps the breakout crowd, then snaps back into the range. Rather than simply absorbing that stop-out, when the broken level is reclaimed the EA deploys an **opposite reversal hedge** that rides the snap-back the other way — converting the textbook “bought the high / sold the low of a fakeout” disaster into a scratch or a win. The hedged pair is then banked at the **basket** level the instant net floating P/L turns green.

Designed for: liquid, level-respecting instruments where pivot breaks and fakeouts alternate throughout the session — FX majors such as EUR/USD and GBP/USD, or XAU/USD (gold) — on the M5, M15, or M30 timeframes. All distances are expressed as fractions of the measured pivot range, so the logic scales to any symbol or timeframe with no hard-coded pip values.

How It Works

1. Floor pivots (recomputed every closed bar)

On each freshly-closed bar the EA recomputes classic floor pivots from the primary timeframe only. Over the `PivotLookback` closed bars that *precede* the signal candle it takes the highest high (`H`) and lowest low (`L`), and uses the close (`C`) of the bar immediately before the signal:

```
PP    = (H + L + C) / 3
R1    = 2 × PP - L    (resistance)
S1    = 2 × PP - H    (support)
range = H - L    (= R1 - S1)
```

The pivot `range` is the single unit that sizes every buffer, stop, and target in the system — this is what makes the strategy symbol- and timeframe-agnostic.

2. Entries (taken only when flat)

The two entry rules are exact mirror images, evaluated once per closed bar:

- **LONG** — the just-closed candle is a **bullish engulfing** (a bullish body that engulfs the prior bearish body) that **opens at or below resistance R1** and **closes decisively above it**. Resistance has broken with momentum, so the EA goes with the break.
- **SHORT** — the just-closed candle is a **bearish engulfing** (a bearish body that engulfs the prior bullish body) that **opens at or above support S1** and **closes decisively below it**. Support has broken with momentum, so the EA goes with the break.

“Opens near the level” is governed by `ZoneFrac × range`; “closes decisively beyond” is governed by `BreakFrac × range`; and the engulfing body must be at least `EngulfBodyRatio` times the size of the prior candle’s body. New entries are also skipped while the spread exceeds `MaxSpreadPoints`.

3. Base stop & target

For a long breakout of R1 the levels are set as follows (the short side is symmetric around S1):

```

level      = R1
hedgeTrig = level - max(HedgeFrac × range, minDist) // false-break line
SL         = hedgeTrig - max(StopFrac × range, minDist) // pad beyond the hedge trigger
TP         = ask + max(RewardFrac × range, minDist) // reward in breakout direction

```

The base stop loss is deliberately placed *beyond* the hedge trigger so that the reversal hedge always engages first — the EA prefers to hedge a fakeout rather than simply stop out of it.

4. The hedge (the signature mechanic)

While the single base leg is open, if price travels `HedgeFrac × range` back through the broken level — proving the breakout false — the EA opens an opposite market leg. It now holds both directions: a genuine locked hedge that rides the reversal and offsets the trapped base leg. The hedge's own stop (reclaim) and target are scaled off the level → trigger span back up to a full range using `ReclaimFrac` and `RewardFrac`.

5. Basket money management (the dominant exit)

Whenever any exposure is held, net floating P/L across all legs is evaluated on every tick:

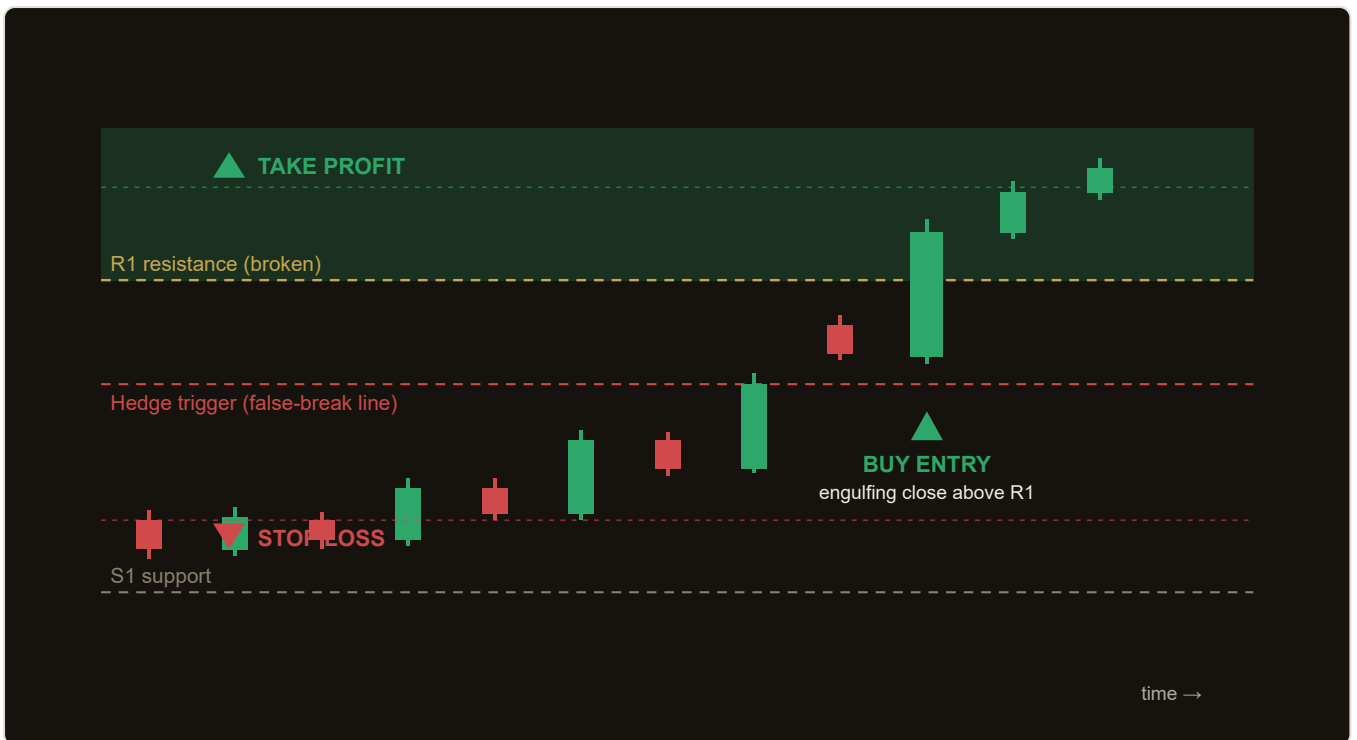
- **Net floating P/L** \geq `BasketTpMoney` → close everything (banks the win or the recovery).
- **Net floating P/L** \leq `-BasketSlMoney` → flatten everything (a hard ceiling against a strong continuation of the very breakout that just failed-then-ran).

Worked example (long fakeout turned into a win)

Price closes a bullish engulfing candle through R1, so the EA buys. Price then stalls and falls back through R1 by `HedgeFrac` of the range — the breakout was false. The EA sells an equal lot, locking the position. The snap-back continues lower; the short hedge gains faster than the trapped long loses, net floating P/L crosses `BasketTpMoney`, and the EA closes both legs in profit.

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: price drifts up to test resistance R1, then a large bullish engulfing candle opens at the level and closes decisively above it — the breakout entry. Take profit projects one reward unit higher. Had price instead fallen back below the dashed *hedge-trigger* line, the EA would have sold an opposite leg (the reversal hedge) before the base stop loss was ever reached.

Parameters

Parameter	Default	Description
PivotLookback	20	Number of closed bars (preceding the signal candle) whose H/L/C define the floor pivots. Range 5–150.
ZoneFrac	0.20	How near the broken level the candle's open must sit, as a fraction of the pivot range. Range 0.02–1.00.
BreakFrac	0.05	How far beyond the level the candle must close to count as a break, as a fraction of the range. Range 0.00–0.50.
EngulfBodyRatio	1.00	Engulfing strength: the signal body must be at least this multiple of the prior candle's body. Range 0.50–3.00.
HedgeFrac	0.25	Distance price must travel back through the level to call the break false and deploy the hedge, as a fraction of the range. Range 0.05–1.00.
StopFrac	0.30	Extra base-stop pad placed beyond the hedge trigger, as a fraction of the pivot range. Range 0.05–2.00.
RewardFrac	1.00	Base take-profit distance in the breakout direction, as a fraction of the range. Range 0.20–4.00.
ReclaimFrac	0.30	Hedge invalidation pad: if price reclaims the level by this amount the reversal is wrong. Range 0.05–1.50.
BasketTpMoney	25.0	Close the whole basket once net floating profit reaches this amount (account currency). Range 5–2000.
BasketSIMoney	300.0	Flatten the whole basket once net floating loss reaches this amount (account currency). Range 50–100000.
MaxSpreadPoints	50	Skip new entries while the spread (in points) exceeds this value; 0 disables the filter. Range 0–500.
Lots	0.10	Base and hedge volume (lots), snapped to the symbol's volume step and min/max limits. Range 0.01–1.00.
Magic	8310	Magic number used to identify and manage this EA's positions. Range 0–9,999,999.

Recommended Settings

Start from the default parameters, which are tuned for liquid, level-respecting instruments where breakouts and fakeouts alternate throughout the session.

- **Symbols:** FX majors such as EUR/USD or GBP/USD, or XAU/USD (gold).
- **Timeframe:** M5, M15, or M30 — the EA runs on whatever timeframe the chart is set to at attach/backtest time.
- **Pivot window:** the default `PivotLookback = 20` captures a recent intraday range; raise it for broader, slower levels or lower it for faster, more reactive ones.
- **Spread guard:** keep `MaxSpreadPoints` at a level appropriate to your broker so entries are skipped during illiquid, wide-spread conditions.

Sizing the basket: `BasketTpMoney` and `BasketSlMoney` are expressed in account currency and must be matched to your `Lots` and account balance. Because a locked hedge can carry two open legs at once, set `BasketSlMoney` as the maximum loss you are willing to accept on the combined basket, not on a single trade.

Hedging account required. This EA holds simultaneous long and short positions on the same symbol. It must run on a **hedging** account type; on a netting account the opposite leg would offset the base position instead of forming a hedge. Always validate on a demo account before going live.

How to Install on MetaTrader 5

- 1 Copy `EngulfingBreakoutHedge.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.