

Engulfing Reversal Hedge

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Price-Action Reversal (Hedging)

TIMEFRAME

M5 / M15

WEBSITE

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

Engulfing Reversal Hedge is a pure price-action reversal scalper. It uses *no* indicators of any kind — no moving averages, RSI, ATR, Bollinger Bands, or VWAP. Every decision is derived from raw candle geometry and swing structure on the chart's primary timeframe.

The strategy waits for a textbook two-candle **engulfing pattern** to print right at a confirmed fractal **swing pivot**, then fades the prior leg as a reversal. Rather than entering on the close, it arms a **stop order** just beyond the engulfing candle so the trade only fills if the reversal genuinely **breaks out** with momentum behind it. If that breakout then proves false and price travels back against the position, the EA deploys an opposite market leg — a genuine locked **hedge** — turning what would have been a clean stop-out into a managed, often-recoverable basket.

Because all distances scale to the engulfing candle's own range, the EA adapts to any symbol or timeframe with zero hard-coded pip values. It is built for liquid FX majors (EUR/USD, GBP/USD) or XAU/USD on M5 / M15 — fast enough for scalps, structured enough for clean swing pivots.

Five price-action ingredients, one idea. The strategy is a deliberate fusion of **Pivot** (swing structure) + **Engulfing** (reversal trigger) + **Reversal** (fade the leg) + **Breakout** (follow-through confirmation) + **Hedge** (false-break recovery). Each ingredient filters or protects the next.

How It Works

The five ingredients

- **Pivot** — a recent fractal swing low/high (a bar that is the local extreme with `PivotSpan` strictly lower/higher bars on each side) marks the structural turning point being traded against.
- **Engulfing** — a two-candle bullish/bearish engulfing pattern printed at that swing pivot is the reversal trigger: sellers (or buyers) have just been overwhelmed at the extreme.
- **Reversal** — the EA fades the prior leg. A bullish engulfing at a swing low signals a buy of the turn up; a bearish engulfing at a swing high signals a sell of the turn down.
- **Breakout** — entry is *not* on the close. A stop order is armed just beyond the engulfing candle's extreme, so the trade fills only if the reversal follows through and breaks out of the pattern. Unfilled stops expire after a few bars.
- **Hedge** — if, after filling, the breakout proves false and price travels back by `HedgeFrac` of the pattern range, the EA deploys an opposite market leg. It now holds both directions — a locked hedge that rides the adverse move and offsets the trapped base leg until the basket is banked.

Entry logic

On each freshly-closed bar, while flat and idle, the EA examines the two most-recent closed candles (the older candle `a`, the newer candle `b`) and the surrounding swing structure:

- **Long setup** — a *bullish* engulfing (`b` closes up and fully engulfs the prior bearish `a`) whose low sits within `ZoneFrac` of the lookback range from a confirmed swing low. A **BuyStop** is armed at the engulfing high plus a `TriggerFrac` buffer.
- **Short setup** — a *bearish* engulfing whose high sits within `ZoneFrac` of the range from a confirmed swing high. A **SellStop** is armed at the engulfing low minus a `TriggerFrac` buffer.

The swing pivot is located by scanning back through the lookback window for the most-recent bar that is a strict fractal extreme (`PivotSpan` bars lower/higher on each side). If no qualifying pivot is found, no order is armed. Setups are skipped while the spread exceeds `MaxSpreadPoints`.

Worked example — long

A clean down-leg bottoms on a fractal swing low. The next two candles print a bullish engulfing whose low taps that pivot. The EA places a BuyStop a fraction of the engulfing range above the pattern high. Price pushes up, triggers the stop, and the long fills — the reversal has confirmed with momentum, not just a hopeful close.

Stops, targets and distance scaling

Every live distance is measured in units of the engulfing candle's range (`engRange`), so the EA needs no pip inputs and adapts automatically across symbols and timeframes:

- **Base stop loss** sits a pad *beyond* the hedge trigger — a distance of $(\text{HedgeFrac} + \text{StopFrac}) \times \text{engRange}$ from entry — so the hedge always engages before the base stop is hit.
- **Base take profit** is a RewardRatio multiple of the base risk (entry-to-stop distance), giving a quick scalp target.
- All prices are floored to the broker's minimum stop distance (StopLevel) so orders are always valid.

The hedge

Once the base leg is live, the EA watches for the breakout to fail. If price travels back against the position by $\text{HedgeFrac} \times \text{engRange}$ from the fill, it immediately opens an opposite market leg of the same volume. The account now holds both a long and a short. The hedge's own target rides the adverse move ($\text{RewardRatio} \times \text{HedgeFrac} \times \text{engRange}$), aiming to recover what the trapped base leg is losing.

Hedging-mode account required. The hedge leg must coexist with the base leg rather than netting it out. On a netting account the opposite order would simply reduce or close the base position, defeating the strategy. The MQL5 build prints a warning at startup if the account is not in $\text{ACCOUNT_MARGIN_MODE_RETAIL_HEDGING}$ mode.

Exit logic & basket money management

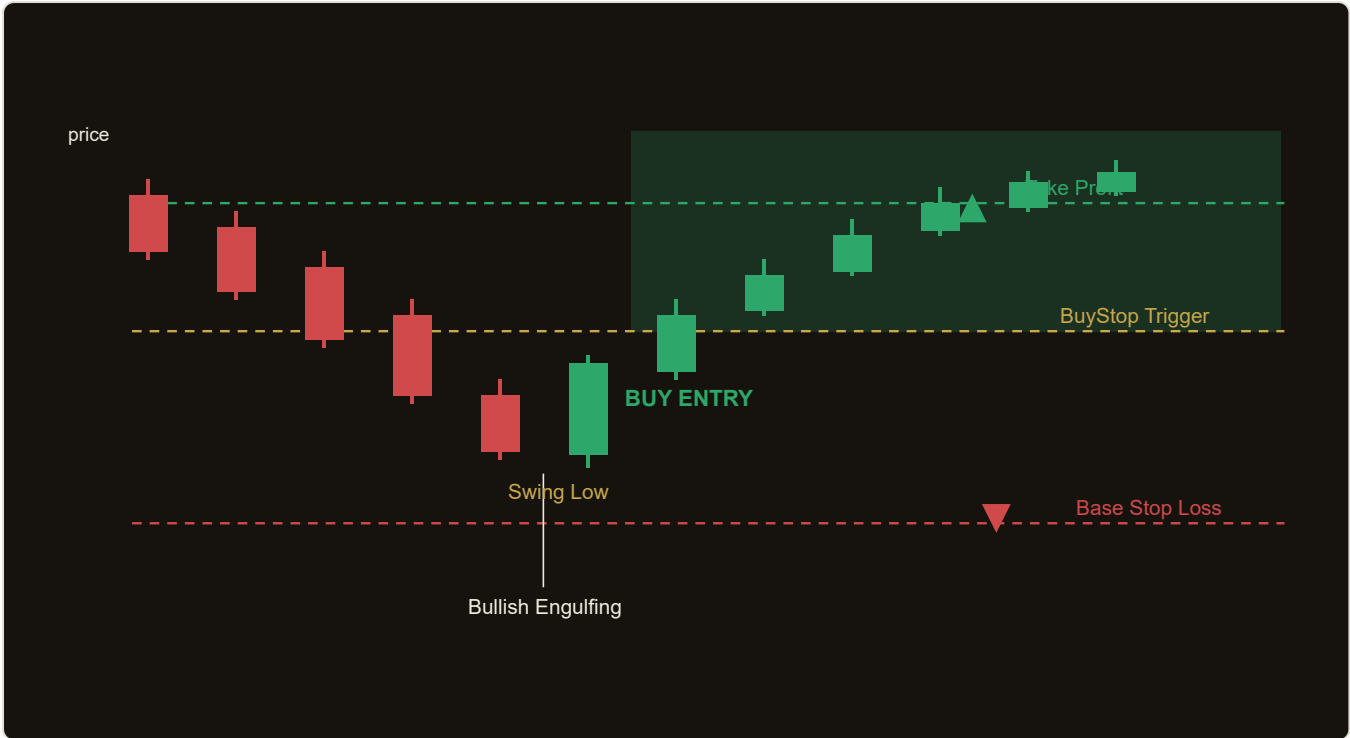
Once any position is open, the whole basket (base leg plus any hedge) is governed by two account-currency money levels evaluated on every tick:

- **Basket take profit** — when net floating profit (including swap) reaches BasketTpMoney , every leg is closed and any stray pending order is cancelled.
- **Basket stop loss** — when net floating loss reaches BasketSlMoney , the entire basket is flattened.

If a BuyStop/SellStop is never triggered, it is cancelled after EntryExpiryBars closed bars so a stale setup never lingers. After every flatten, all internal state is reset so the next engulfing-at-swing setup starts clean.

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
PivotSpan	3	Fractal half-width: a swing pivot needs this many strictly lower/higher bars on each side. Range 2–10.
SwingLookback	30	How many recent closed bars to scan for the latest swing pivot and the proximity range. Range 10–120.
ZoneFrac	0.35	The engulfing extreme must sit within this fraction of the lookback range from the swing pivot. Range 0.05–1.00.
TriggerFrac	0.10	Breakout buffer placed beyond the engulfing extreme for the stop entry (\times engRange). Range 0.00–1.00.
HedgeFrac	0.60	Adverse travel past the fill (\times engRange) that flags a false break and deploys the hedge. Range 0.10–2.00.
StopFrac	0.50	Extra base-stop pad placed beyond the hedge trigger (\times engRange). Range 0.10–3.00.
RewardRatio	1.50	Base take-profit as a multiple of the base risk (entry-to-stop distance). Range 0.50–5.00.
EntryExpiryBars	3	Cancel an unfilled breakout stop order after this many closed bars. Range 1–20.
BasketTpMoney	25.0	Close the whole basket once net floating profit reaches this (account currency). Range 5–2000.
BasketSIMoney	300.0	Flatten the whole basket once net floating loss reaches this (account currency). Range 50–100000.
MaxSpreadPoints	50	Skip new setups while the spread (points) exceeds this. Set 0 to disable. Range 0–500.
Lots	0.10	Order volume per leg. Snapped to the symbol's volume step and min/max limits. Range 0.01–1.00.
Magic	4815	Magic number identifying this EA's orders and positions. Range 0–9,999,999.

Recommended Settings

The EA is designed for liquid instruments with clean swing structure and fast scalp follow-through.

- **Symbols:** EUR/USD, GBP/USD, or XAU/USD (gold).
- **Timeframe:** M5 or M15 — fast enough for scalps, structured enough for clean fractal pivots.
- **Account:** a **hedging-mode** MT5 account is mandatory (see the hedge note above).
- **Spread:** keep `MaxSpreadPoints` tight on majors; raise it for gold, which carries a wider spread.

Tip — sizing the basket money levels. `BasketTpMoney` and `BasketSlMoney` are in account currency and are *not* scaled to `Lots` automatically. If you change the volume, revisit both so the basket target and money-stop still match your risk per trade.

Hedging adds exposure, not safety. A locked hedge does not cap loss on its own — both legs remain open and the spread is paid twice. The basket money-stop (`BasketSlMoney`) is the real backstop. Always set it to a loss you can accept on a single basket, and test thoroughly in the Strategy Tester before live use.

How to Install on MetaTrader 5

- 1 Copy `EngulfingReversalHedge.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.