

Engulfing Pivot Scalp Hedge

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Pivot Breakout Scalper (Hedged)

TIMEFRAME

M5 – M30

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 Pivot Scalp Hedge is a pure price-action Expert Advisor — it uses **no indicators** (no moving averages, RSI, ATR, or bands). Every decision is derived directly from candle bodies and classic floor pivot levels, so the logic is transparent and adapts to any symbol without hard-coded pip values.

The EA fuses five tools the brief asked for into a single workflow: floor **pivots** (PP / R1 / S1), **engulfing** candle patterns, a pivot **breakout** entry, a quick **scalp** target, and a managed stop-and-reverse **hedge** that turns a false break into a reversal trade.

The edge thesis. Floor pivots are the lines virtually every intraday desk marks. A decisive *close* through R1 or S1 is the moment the level "gives way" and the order flow that was defending it flips to chasing the move. Requiring that the breakout bar is also a true **engulfing candle** filters out weak pokes — the breakout only counts when the new side fully overwhelms the prior candle's body (real conviction, not a one-tick stop run). The EA scalps that initial thrust.

The danger with breakouts is the **false break**: price closes through, traps the breakout crowd, then snaps violently back into the range. Instead of simply eating that loss, when price travels back through the broken level the EA deploys an opposite **hedge** leg — now the very fakeout that would have stopped it out becomes a reversal trade riding the snap-back toward the central pivot. The hedged pair is then banked as a basket the instant the net float turns sufficiently green.

Design stance. This is deliberately the *mirror* of a pivot-fade system: it trades **with** the break and hedges the failure, rather than fading the level and hedging the break.

How It Works

1. Floor Pivot Levels

On every freshly-closed bar of the chart timeframe, the EA recomputes the floor pivots from the `PivotLookback` closed bars *before* the signal candle:

```
H = highest high over the lookback window
L = lowest low over the lookback window
C = close of that block's last bar
PP = (H + L + C) / 3
R1 = 2 × PP - L      (resistance)
S1 = 2 × PP - H      (support)
range = H - L        (== R1 - S1)
```

The pivot **range** sizes every buffer in the strategy — break margins, stops, targets and the hedge trigger are all expressed as fractions of this range. That is why the EA carries **zero pip hard-coding** and scales cleanly across symbols and timeframes.

2. Entry Logic (flat only)

The EA only hunts for new setups when it is completely flat, and only acts once per freshly-closed bar. The entry rules are distinct, mirror-image long and short conditions:

- **LONG (R1 break)** — the just-closed candle is a **bullish engulfing** (its body fully engulfs the prior bearish body, and the current body is \geq `EngulfFactor` × the prior body) *and* it closes cleanly **above R1** — that is, `close > R1 + BreakFrac × range` — having come up from below. Resistance broke with conviction → buy the breakout.
- **SHORT (S1 break)** — the just-closed candle is a **bearish engulfing** that closes cleanly **below S1** (`close < S1 - BreakFrac × range`) having come down from above. Support broke → sell the breakdown.

A prior-doji guard floors the reference body at one point, so a flat prior candle cannot produce a false engulfing signal. If `MaxSpreadPoints` is set, entries are skipped while the spread exceeds that ceiling.

3. Stops, Targets & the Hedge Trigger

When the base leg opens, three structural prices are placed (all as fractions of the pivot range, never below the broker's minimum stop distance):

- **Scalp take-profit** — `TargetFrac × range` from entry, in the breakout direction (the quick scalp).

- **Fail trigger** — $\text{FailFrac} \times \text{range}$ back through the broken level. Reaching it means the break is failing and arms the hedge.
- **Base stop-loss** — an extra $\text{StopFrac} \times \text{range}$ pad placed *beyond* the fail trigger, so the hedge always fires first and the base stop is the last line of defence.

4. The Hedge (false-break reversal)

While the single base leg is open, if price travels back through the broken level and touches the fail trigger, the EA opens an **opposite market leg** — a genuine locked hedge that rides the snap-back the new way and offsets the losing base leg. The hedge volume is $\text{Lots} \times \text{HedgeVolFactor}$ (a multiplier > 1 over-covers the loser). The hedge leg carries its own stop just beyond the broken level (a reclaim = the fakeout is over) and a take-profit at $\text{HedgeTpFrac} \times \text{range}$ toward the central pivot.

5. Basket Money Management (dominant exit)

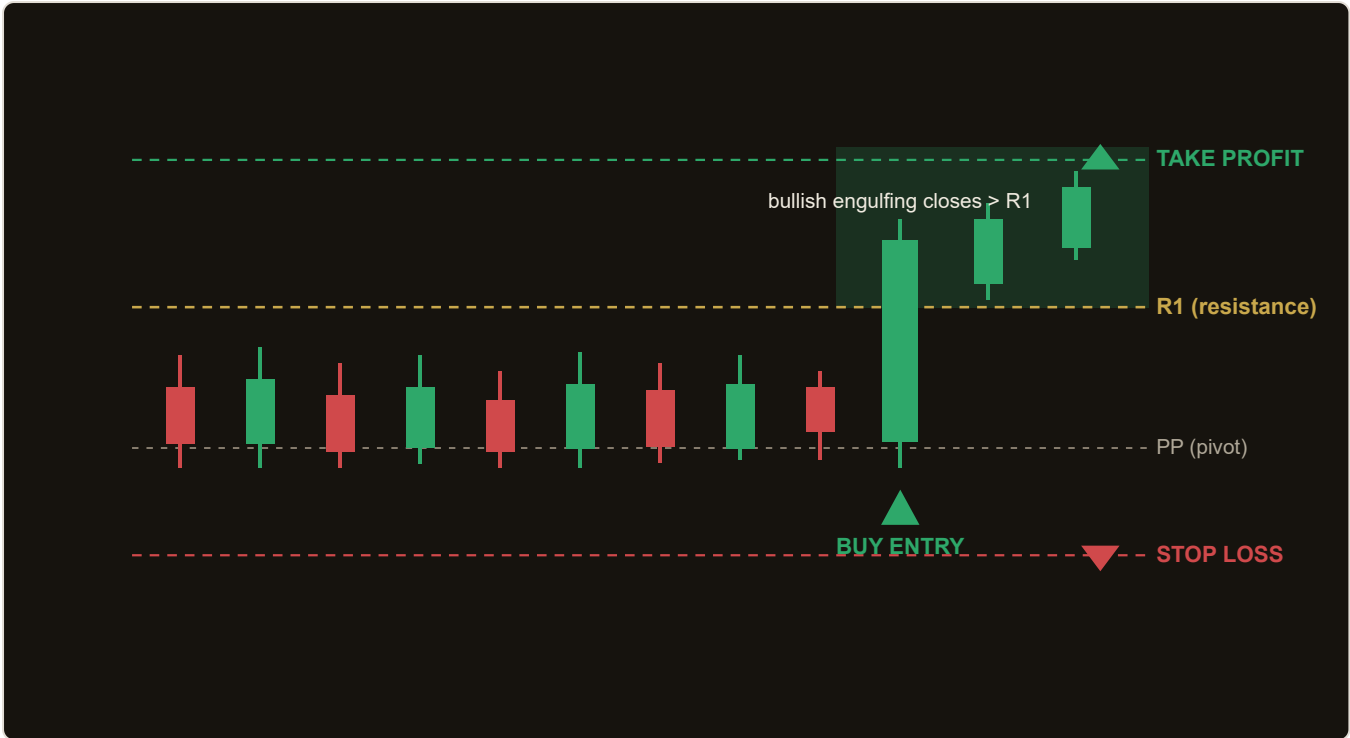
Once exposure is live, net floating P/L (profit + swap across all legs) governs the exit and overrides everything else:

- **Basket take-profit** — net float $\geq \text{BasketTpMoney}$ → close everything (banks the recovery or the win).
- **Basket stop-loss** — net float $\leq -\text{BasketSlMoney}$ → flatten everything (the hard ceiling: the failure mode is a strong one-way trend after the hedge locks).

Hedging account required. This EA deliberately holds opposing buy and sell positions on the same symbol at the same time. It must run on a **hedging** account, not a netting account, or the opposite leg will simply close the base leg instead of locking it.

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 the **long (R1 break)** case: price ranges below resistance, a bullish engulfing candle closes cleanly above R1, the EA buys the breakout, and the quick scalp is banked at the take-profit.



Illustrative example only. Actual market behaviour varies.

Parameters

Parameter	Default	Description
PivotLookback	20	Closed bars (before the signal candle) whose H/L/C define the floor pivots. Range 5–150, step 1.
EngulfFactor	1.10	Engulfing strength — the current body must be \geq this multiple of the prior body. Range 1.00–3.00, step 0.05.
BreakFrac	0.05	Clean-break margin: the close must clear the pivot by this fraction of the range. Range 0.00–0.50, step 0.01.
TargetFrac	0.50	Scalp target distance from entry, as a fraction of the pivot range. Range 0.15–3.00, step 0.05.
FailFrac	0.15	Distance back through the broken level that confirms a false break and arms the hedge. Range 0.03–1.00, step 0.01.
StopFrac	0.35	Extra base-stop pad placed beyond the hedge trigger, as a fraction of the range. Range 0.05–2.00, step 0.05.
HedgeTpFrac	0.60	Hedge leg take-profit (snap-back target) as a fraction of the range. Range 0.15–3.00, step 0.05.
HedgeVolFactor	1.50	Hedge lot size as a multiple of the base lots (>1 over-covers the loser). Range 0.50–3.00, step 0.10.
BasketTpMoney	20.0	Close the whole basket once net floating profit reaches this (account currency). Range 5.0–2000.0, step 5.0.
BasketSIMoney	250.0	Flatten the whole basket once net floating loss reaches this (account currency). Range 50.0–100000.0, step 50.0.
MaxSpreadPoints	40	Skip new entries while the spread (points) exceeds this (0 = off). Range 0–500, step 5.
Lots	0.10	Base lot size. Range 0.01–1.00, step 0.05.
Magic	6310	EA magic number used to identify and manage this EA's positions. Range 0–9,999,999, step 1.

Recommended Settings

The strategy is built for liquid, breakout-prone instruments where pivot breaks and fakeouts alternate throughout the session.

- **Symbols:** liquid FX majors such as GBP/USD or EUR/USD, or XAU/USD (gold).
- **Timeframe:** M5, M15 or M30 — the EA recomputes pivots from whatever timeframe the chart is set to.
- **Account type:** a **hedging** account (required — see the note above).
- **Spread:** keep `MaxSpreadPoints` tight enough to block entries during news-driven spread blowouts.

Example starting point — GBP/USD M15

Leave `PivotLookback` at 20 (a balanced intraday window), `EngulfFactor` at 1.10 (genuine conviction without being too rare), and `TargetFrac` at 0.50 for a quick scalp. Size `BasketTpMoney` and `BasketSlMoney` to your account: the defaults of 20 / 250 give the basket room to let a hedge recover while still capping the one-way-trend failure mode. Always validate on the MT5 Strategy Tester and a demo account before going live.

Tuning tip. Because every distance scales with the pivot range, the fraction parameters (`BreakFrac` , `TargetFrac` , `FailFrac` , `StopFrac` , `HedgeTpFrac`) behave consistently across symbols and timeframes. Adjust them in small steps and re-test — widening `FailFrac` delays the hedge (fewer, later hedges); tightening it hedges sooner.

How to Install on MetaTrader 5

- 1 Copy `EngulfingPivotScalpHedge.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.