

Pivot Engulfing Scalper

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Price-Action Breakout (Hedged)

TIMEFRAME

M5 / M15 / M30

WEBSITE

www.algotbot.live

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Overview

The **Pivot Engulfing Scalper** is a pure price-action Expert Advisor — it uses **no indicators** (no moving averages, RSI, ATR, or Bollinger Bands). Instead it reads raw market structure directly from the candles, fusing four classic discretionary tools into one mechanical system: structural **pivots**, the **engulfing** candle pattern, momentum **breakout** entries, and a managed **reversal hedge**.

It is the deliberate mirror of a “fade-the-level” system. Rather than betting a swing high or low will hold, it bets the level will **break** — and when a break turns out to be false, it stops fighting the move and flips into a locked hedge that rides the snap-back toward the mean.

A swing high or low is the level the whole intraday crowd watches. When a single engulfing candle closes cleanly through that level, real momentum has shifted: stops cascade and price tends to extend toward the next pivot projection (R1 or S1). That is the scalp the EA harvests. The classic failure mode of a breakout trader is the *false break* — price pokes past the level, traps the breakout crowd, then reverses hard. This system refuses to simply eat that loss: once price falls back through the broken level by a buffer, the break is proven false and the EA deploys an opposite market leg. It then holds **both directions** — a genuine locked hedge — and banks the pair at a money **basket** level the instant net floating profit turns sufficiently green.

Habitat: Designed for liquid, momentum-prone FX majors such as EUR/USD or GBP/USD, or XAU/USD (Gold), on the M5, M15, or M30 timeframes — the environment where structural breaks and false breaks naturally alternate. All distances are derived from the pivot range, so the logic scales to any symbol or timeframe with no hard-coded pip values.

How It Works

1. Pivot Levels (recomputed every closed bar)

On each freshly-closed bar of the primary timeframe, the EA scans the `PivotLookback` closed bars that precede the signal candle and derives the classic floor-trader pivots:

```
H = highest high over the lookback window
L = lowest low over the lookback window
C = close of the bar just before the signal candle

PP = (H + L + C) / 3      central pivot (hedge target)
R1 = 2 * PP - L         upside projection (long take-profit)
S1 = 2 * PP - H         downside projection (short take-profit)
range = H - L           sizes every buffer in the system
```

H and **L** are the structural break levels, **R1 / S1** are the scalp targets, and **PP** is the mean-reversion target the hedge aims for. Because every distance is expressed as a fraction of `range`, the strategy self-adjusts to volatility, symbol, and timeframe.

2. Entry Logic (taken only when flat)

Entries are mirror-image long and short rules, evaluated once per closed bar and only when no position is open.

LONG — BULLISH ENGULFING BREAK OF THE SWING HIGH

- The just-closed candle is a **bullish engulfing**: the prior bar is bearish, this bar is bullish, its body fully engulfs the prior body, and it is the larger of the two.
- It opens at/below the prior swing high **H** and **closes above it** — a real break of structure.
- The close is not over-extended past H (within `MaxExtendFrac` of the range), so the entry is still a fresh scalp.
- Action: **buy**, targeting **R1**.

SHORT — BEARISH ENGULFING BREAK OF THE SWING LOW

- The just-closed candle is a **bearish engulfing** that opens at/above the prior swing low **L** and **closes below it**.
- The close is not over-extended past L (within `MaxExtendFrac` of the range).
- Action: **sell**, targeting **S1**.

A spread filter (`MaxSpreadPoints`) blocks new entries whenever the current spread is too wide.

3. Stop Loss & Take Profit (base leg)

- **Take Profit** is the next pivot projection (R1 for longs, S1 for shorts), nudged out to satisfy a minimum reward distance of `RewardFrac` × range.
- **Stop Loss** sits a structural pad (`StopFrac` × range) *beyond* the hedge trigger, guaranteeing the hedge always engages first. The base trade is a quick scalp toward the pivot projection.

4. The Hedge Mechanic (the signature feature)

While the single base leg is open, the EA watches every tick. If price travels `FailFrac` of a range back **through** the broken level, the breakout is proven false. The EA immediately opens an opposite market leg, so it now holds both directions — a locked hedge that rides the reversal back toward **PP** and offsets the trapped base leg.

The hedge leg targets PP and is invalidated (stopped out) only if price **reclaims** the broken level by `ReclaimFrac` × range — i.e. the original breakout resumes.

5. Basket Money Management (the dominant exit)

Whenever any exposure is held, net floating profit/loss across the EA's positions drives the exit:

- Net floating P/L ≥ `BasketTpMoney` → close everything (banks the scalp or the hedge recovery).
- Net floating P/L ≤ - `BasketS1Money` → flatten everything (a hard ceiling for the worst case: a strong one-way trend that keeps running after the hedge locks).

Hedging account required. This EA deliberately holds simultaneous buy and sell positions on the same symbol. Your broker account must be in **hedging** mode (not netting), or the opposite leg will 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.



Illustrative example only. Actual market behaviour varies.

Parameters

Parameter	Default	Description
PivotLookback	20	Number of closed bars (before the signal candle) whose H/L/C define the pivots. Range 5–150, step 1.
MaxExtendFrac	0.35	How far beyond the broken level the close may sit and still count as a fresh scalp (fraction of range). Range 0.05–2.00, step 0.05.
FailFrac	0.25	Retrace back through the broken level (fraction of range) that proves the break false and triggers the hedge. Range 0.05–1.50, step 0.05.
StopFrac	0.35	Extra base-stop pad placed beyond the hedge trigger (fraction of the pivot range). Range 0.05–2.00, step 0.05.
RewardFrac	0.60	Minimum reward distance for the base / hedge take-profit (fraction of range). Range 0.10–4.00, step 0.10.
ReclaimFrac	0.30	Hedge invalidation pad: if price reclaims the broken level by this (fraction of range), the hedge is wrong and is stopped. Range 0.05–1.50, step 0.05.
BasketTpMoney	25.0	Close the whole basket once net floating profit reaches this amount (account currency). Range 5.0–2000.0, step 5.0.
BasketSiMoney	300.0	Flatten the whole basket once net floating loss reaches this amount (account currency). Range 50.0–100000.0, step 50.0.
MaxSpreadPoints	50	Skip new entries while the spread (in points) exceeds this value (0 = filter off). Range 0–500, step 5.
Lots	0.10	Trade volume in lots for each leg (base and hedge). Range 0.01–1.00, step 0.05.
Magic	7733	Magic number identifying this EA's positions. Range 0–9,999,999, step 1.

Recommended Settings

Start with the defaults on a liquid, momentum-prone instrument, then tune the fraction-based buffers and the money-basket levels to your account size and risk tolerance.

- **Symbols:** EUR/USD, GBP/USD, or XAU/USD (Gold).
- **Timeframes:** M5, M15, or M30.
- **Account:** a **hedging**-mode account (mandatory — both directions are held simultaneously).

- **Lookback / buffers:** begin with `PivotLookback = 20`, `FailFrac = 0.25`, `StopFrac = 0.35`, `RewardFrac = 0.60`.
- **Spread filter:** keep `MaxSpreadPoints` tight on FX majors; raise it for Gold, which runs wider spreads.

Scale the basket to your account. `BasketTpMoney` and `BasketSlMoney` are absolute amounts in your account currency, not percentages. They must be tuned together with `Lots` and your account balance — a 0.10-lot basket behaves very differently from a 1.00-lot basket at the same money targets. Always validate a configuration in the MT5 Strategy Tester before going live.

Worked example — a long scalp that turns into a hedge

Price has ranged for 20 bars below a swing high H. A large bullish engulfing candle opens below H and closes above it — the EA buys at market with TP at R1 and a stop pad below the hedge trigger. If price keeps running up, the basket banks at + `BasketTpMoney` and the trade is done. If instead price falls back through H by `FailFrac` of the range (a false break), the EA sells an opposite leg, locking the pair, and rides the reversal toward PP — closing the whole basket the moment net floating P/L reaches the profit target.

How to Install on MetaTrader 5

- 1 Copy `PivotEngulfingScalper.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.

