

# Pivot Breakout Hedge

Expert Advisor Documentation

## PLATFORM

MetaTrader 5 (MT5)

## TYPE

Price-Action Breakout (Hedged Scalping)

## TIMEFRAME

M5 – M30 (Intraday)

## WEBSITE

[www.algotbot.live](http://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

**Pivot Breakout Hedge** is a pure price-action breakout scalper. It uses *no* classical indicators — no moving average, RSI, ATR, or Bollinger Bands. Instead it fuses four raw market-structure tools: floor **pivots**, an **engulfing** candle pattern, a momentum **breakout**, and a managed **hedge** that turns a false breakout into a recovery trade.

The edge thesis is a deliberate mirror of the crowded “fade-the-pivot” reversion playbook. Floor pivots (PP / R1 / S1) are the levels intraday desks defend; most of the time price stalls there, but when a level is taken with conviction the move tends to extend as trapped faders cover. Pivot Breakout Hedge only acts when that conviction is visible as a single engulfing candle that fully swallows the prior bar *and* closes decisively beyond the pivot — that is order-flow displacement, not a drift — and it rides the continuation for a quick scalp.

The classic failure mode of breakout trading is the false break: price pokes through the level, traps breakout buyers, then snaps back. Rather than simply absorb that loss, when price **reclaims** the broken level the EA deploys an opposite **hedge** leg to ride the snap-back the other way. The locked pair is then banked at the **basket** level the instant net floating profit turns sufficiently green.

**In one sentence:** when a strong engulfing candle breaks a fresh floor pivot, ride the continuation; if the break fails and the level is reclaimed, hedge the snap-back and bank the whole basket on a net-money target.

# How It Works

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## 1. Floor pivots (the levels)

On every closed bar of the primary timeframe, the EA recomputes the floor pivots from the last `PivotLookback` closed bars *ending at the prior bar* (the breakout candle itself is excluded from the range).

Taking H = highest high, L = lowest low, and C = the prior bar's close:

$$\begin{aligned} \text{PP} &= (H + L + C) / 3 \\ \text{R1} &= 2 * \text{PP} - L && \text{(resistance)} \\ \text{S1} &= 2 * \text{PP} - H && \text{(support)} \\ \text{range} &= H - L && \text{(== R1 - S1)} \end{aligned}$$

Every buffer in the strategy is expressed as a fraction of `range`, so nothing is pip-hard-coded — the logic scales automatically to any symbol and any timeframe.

## 2. Entries (flat only — mirror-image long & short)

The EA hunts a new setup only once per freshly-closed bar and only while completely flat. The just-closed candle (`c`) is the breakout bar; the bar before it (`p`) must be engulfed.

- **Long** — the just-closed candle is a strong **bullish engulfing** (a bullish body that swallows the prior bearish body, with body  $\geq$  `MinBodyFrac` of its own H–L range) whose close breaks above **R1** by `BreakBufferFrac` of a range, while the prior close was still below R1 (a *fresh* break). Resistance was taken with conviction → buy.
- **Short** — the mirror image: a strong **bearish engulfing** whose close breaks below **S1**, with the prior close still above S1. Support was taken with conviction → sell.

An optional spread filter (`MaxSpreadPoints`) skips new entries when the spread is too wide.

## 3. Base stop-loss & take-profit

The base stop-loss sits structurally beyond the engulfing candle's far extreme (padded by `StopBufferFrac` of a range), and is deliberately forced beyond the hedge trigger so the hedge always engages *before* the base stop. The base take-profit is set to `RewardRatio` multiples of the risk distance (entry → SL) — a quick momentum scalp target.

## 4. The hedge (the signature mechanic)

While the single base leg is open, the EA watches intrabar. If price **reclaims** the broken pivot by `ReclaimFrac` of a range — meaning the breakout has clearly failed — an opposite market leg is opened. The account now holds *both* directions: the losing base leg and a fresh hedge leg positioned to ride the snap-back and offset the loss. The hedge's take-profit and stop are sized by `HedgeRewardFrac` of a pivot range.

### Example — a false break recovered

A bullish engulfing candle closes above R1 and the EA buys. Price stalls and rolls back; once it drops `ReclaimFrac` of a range below R1, the breakout is judged false and a short hedge leg fires. Price continues down: the hedge profits while the base bleeds, and the moment the *net* floating P/L of the pair reaches `BasketTpMoney`, both legs close together for a banked recovery.

## 5. Basket money management (the dominant exit)

Whenever any exposure is held, net floating P/L across all legs governs the exit:

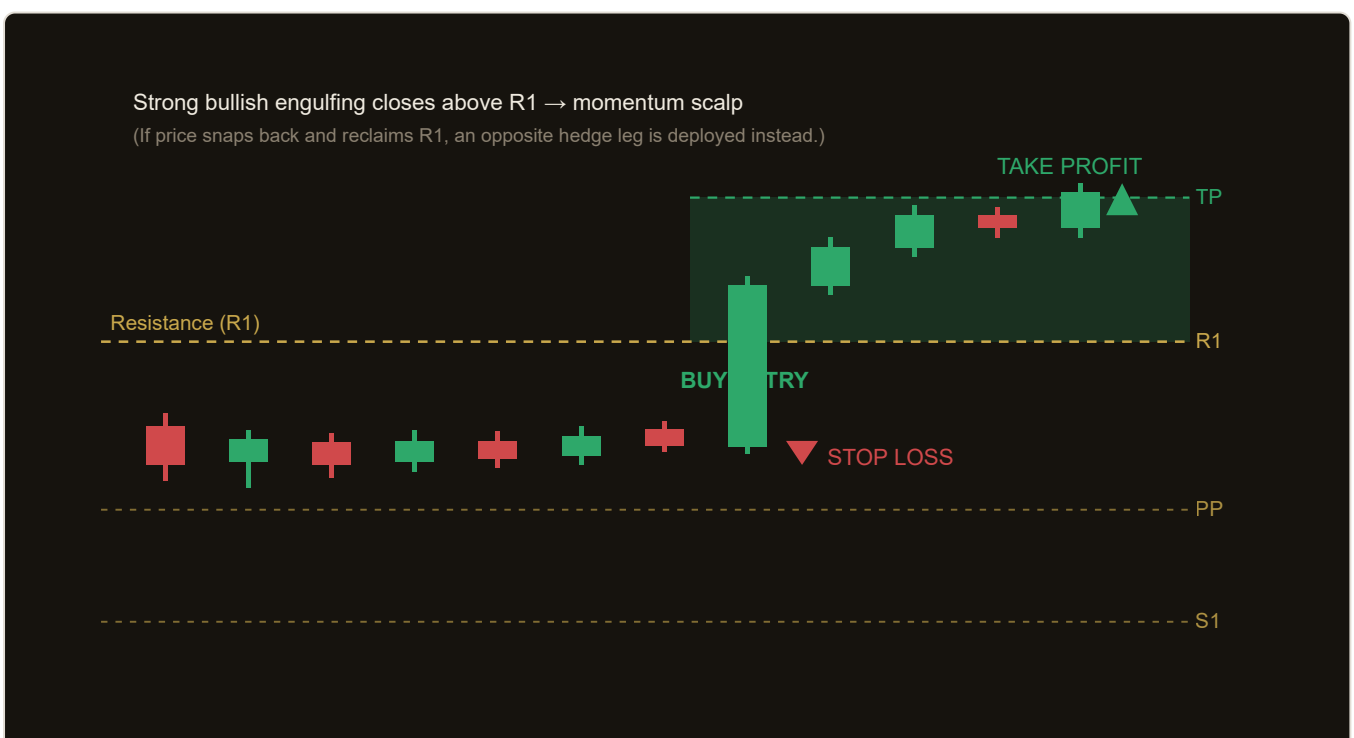
- **Net floating P/L**  $\geq$  `BasketTpMoney` → close everything (banks the scalp or the recovery).
- **Net floating P/L**  $\leq$   $-$  `BasketS1Money` → flatten everything (a hard ceiling on hedge risk).

The basket targets are evaluated on every tick and take priority over the individual base SL/TP, so the whole position is managed as one unit once exposure is open.

**Hedging account required.** This EA holds long and short legs simultaneously. Run it only on a **hedging** account type. On a netting account the opposite leg would offset the base position rather than form a managed pair, and the strategy will not behave as designed.

## 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

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Parameter	Default	Description
PivotLookback	30	Number of closed bars whose H/L/C define the floor pivots (range 5–150).
BreakBufferFrac	0.05	How far beyond the pivot the engulfing close must finish, as a fraction of the pivot range (0.00–0.50).
MinBodyFrac	0.55	The engulfing candle's body must be at least this fraction of its own H–L range (0.20–0.95) — filters for conviction.
StopBufferFrac	0.15	Structural stop-loss pad placed beyond the engulfing candle's far extreme, as a fraction of range (0.02–1.00).
RewardRatio	1.30	Base take-profit as a multiple of the risk distance (entry → SL). A quick scalp target (0.50–5.00).
ReclaimFrac	0.25	Reclaim back through the broken level that confirms a false break and triggers the hedge, as a fraction of range (0.05–1.50).
HedgeRewardFrac	0.80	Hedge take-profit / stop sizing as a fraction of a pivot range (0.20–4.00).
BasketTpMoney	20.0	Close the whole basket once net floating profit reaches this amount (account currency, 5–2000).
BasketSIMoney	300.0	Flatten the whole basket once net floating loss reaches this amount (account currency, 50–100000).
MaxSpreadPoints	50	Skip new entries while the spread (in points) exceeds this value. Set 0 to disable (0–500).
Lots	0.10	Trade volume per leg, snapped to the symbol's volume step and min/max limits (0.01–1.00).
Magic	5310	Magic number used to identify and manage this EA's positions (0–9,999,999).

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## Recommended Settings

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Pivot Breakout Hedge is designed for momentum-friendly, liquid instruments on intraday timeframes. The defaults are a reasonable starting point; always validate on your own broker's data before going live.

## INSTRUMENTS

- **Forex majors:** GBP/USD, USD/JPY — clean, momentum-driven intraday moves.
- **Metals:** XAU/USD (Gold) — strong directional bursts that suit conviction breakouts.
- **Index CFDs:** a major equity index CFD with reasonable spreads.

## TIMEFRAME

- **M5, M15, or M30.** The EA runs on whatever timeframe is selected at backtest time; M5–M30 fits the intraday breakout-scalp design.

**Tuning tips.** Raise `MinBodyFrac` and `BreakBufferFrac` to demand stronger, cleaner breaks (fewer but higher-quality entries). Size `BasketTpMoney` and `BasketSlMoney` to your account and the symbol's tick value — they are quoted in account currency, not pips, so they must be re-checked for each instrument and lot size. Keep `BasketSlMoney` comfortably above `BasketTpMoney` to reflect the asymmetric basket exit.

The basket targets are **fixed money amounts**, not risk-scaled percentages. If you increase `Lots`, the floating P/L swings faster and the same `BasketTpMoney` / `BasketSlMoney` values represent a very different fraction of your equity. Re-validate these two inputs whenever you change volume, symbol, or account.

## How to Install on MetaTrader 5

- 1 Copy `PivotBreakoutHedge.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

**Account type:** ensure the trading account is set to **Hedging** (not Netting) so the base and hedge legs can be held simultaneously, exactly as the strategy intends.

## Risk Warning

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