

# Pivot Rebound Hedge

Expert Advisor Documentation

## PLATFORM

MetaTrader 5  
(MT5)

## TYPE

Price-Action Reversal · Pivot Rebound +  
Hedge

## TIMEFRAME

Intraday (M15  
recommended)

## 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 Rebound Hedge** is a pure price-action reversal scalper with a built-in breakout hedge. It uses **no indicators of any kind** — no moving averages, RSI, ATR, or Bollinger Bands. Every decision is made from raw candle geometry and a shelf of classic horizontal floor-pivot levels.

The strategy works in two layers that complement each other. The first layer is the **rebound scalp**: when an engulfing candle pierces a pivot level with its wick but closes its body back across it, the level is treated as held support or resistance and the EA fades the move back into the range. The second layer is the **breakout hedge**: if the reclaimed pivot instead fails decisively, the EA opens an opposite-side position to ride the genuine breakout and recover the losing rebound leg.

The pivot shelf is rebuilt every `RefPeriod` bars from the most recently closed reference window, so the support/resistance map refreshes on a session-like cadence regardless of the timeframe being traded. Distinct, mirror-image long and short rules apply throughout. Its natural habitat is a liquid FX major or gold on an intraday timeframe (for example EURUSD or XAUUSD on M15), where pivots are widely watched and engulfing reversals print cleanly.

# How It Works

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## 1. The Pivot Shelf (the map)

Every `RefPeriod` bars the EA recomputes a set of five classic floor pivots from the high, low and close of the just-closed reference window of the primary timeframe:

$$\begin{aligned} P &= (\text{High} + \text{Low} + \text{Close}) / 3 \\ R1 &= 2P - \text{Low} & S1 &= 2P - \text{High} \\ R2 &= P + (\text{High} - \text{Low}) & S2 &= P - (\text{High} - \text{Low}) \end{aligned}$$

These five horizontals — `S2, S1, P, R1, R2` — act as the session's support/resistance shelf and stay fixed until the next window is built, exactly the way daily pivots stay put for the day. The width of the reference window (`High - Low`) is also stored as the *reference range*, which later defines how far price must travel to count as a genuine breakout.

## 2. Entry — Engulfing Rebound off a Pivot

An entry requires an **engulfing candle** that pierces a pivot with its wick but reclaims the level with its body. The engulfing body must also be at least `MinBodyRatio` times the size of the prior candle's body, filtering out weak signals.

- **Long (support reclaim):** the closed bar is a **bullish engulfing** candle whose lower wick pierces a pivot (`Low ≤ level`) but whose body closes back above it (`Close > level`). The level held as support and price snapped back up — buy the rebound. The EA selects the *highest* qualifying pivot the candle reclaimed.
- **Short (resistance reclaim):** the mirror image — a **bearish engulfing** candle whose upper wick pierces a pivot (`High ≥ level`) but closes back below it (`Close < level`). The level held as resistance — sell the rebound. The EA selects the *lowest* qualifying pivot the candle reclaimed.

Only one rebound ("RB") leg per side is allowed open at a time.

## 3. Stop Loss & Take Profit (structure-based, no ATR)

Stops are placed from candle structure, not from any volatility indicator:

- **Stop Loss** sits just beyond the pierce wick — a buffer of `StopBufferFraction` × the signal candle's range below the long's wick (or above the short's wick).
- **Take Profit** is a `RewardRatio` multiple of that structural risk — a quick scalp back into the range.

Both levels are clamped to respect the broker's minimum stop distance (`SYMBOL_TRADE_STOPS_LEVEL`), so orders are never rejected for stops that sit too close to price.

#### 4. Hedge — Riding the Breakout When the Rebound Is Wrong

A rebound assumes the pivot holds. If price instead breaks **decisively** through that pivot — by `HedgeBreakFraction` of the reference range beyond it — the level has failed and a real breakout is underway. The EA then fires an **opposite-side hedge**, sized `HedgeMultiplier` × `Lots`, to ride the breakout and recover the losing rebound leg.

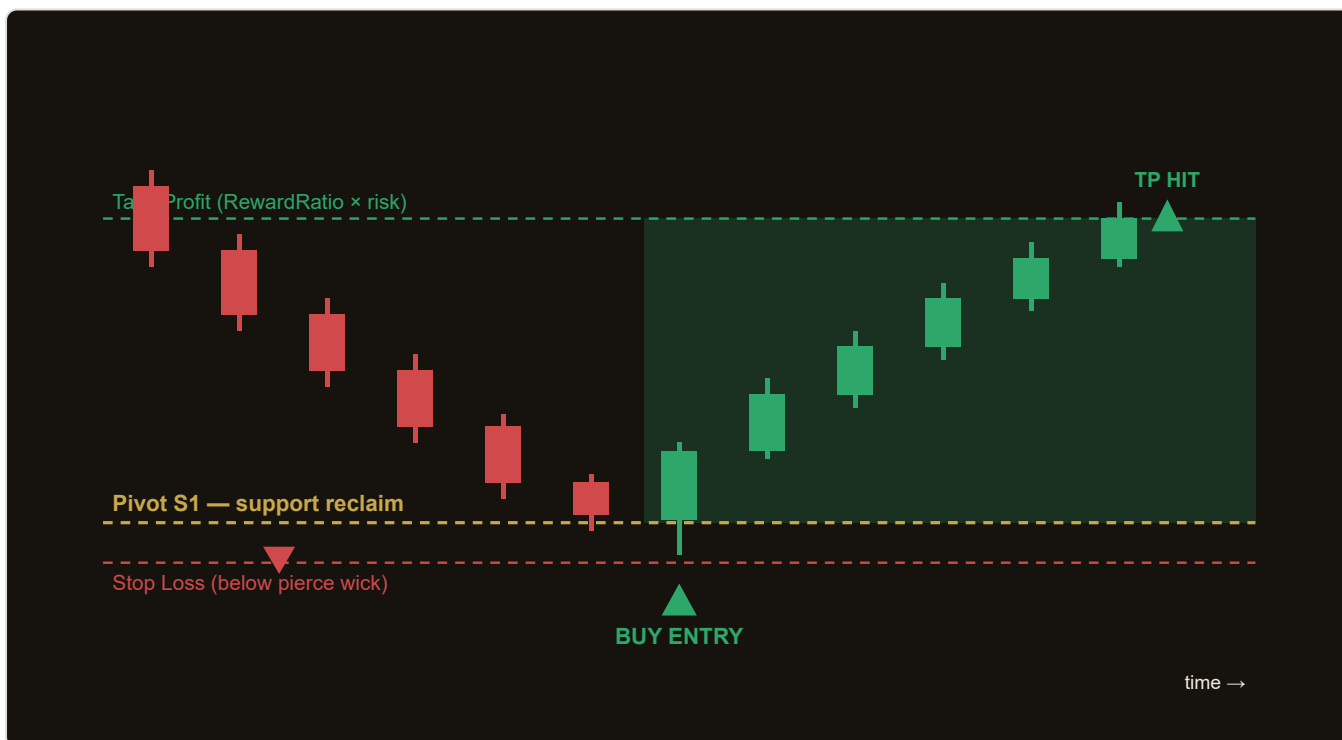
- A long that bought a support bounce is hedged with a **sell** when price breaks below the reclaimed level by the breakout distance.
- A short that sold a resistance bounce is hedged with a **buy** when price breaks above the reclaimed level by the breakout distance.

Exactly **one hedge per original position** is allowed. Setting `HedgeMultiplier = 0` disables hedging entirely, leaving a clean rebound scalper.

**Note — hedging account mode.** The breakout hedge opens a position on the opposite side while the original is still open. To allow both legs to coexist, run this EA on a **hedging-mode** MT5 account. On a netting account the opposite order would simply offset the original instead of running alongside 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.*

### Reading the chart

Price sells off into the **S1 pivot**. The signal candle is a bullish engulfing bar whose lower wick pierces below the level but whose body closes back above it — the support held. The EA buys the rebound, parks the stop just beyond the pierce wick, and targets a **RewardRatio** multiple of that risk back into the range. Had price instead broken decisively *below* S1 by **HedgeBreakFraction** of the reference range, a sell hedge would have fired to ride the breakout.

## Parameters

Parameter	Default	Description
RefPeriod	24	Bars per pivot reference window; the pivot shelf is rebuilt every <b>RefPeriod</b> bars from the just-closed window. Range 8–96, step 2.
RewardRatio	1.5	Take-profit distance as a multiple of the structural risk (the stop-loss distance). Range 0.5–4.0, step 0.1.
StopBufferFraction	0.30	Stop-loss buffer beyond the pierce wick, expressed as a fraction of the signal candle's range. Range 0.00–1.50, step 0.05.
MinBodyRatio	1.00	Engulfing strength filter: the signal body must be at least this multiple of the prior candle's body. Range 0.50–3.00, step 0.10.
HedgeBreakFraction	0.25	Breakout distance beyond the failed pivot — as a fraction of the reference range — required before a hedge fires. Range 0.05–1.50, step 0.05.
HedgeMultiplier	1.50	Hedge lot size as a multiple of <b>Lots</b> . Set to <b>0</b> to disable hedging entirely. Range 0.00–3.00, step 0.25.
Lots	0.10	Base trade volume for each rebound leg, in lots. Range 0.01–1.00, step 0.01.
Magic	7301	Magic number used to identify and manage this EA's own positions. Range 0–9,999,999, step 1.

## Recommended Settings

The defaults are tuned for a liquid intraday market where pivots are widely respected and engulfing reversals are clean.

- **Symbol:** a liquid FX major or gold — e.g. EURUSD or XAUUSD.

- **Timeframe:** M15 intraday (the strategy is timeframe-agnostic because pivots are rebuilt from the active timeframe, but M15 is the intended habitat).
- **Account mode:** hedging mode, so the breakout hedge can coexist with the original rebound leg.
- **Risk:** start with the default `Lots = 0.10` and a modest `HedgeMultiplier`; size to your account, not to the defaults.

**Tuning tips.** Raise `MinBodyRatio` to demand stronger engulfing candles and reduce false signals in choppy conditions. Increase `HedgeBreakFraction` to require a more convincing breakout before hedging (fewer, higher-conviction hedges). Widen `StopBufferFraction` if wicks are frequently stopping you out just before the rebound resumes.

**About the hedge multiplier.** A `HedgeMultiplier` greater than 1 opens a larger opposite position than the original leg. This can recover a failed rebound quickly, but it also increases exposure if the breakout itself fails. Validate any multiplier above the default on a demo account before trading live, and never set it higher than your risk budget allows.

## How to Install on MetaTrader 5

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- 1 Copy `PivotReboundHedge.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

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