

Pivot Zone Rejection Hedge

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Pivot Reversion + Managed Hedge (Price Action)

TIMEFRAME

M15 / M30 / H1

WEBSITE

www.algotbot.live

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Overview

Pivot Zone Rejection Hedge is a pure price-action Expert Advisor — it uses **no indicators whatsoever** (no moving averages, RSI, ATR, or Bollinger Bands). It combines four classic discretionary tools into a single mechanical system: floor **pivots**, **support/resistance rejection**, **candle patterns**, and a managed **hedge**.

The edge thesis is straightforward. Floor pivots (PP, R1, S1) are reference levels that a huge slice of intraday desks watch, so price reliably reacts there. It either **rejects** the level — a wick probes it and snaps back, which is the reversal trade — or it **fails** the level by closing through it, which becomes a runaway breakout. A naive "fade the pivot" trader wins the first case but gets run over in the second.

This system harvests the reversion when a level holds. When the level instead **fails**, it stops fighting the move and deploys an opposite **hedge** leg to ride the breakout the other way — turning the textbook "faded a level that then ran" disaster into a scratch or a win. The locked hedge pair is then banked at the **basket** level the instant net floating profit turns sufficiently green.

Best habitat: a liquid, range-respecting FX major such as EUR/USD or AUD/USD, or XAU/USD (gold), on M15, M30, or H1 — the environment where pivot rejections and false breaks alternate. Every distance in the system scales to the symbol's own pivot range, so there are no hard-coded pip values.

How It Works

Pivot Levels

Levels are recomputed on every closed bar from the primary chart timeframe only. Over the last `PivotLookback` closed bars the EA takes the highest high (H), the lowest low (L), and the most-recent close (C):

```
PP = (H + L + C) / 3
R1 = 2 × PP - L
S1 = 2 × PP - H
range = R1 - S1 == H - L
```

The pivot **range** is the single yardstick used to size every buffer, tolerance, and stop in the strategy, which is why the logic scales to any symbol or timeframe without pip hard-coding.

Entry Logic (flat only)

The EA only hunts new setups when it is completely flat, and it evaluates the rules once per freshly-closed bar. The long and short rules are exact mirror images:

- **Long — bullish rejection that held support S1:** the just-closed candle dips into the S1 zone (`Low ≤ S1 + tol`), closes *back above* S1, and is a bullish rejection candle — a dominant lower wick (at least `WickBodyRatio` × the body), the lower wick exceeding the upper wick, and a close in the upper half of the candle's range. Sellers were rejected at support → buy.
- **Short — bearish rejection that held resistance R1:** the just-closed candle pokes into the R1 zone (`High ≥ R1 - tol`), closes *back below* R1, and is a bearish rejection candle — a dominant upper wick, the upper wick exceeding the lower wick, and a close in the lower half of the range. Buyers were rejected at resistance → sell.

The zone tolerance is `tol = ZoneFrac × range`, so "close to the level" is always proportional to the current pivot range. Entries are also skipped while the spread (in points) exceeds `MaxSpreadPoints`.

Stop Loss & Take Profit (base leg)

- **Take Profit** aims at the central pivot **PP** (mean reversion). A minimum reward of `RewardFrac × range` is enforced so the target is always worthwhile.
- **Stop Loss** is deliberately placed a structural pad (`StopFrac × range`) *beyond* the hedge trigger, so the hedge always engages first — the base stop is the last line of defence, not the first.

The Hedge — the signature mechanic

While the single base leg is open, the EA watches for the rejected level to **fail**. If price travels `HedgeFrac` of a range *beyond* the rejected level (support/resistance has clearly broken), the EA opens an opposite market leg. It now holds **both directions** — a genuine locked hedge that rides the breakout the new way and offsets the losing base leg.

The hedge leg gets its own stop and target derived from the distance between the level and the hedge trigger: it is invalidated if price reclaims the level by `ReclaimFrac`, and targets a proportional reward in the breakout direction.

Worked example — support fails into a hedge

A long is opened on a bullish rejection of S1 at 1.0850. Instead of bouncing to PP, price grinds lower and trades `HedgeFrac` of a range below S1 — the hedge trigger at, say, 1.0838. The EA fires an opposite *sell* leg, locking the pair. Price keeps falling; the short hedge's gain outpaces the long's loss until net floating P/L crosses `+BasketTpMoney`, and the EA closes everything in profit. The "faded a level that then ran" disaster has become a banked win.

Basket Money Management (the dominant exit)

Whenever any exposure is held, net floating P/L (profit + swap across all legs for this symbol and magic number) governs the exit:

- **Net floating P/L** \geq `BasketTpMoney` → close everything. This banks the recovery or the win.
- **Net floating P/L** \leq `-BasketS1Money` → flatten everything. This is the hard ceiling on hedge risk; the failure mode is a strong one-way trend after the hedge locks.

Hedging account required. This EA holds opposing buy and sell positions on the same symbol simultaneously. It must be run on a **hedging** MT5 account, not a netting account, or the opposing legs will offset instead of locking.

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. Here price dips into the S1 support zone with a long lower wick, closes back above S1 (a bullish rejection → BUY), and mean-reverts to PP for the take-profit. Had price instead closed through the hedge trigger, an opposite SELL leg would have been deployed.

Parameters

Parameter	Default	Description
PivotLookback	24	Number of closed bars whose H/L/C define the floor pivots. Integer, range 5–150 (step 1).
ZoneFrac	0.15	How close to a pivot the candle's wick must reach to count as a touch, as a fraction of the pivot range. Range 0.02–0.60 (step 0.01).
WickBodyRatio	1.50	The rejection wick must be at least this multiple of the candle body. Range 0.50–5.00 (step 0.10).
HedgeFrac	0.20	Distance beyond the rejected level that confirms it has FAILED and deploys the hedge, as a fraction of the pivot range. Range 0.05–1.00 (step 0.05).
StopFrac	0.30	Extra base-stop pad placed beyond the hedge trigger, as a fraction of the pivot range. Range 0.05–2.00 (step 0.05).
RewardFrac	0.80	Minimum reward distance for the base take-profit, as a fraction of the pivot range. Range 0.20–4.00 (step 0.10).
ReclaimFrac	0.30	Hedge invalidation pad: if price reclaims the level by this amount, the hedge is deemed wrong. Range 0.05–1.50 (step 0.05).
BasketTpMoney	25.0	Close the WHOLE basket once net floating profit reaches this (account currency). Range 5.0–2000.0 (step 5.0).
BasketSIMoney	300.0	Flatten the WHOLE basket once net floating loss reaches this (account currency). Range 50.0–100000.0 (step 50.0).
MaxSpreadPoints	50	Skip new entries while the spread (in points) exceeds this. 0 disables the filter. Integer, range 0–500 (step 5).
Lots	0.10	Order volume for each leg. Snapped to the symbol's volume step and min/max. Range 0.01–1.00 (step 0.05).
Magic	7420	Magic number identifying this EA's positions. Integer, range 0–9,999,999 (step 1).

Recommended Settings

The defaults are tuned for a liquid, range-respecting instrument on an intraday timeframe. As a starting point:

- **Symbol:** EUR/USD, AUD/USD, or XAU/USD (gold).
- **Timeframe:** M15, M30, or H1 — where pivot rejections and false breaks alternate.
- **Account type:** a **hedging** account (mandatory — opposing legs must coexist).
- **PivotLookback:** 24 bars is a balanced default; raise it for wider, slower swing levels, lower it for tighter intraday levels.
- **Basket money levels:** size `BasketTpMoney` and `BasketSlMoney` to your account and lot size. The asymmetric default (take 25, risk up to 300) reflects that the basket banks small recoveries often but caps the rare strong-trend hedge failure.

Tip: Because every distance scales to the pivot range, the same parameter set transfers reasonably across symbols and timeframes. Validate on the MT5 Strategy Tester with "Every tick based on real ticks" before any live use, and confirm your broker permits hedging.

Understand the hedge risk. A locked hedge is not a free lunch. After the hedge engages, a strong sustained one-way trend can grind the basket toward – `BasketSlMoney` before the take-profit is reached. Treat `BasketSlMoney` as a real, possible loss on every cycle and size lots accordingly.

How to Install on MetaTrader 5

- 1 Copy `PivotZoneRejectionHedge.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.