

Boundary Fade Scalp Hedge

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Mean Reversion + Recovery Hedge

TIMEFRAME

M5 / M15

WEBSITE

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

Boundary Fade Scalp Hedge is a pure price-action Expert Advisor that combines a high-hit-rate range-fade scalp with an automatic recovery hedge. It uses **no indicators of any kind** — no moving averages, no RSI, no ATR, no pivots. Every decision is driven by raw bar highs and lows, candle wicks, and the floating profit/loss of the open basket, exactly the way a discretionary trader manages a hand-run reversion book.

The edge thesis is simple. Inside a quiet micro-range, the upper and lower boundaries behave like elastic walls: price repeatedly pokes at an edge, leaves a rejection wick, and snaps back toward the middle. Fading those rejections is a profitable scalp *most* of the time. The well-known failure mode of any edge-fade is the session when the range finally **breaks** — the fade is suddenly on the wrong side of a runaway move.

Rather than simply absorbing that loss, the EA arms a **recovery hedge**. Once a losing fade has run a set distance against the position (evidence the breakout is real), the EA opens a *larger* opposite market order in the breakout direction. The trapped fade is then allowed to die on its wide protective stop while the bigger hedge rides the breakout, and the whole basket is banked the instant its net floating P/L turns sufficiently green. Quiet ranges pay the scalp; genuine breakouts are recovered by the hedge.

Money-based, self-scaling design. All distances are expressed as fractions of the measured range width, and all basket exits are expressed in account currency. There is no hard-coded point math, so the same settings adapt across symbols and timeframes. Long and short logic are distinct, mirror-image rules throughout.

Hedging account required. This system deliberately holds two opposing legs at once (the fade plus its recovery hedge). It must run on a **hedging** account. On a **netting** account the opposite hedge order would simply net the fade out instead of arming a true protective hedge.

How It Works

The strategy operates on a single primary timeframe and moves through three states: **Flat**, **Engaged**, and basket exit. Structural decisions are evaluated once per newly closed bar; basket money management and hedge arming are checked on every tick while the EA is exposed.

1. Flat — seek a boundary fade

While completely flat, the EA measures the micro-range over the last `RangeLookback` closed bars that precede the signal bar:

- **rangeHigh** = highest High, **rangeLow** = lowest Low, **width** = rangeHigh – rangeLow, **mid** = midpoint.
- The **edge zone** depth is `EdgeFrac × width`.

It then inspects the just-closed bar for a boundary rejection:

- **Long fade** — the bar dipped into the lower edge zone (`Low ≤ rangeLow + EdgeFrac×width`), printed a lower rejection wick of at least `RejectionFrac` of its own range, and closed back inside the range (`Close > rangeLow`), with price still in the lower half (`Ask < mid`). The EA fades up with a market **BUY**.
- **Short fade** — the mirror image at the upper boundary (poke into `rangeHigh - EdgeFrac×width` , upper rejection wick, close below `rangeHigh` , price still in the upper half). The EA fades down with a market **SELL**.

Each fade carries a small **take-profit toward the mean** (`ScalpTpFrac × width`) and a **wide protective stop beyond the boundary** (`ScalpSlFrac × width`). Both are floored at the broker's minimum stop distance. New fades are skipped while the spread (in points) exceeds `MaxSpreadPoints` .

2. Engaged — arm the recovery hedge

Once a lone fade is open and the range starts to break, the EA monitors adverse excursion every tick. If the fade runs `HedgeTriggerFrac × width` against the entry and no hedge exists yet, the EA fires a market hedge in the breakout direction sized `HedgeMultiplier ×` the fade lots:

- A losing **long** fade (price falling) is hedged with a larger **SELL**.

- A losing **short** fade (price rising) is hedged with a larger **BUY**.

Because `HedgeMultiplier > 1`, the combined basket becomes net-long the breakout. The hedge carries **no per-leg stop or target** — every exit is governed by the basket layer below.

3. Basket exits (dominant)

On every tick while any leg is open, the EA sums floating profit and swap across all legs of the basket:

- If net floating P/L \geq `BasketTpMoney` → close everything (a clean scalp win, or a recovered breakout, banked at book level).
- If net floating loss \leq `-BasketSlMoney` → flatten everything (the hard ceiling on combined risk).

The basket target and stop are checked *before* hedge arming, so a position that recovers on its own is banked immediately and never needs a hedge.

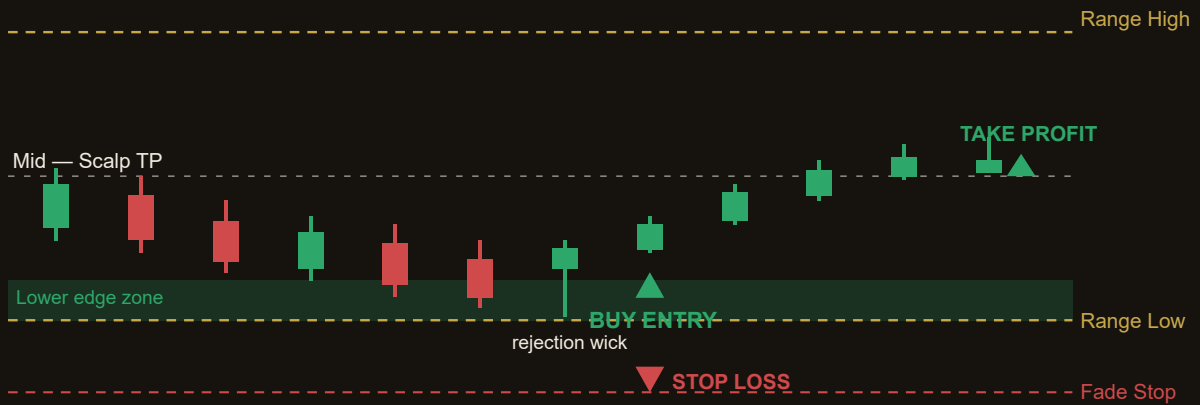
Worked example — a fade that needs rescuing

A long fade is opened at the lower boundary of a 30-pip range with a wide stop beyond the edge. Instead of bouncing, price keeps falling. After it runs `HedgeTriggerFrac × width` (e.g. $0.60 \times 30 = 18$ pips) against the fade, the EA fires a SELL hedge at $1.5\times$ the fade lots. The fade later dies on its protective stop, but the larger short rides the breakout down. The moment the basket's net floating profit reaches `BasketTpMoney` (e.g. \$20), the EA closes both legs and the book is green.

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 core **long fade off the lower boundary**: a rejection wick at the support edge, a market BUY back into the range, a take-profit at the mean, and the wide protective stop placed beyond the boundary.

Long fade off the lower boundary



Illustrative example only. Actual market behaviour varies.

Parameters

Every input below maps one-to-one to the EA's `DescribeParameters()` definition. Defaults are the recommended starting point; the min/max/step bounds shown reflect the EA's built-in validation ranges.

Parameter	Default	Description
RangeLookback	24	Number of closed bars whose highest high and lowest low define the micro-range. Range 6–120, step 1.
EdgeFrac	0.15	Boundary "edge zone" depth, as a fraction of the range width. Range 0.02–0.45, step 0.01.
RejectionFrac	0.40	Minimum rejection wick at the boundary, as a fraction of the signal bar's own range. Range 0.00–0.90, step 0.05.
ScalpTpFrac	0.50	Fade take-profit toward the mean, as a multiple of the range width. Range 0.10–1.50, step 0.05.
ScalpSlFrac	1.20	Fade protective stop beyond the boundary, as a multiple of the range width. Range 0.30–3.00, step 0.10.
HedgeTriggerFrac	0.60	Adverse excursion that arms the recovery hedge, as a multiple of the range width. Range 0.10–2.00, step 0.05.
HedgeMultiplier	1.50	Recovery hedge volume as a multiple of the fade lots (>1 = net-long the breakout). Range 1.00–3.00, step 0.10.
BasketTpMoney	20.0	Close the whole basket once net floating profit reaches this amount (account currency). Range 2.0–2000.0, step 1.0.
BasketSlMoney	300.0	Flatten the whole basket once net floating loss reaches this amount (account currency). Range 20.0–100000.0, step 10.0.
MaxSpreadPoints	25	Skip new fades while the spread (points) is wider than this; 0 disables the filter. Range 0–500, step 1.
Lots	0.10	Base fade volume, snapped to the symbol's volume step and min/max limits. Range 0.01–1.00, step 0.05.
Magic	6470	EA magic number used to identify and manage only this strategy's positions. Range 0–9,999,999, step 1.

Recommended Settings

The strategy's natural habitat is a liquid, range-prone FX major on a fast intraday timeframe — the environment where boundary rejections are frequent and a recovery hedge can backstop the occasional breakout.

- **Symbols:** EURUSD or AUDUSD (liquid, mean-reverting majors with tight spreads).

- **Timeframe:** M5 or M15.
- **Account:** Hedging account (mandatory — see warning above).
- **Spread filter:** Keep `MaxSpreadPoints` tight ($\approx 20-25$) so fades are only taken in good conditions.

Sizing the basket exits to your account. `BasketTpMoney` and `BasketSlMoney` are absolute account-currency amounts, not percentages. Scale them to your balance and to `Lots / HedgeMultiplier` before going live. A larger `HedgeMultiplier` recovers breakouts faster but increases the worst-case basket drawdown — keep `BasketSlMoney` consistent with the risk you are prepared to take on a single basket.

Hedge risk is real. The recovery hedge improves the odds of turning a broken fade green, but it is not a guarantee. A whipsaw that triggers the hedge and then reverses can hit `BasketSlMoney`. Always validate any configuration on a demo account and in the Strategy Tester before risking live capital.

How to Install on MetaTrader 5

- 1 Copy `BoundaryFadeScalpHedge.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

Confirm hedging mode. Before attaching the EA, verify your trading account is configured for *Hedging* (not *Netting*) in the account properties. The recovery hedge depends on holding two opposing legs simultaneously.

Risk Warning

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