

Trend Hedge Recovery Overlay

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Hedging / Trend Recovery	H1 (single timeframe)	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

Trend Hedge Recovery Overlay is a directional trend strategy wrapped in a protective *hedge* overlay. The Expert Advisor first takes a single primary position in the direction of the prevailing trend, identified by a fast/slow EMA crossover. If that primary position moves against the account by a defined amount, the EA opens an *opposing* position of equal size — so the account simultaneously holds both a long *and* a short (a true hedge). This locked pair freezes the open drawdown while the combined basket is worked back toward a net profit and closed together, forming the "recovery" layer.

Rather than relying on a single stop-out, the strategy blends three risk layers: an ATR-based stop and take-profit on every individual leg, a protective hedge that caps how far the primary can bleed, and a basket-level money target that closes everything once the floating result reaches a profit bank (`BasketTpMoney`) or a hard loss cap (`BasketSlMoney`). Trend signals are evaluated only on closed bars, while the basket safety check runs on every tick.

Hedging account required. This EA holds a long and a short at the same time, which is only possible on a MetaTrader 5 "**Retail Hedging**" margin-mode account. On a **netting** account the opposing order would net out (close/reduce) the primary instead of coexisting with it, breaking the strategy. Confirm your broker account is in hedging mode before running.

How It Works

1. Trend Detection — the Primary Entry

While the EA is flat (no open positions), it watches for a fresh crossover between the fast EMA (`FastEma` , default 12) and the slow EMA (`SlowEma` , default 34), both taken on the primary timeframe:

- **Primary LONG** — the fast EMA crosses *above* the slow EMA (an emerging uptrend). The EA buys at the Ask.
- **Primary SHORT** — the fast EMA crosses *below* the slow EMA (an emerging downtrend). The EA sells at the Bid.

A "cross" requires the previous closed bar to be on one side and the current closed bar to be on the other (`pf <= ps && fast > slow` for up, and the mirror for down), so the signal fires once per genuine crossover rather than on every bar the fast EMA happens to lead.

2. The Hedge Overlay

Once a single primary position is open, the EA measures how far price has moved *against* it (the adverse excursion). For a long that is `PriceOpen - Bid` ; for a short it is `Ask - PriceOpen` . When that adverse distance reaches `HedgeTriggerAtr × ATR` and no hedge exists yet, the EA opens an equal-lot position on the *opposite* side:

- A primary **long** under water is protected by a new **short** hedge.
- A primary **short** under water is protected by a new **long** hedge.

With both legs open, further price movement is largely offset — one leg gains what the other loses — so the account's open drawdown is effectively frozen at the hedge point.

Note: Only one hedge is ever added (the logic runs only when the position count is exactly 1). The strategy does not martingale or stack additional hedges; it locks a single protective pair and then relies on the basket target to resolve it.

3. Per-Leg Stops & Targets

Every order — primary and hedge alike — is submitted with an ATR-derived stop-loss and take-profit measured from its entry price:

```
Stop-loss    = entry ∓ AtrStopMult × ATR    (default 4.0 × ATR)
Take-profit  = entry ± AtrTpMult  × ATR    (default 2.5 × ATR)
```

These per-leg brackets give each position an independent exit regardless of basket state, and adapt automatically to volatility because they scale with the current ATR (`AtrPeriod` , default 14).

4. Basket Recovery & Risk Cap

On every tick, when at least one position is open, the EA sums the floating profit plus swap across all of its own positions on the symbol. It then closes the entire basket together when either boundary is hit:

- **Recovery bank** — floating result \geq `+BasketTpMoney` (default +30 in account currency): the basket is closed in net profit.
- **Hard risk cap** — floating result \leq `-BasketSlMoney` (default -400): the basket is force-closed to cap the loss.

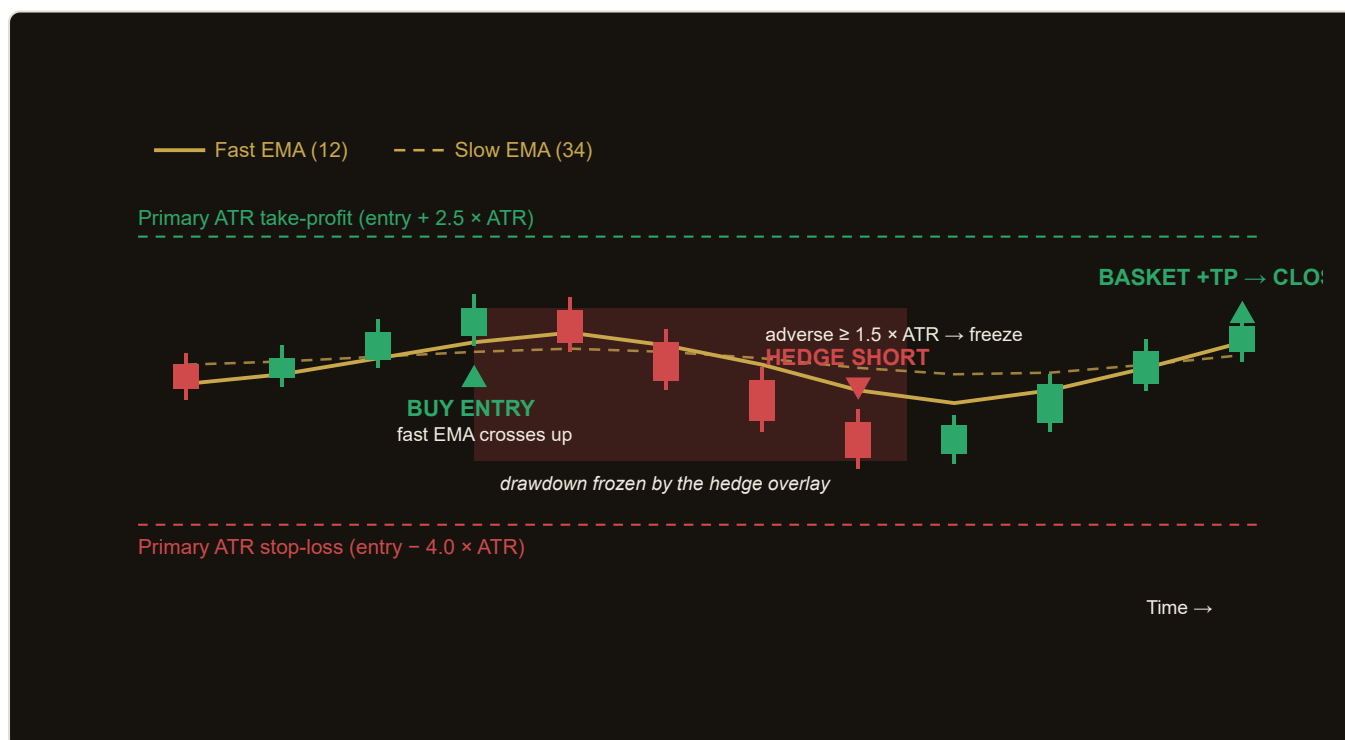
This basket check is what turns a frozen hedge into a "recovery" — it waits for the combined pair to drift to a small net profit and banks it, or pulls the plug entirely if the loss cap is reached.

Execution Model

- **Closed-bar signals.** EMA and ATR values are computed from the last *closed* bar (the forming bar is ignored), so entries and hedge triggers are stable and do not repaint intrabar.
- **Tick-level safety.** The basket profit/loss check runs on every tick, so the recovery target and risk cap are honoured immediately rather than only at bar close.
- **Own-positions only.** All counting, floating P/L, and closing is filtered by the `Magic` number and symbol, so the EA never touches trades it did not open.

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 illustration

The fast EMA crosses above the slow EMA, opening a primary *long* (BUY ENTRY). Price then reverses and bleeds by more than $\text{HedgeTriggerAtr} \times \text{ATR}$, so the EA adds an equal-lot *short* HEDGE that freezes the open loss. As the combined basket drifts back to $+\text{BasketTpMoney}$ of floating profit, both legs are closed together (BASKET +TP → CLOSE ALL). The dashed gold lines are the two EMAs; the dashed green/red lines mark each leg's ATR take-profit and stop-loss.

Parameters

Parameter	Default	Description
FastEma	12	Fast (reactive) EMA period. A fresh cross of the fast EMA above/below the slow EMA is the trend signal. Range 3–40, step 1.
SlowEma	34	Slow (baseline) EMA period. The fast-vs-slow relationship defines the long/short bias. Range 15–120, step 1.
AtrPeriod	14	Averaging period for the ATR used to size stops, take-profits and the hedge trigger. Range 5–30, step 1.
HedgeTriggerAtr	1.5	Adverse move, in ATR multiples, the primary must be under water before the protective hedge is opened. Range 0.5–5.0, step 0.1.
AtrStopMult	4.0	Per-leg stop-loss distance = this \times ATR from entry. Range 1.0–10.0, step 0.5.
AtrTpMult	2.5	Per-leg take-profit distance = this \times ATR from entry. Range 0.5–8.0, step 0.25.
BasketTpMoney	30.0	Floating profit (account currency) at which the entire basket is closed — the recovery bank. Range 5.0–2000.0, step 5.0.
BasketSIMoney	400.0	Floating loss (account currency) at which the entire basket is force-closed — the hard risk cap. Range 50.0–100000.0, step 50.0.
Lots	0.10	Fixed volume per leg. Primary and hedge always use equal lots. Range 0.01–1.0, step 0.05.
Magic	3105	Unique EA identifier so it only counts, values and closes its own positions. Range 0–9,999,999, step 1.

Recommended Settings

The defaults are tuned as a balanced starting point on a liquid major such as EUR/USD on the **H1** timeframe, where the EMA (12/34) crossover produces workable trend signals and ATR-scaled brackets stay reasonable. Because the basket targets are expressed in *money*, they should be re-scaled to your account size and lot volume.

- **Account:** a MetaTrader 5 *Retail Hedging* account is mandatory (see warning above).
- **Symbol / timeframe:** a liquid major (e.g. EUR/USD, USD/JPY) on H1. Higher timeframes reduce whipsaw crossovers; test before changing.
- **Basket money targets:** keep `BasketTpMoney` modest relative to `BasketSlMoney` — a small, achievable recovery bank against a much larger hard cap. Scale both with `Lots`.
- **Hedge trigger:** a smaller `HedgeTriggerAtr` hedges sooner (freezes drawdown early but hedges more often); a larger value lets the primary run further before protection kicks in.

Tip: Always validate any parameter set in the MT5 Strategy Tester on your own broker's spread and swap conditions before going live. Since exits are partly money-based, results depend directly on your lot size and account currency — a configuration that banks +30 on 0.10 lots behaves very differently at 1.0 lots.

How to Install on MetaTrader 5

- 1 Copy `TrendHedgeRecoveryOverlay.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.