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Rsi Trend Pullback

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Trend Continuation (Pullback)	M15 – H1	www.algobot.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

Rsi Trend Pullback is a trend-continuation Expert Advisor that combines two classic price-action and momentum building blocks — and nothing else. There are no moving averages and no fixed trade clock; the EA simply reads the trend from market structure and waits for a momentum dip to re-join it.

- **Swing structure** — the trend is read directly from confirmed swing highs and swing lows. A sequence of *higher lows* defines an uptrend; a sequence of *lower highs* defines a downtrend.
- **RSI momentum** — once a trend is established, the EA waits for the Relative Strength Index to pull back into the opposite-of-trend band, then re-enters the instant momentum snaps back through that band.

The reasoning is simple: trends pull back, shake out weak hands, then continue. By entering on the momentum snap-back rather than on the dip itself, the strategy avoids catching a falling knife while still buying (or selling) the discount. An ATR-based stop frames risk, and a wider ATR-based target keeps the reward-to-risk ratio positive.

The EA operates on a single timeframe — whatever chart it is attached to — and is symbol- and timeframe-agnostic. It is best suited to liquid FX pairs such as EUR/USD or GBP/USD on M15 to H1.

How It Works

The EA evaluates its logic only once per completed bar. On each new bar it updates the swing structure, recomputes RSI and ATR on closed candles, and checks for an entry. Only one position is held at a time for its magic number.

Reading the Trend (Swing Structure)

The EA scans for confirmed swing extremes using a symmetric window of `SwingLookback` bars on each side of a candidate bar. A bar is a **swing high** if its high is strictly greater than every high in the window around it, and a **swing low** if its low is strictly less than every low in the window. Because the window needs bars on both sides, swings are only confirmed once the centre bar has fully settled.

From the two most recent confirmed swings on each side, the EA defines the trend:

- **Uptrend** — the latest swing low is higher than the previous swing low (higher lows).
- **Downtrend** — the latest swing high is lower than the previous swing high (lower highs).

The Momentum Pullback (RSI)

RSI is measured against a symmetric band derived from a single input, `PullbackLevel`. With the default of 45, the lower band sits at 45 and the upper band sits at `100 - 45 = 55`. Inside a trend, the EA waits for RSI to pierce the band against the trend and then cross back through it:

- **Long pullback** — in an uptrend, RSI must dip *below* the lower band on the prior reading, then close back *at or above* it on the current reading.
- **Short pullback** — in a downtrend, RSI must pop *above* the upper band on the prior reading, then close back *at or below* it on the current reading.

Entry Logic

An entry requires the trend, the RSI snap-back, *and* a confirming candle direction on the just-closed bar:

```
LONG  = upTrend   AND rsiPrev < loBand AND rsiNow >= loBand AND bullish candle
SHORT = downTrend AND rsiPrev > hiBand AND rsiNow <= hiBand AND bearish candle
```

A **long** is opened at the Ask; a **short** is opened at the Bid. The confirming candle (close above open for longs, close below open for shorts) ensures the EA enters only when price action agrees with the momentum signal.

Exit Logic (Stop Loss & Take Profit)

Both the stop loss and take profit are derived from the current Average True Range (ATR), so risk scales with market volatility. There is no trailing stop or time-based exit — each trade runs to either its stop or its target.

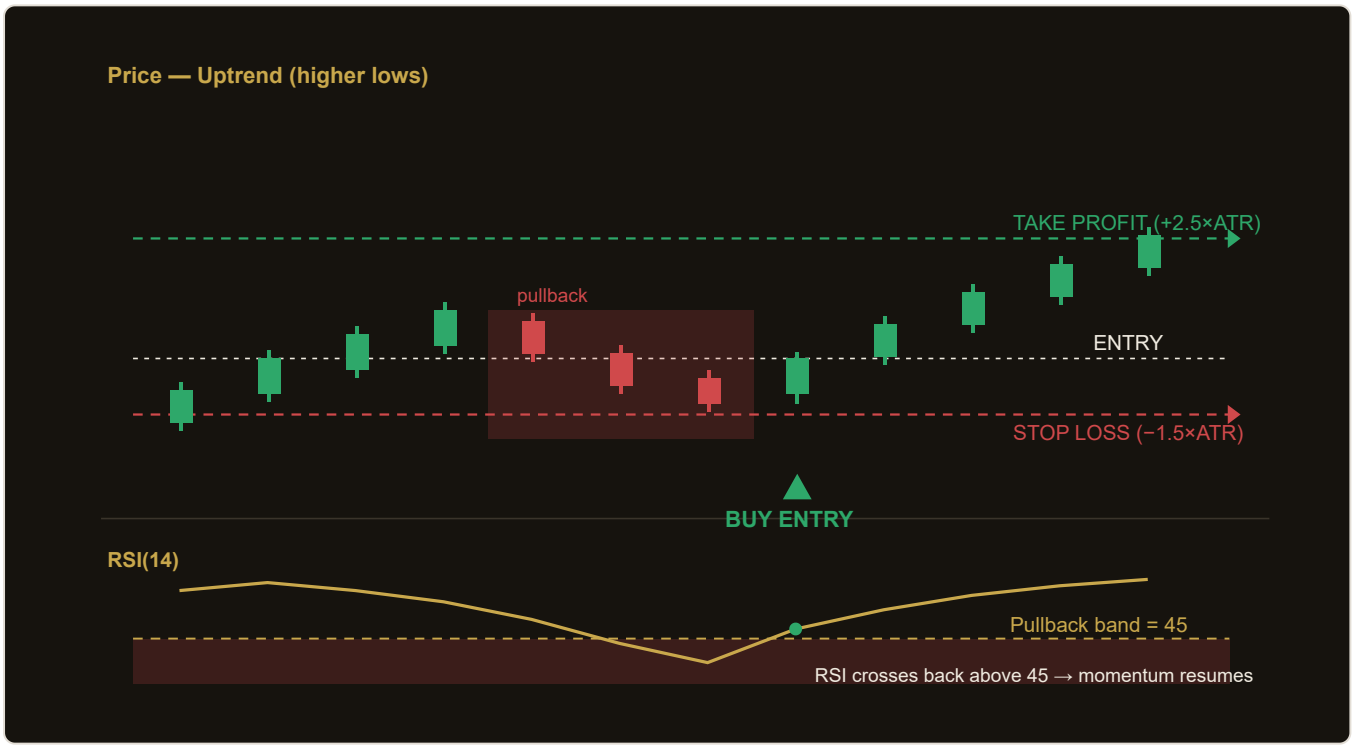
```
LONG :  SL = price − ATR × AtrSlMult    TP = price + ATR × AtrTpMult
SHORT:  SL = price + ATR × AtrSlMult    TP = price − ATR × AtrTpMult
```

With the default multipliers (SL = 1.5×ATR, TP = 2.5×ATR), each trade targets roughly a 1:1.67 reward-to-risk ratio.

> **Note:** All signals are evaluated on *completed* bars only. RSI and the confirming candle use the most recently closed bar (shift 1), and the prior RSI reading uses the bar before that (shift 2). This prevents repainting and keeps the live EA faithful to backtest behaviour.

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

Parameter	Default	Description
RsiPeriod	`14`	Look-back period for the RSI momentum calculation. Range 7–21 (step 1). Lower values react faster but are noisier.
PullbackLevel	`45.0`	Lower RSI pullback band. The upper band is derived symmetrically as `100 - PullbackLevel` (default 55). Range 35–49 (step 1). Values closer to 50 trigger on shallower pullbacks.
SwingLookback	`4`	Number of bars on each side of a candidate bar used to confirm a swing high or swing low. Range 2–12 (step 1). Larger values detect bigger, slower structure.
AtrPeriod	`14`	Look-back period for the ATR used to size the stop loss and take profit. Range 7–21 (step 1).
AtrSlMult	`1.5`	Stop-loss distance as a multiple of ATR. Range 0.5–4.0 (step 0.1).
AtrTpMult	`2.5`	Take-profit distance as a multiple of ATR. Range 1.0–6.0 (step 0.1). Keep above `AtrSlMult` for a positive reward-to-risk ratio.
Lots	`0.10`	Fixed trade volume in lots. Range 0.01–1.0 (step 0.05).
Magic	`1009`	Magic number identifying this EA's positions. Use a unique value per chart so the EA only manages its own trades.

Recommended Settings

The defaults are tuned for liquid major FX pairs on intraday timeframes. Use the following as a starting point and validate with the Strategy Tester before live deployment.

- **Symbols:** EUR/USD, GBP/USD, or other liquid majors with tight spreads.
- **Timeframe:** M15 to H1. The EA reads the timeframe of the chart it is attached to.
- **RSI & pullback:** `RsiPeriod = 14`, `PullbackLevel = 45` for a balanced, moderately selective trigger.
- **Structure:** `SwingLookback = 4` gives responsive yet meaningful swings on intraday charts.
- **Risk frame:** `AtrSlMult = 1.5` and `AtrTpMult = 2.5` for a positive reward-to-risk profile.

Example — EUR/USD M15 long

Structure shows higher lows (uptrend). Price pulls back for several bars and RSI dips to 42, below the lower band of 45. On the next closed bar RSI recovers to 47 (back above 45) and the candle closes bullish. The EA buys at the Ask, places the stop 1.5×ATR below entry and the target 2.5×ATR above, then manages the single position until one level is hit.

Tip: Because both stops and targets scale with ATR, the strategy adapts automatically to changing volatility — there is no need to re-tune pip distances per symbol. Always run the MT5 Strategy Tester on recent data to confirm behaviour before going live.

How to Install on MetaTrader 5

1. Copy `RsiTrendPullback.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.