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Rsi Boundary Rejection

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Mean Reversion	M15 – H1	www.algobot.live

Overview

Rsi Boundary Rejection is a mean-reversion reversal Expert Advisor that fades failed breakouts at rolling support and resistance, gated by an RSI extreme. The entire concept rests on a deliberate combination of just two things: price-action structure (a self-updating swing high and swing low) and RSI momentum — and nothing else.

Liquid markets routinely run the stop orders parked just beyond an obvious level. Price spikes through a recent swing high or low, trips the resting orders, then snaps straight back inside the range because there was no genuine continuation behind the poke. This “sweep and reclaim” is one of the more reliable reversal tells in price action. On its own, though, a level poke is noisy — many pokes are the first leg of a real breakout. So the EA fades a poke *only* when momentum is already stretched in the same direction: a failed breakdown that occurs while RSI is oversold, or a failed breakout that occurs while RSI is overbought.

Requiring both signals to agree — structure rejected the move *and* momentum says the move is spent — is the edge. Either signal alone is ignored. The strategy is symbol- and timeframe-agnostic: levels are real structure on whatever chart is loaded, and all risk distances scale off ATR, so there is no pip or point math to retune per instrument.

How It Works

The EA evaluates its rules **once per newly-closed bar**. The just-closed bar is the *signal bar*; the lookback window is the block of closed bars immediately *before* it. A new trade is only considered when no position for this EA's magic number is already open and the current spread is within the allowed limit.

1. The Level (price action)

Over the last `Lookback` closed bars *before* the signal bar, the EA marks structure:

- **Resistance** = the highest high of the window
- **Support** = the lowest low of the window

These levels are real, self-updating structure on whatever symbol and timeframe is loaded — no fixed pip or point distances are involved.

2. The Sweep (price action)

The signal bar must pierce a level by at least a fraction of ATR — a true poke rather than a rounding touch — and then *close back inside* the range. The close-back-inside is the rejection: the breakout attempt failed on its own bar.

```
pierce = MinPierceAtr × ATR

LONG  : Low  < support    - pierce   AND   Close > support
SHORT : High > resistance + pierce   AND   Close < resistance
```

3. The Exhaustion (RSI)

RSI on the signal bar must already confirm momentum is stretched the same way the structure rejected the move:

- **Long** — a failed breakdown into oversold: RSI ≤ `Oversold`
- **Short** — a failed breakout into overbought: RSI ≥ `Overbought`

> **Two-sided agreement.** A failed breakdown into oversold (longs) or a failed breakout into overbought (shorts) means structure rejected the move *and* momentum says the move is spent. Demanding both filters together is what screens out the genuine breakouts that run naive level-fades over.

Exit Logic — Stop Loss & Take Profit

Risk is entirely ATR-based, so it self-scales on any symbol or timeframe. The stop sits just beyond the swept wick — below the signal bar's low for a long, above its high for a short — buffered by `AtrSlMult × ATR`. The logic: if price trades back through the very extreme that was meant to reject it, the reversal thesis is dead. The take-profit is a fixed reward-to-risk multiple of that stop distance, so expectancy is governed by `RewardRatio` rather than a guess.

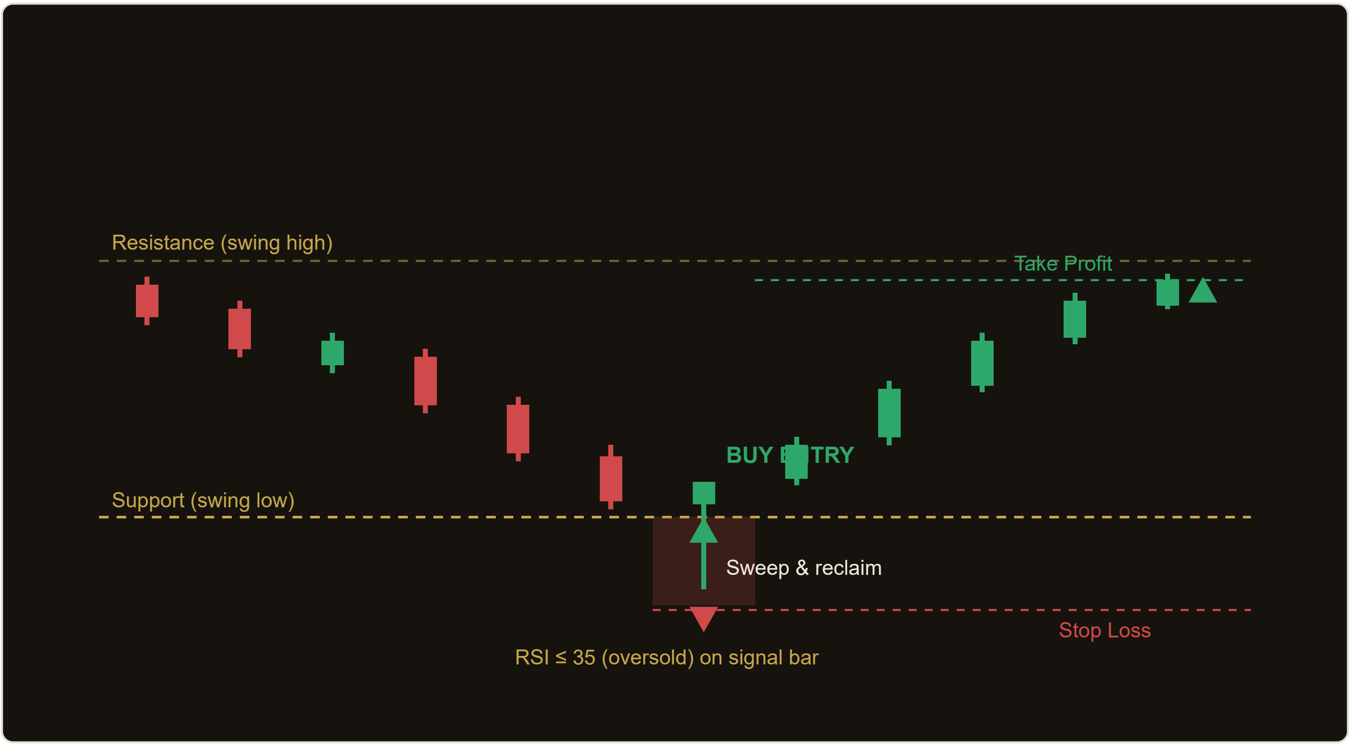
```
LONG  : SL = signalLow  − AtrSlMult × ATR
        risk = entry − SL
        TP = entry + RewardRatio × risk

SHORT : SL = signalHigh + AtrSlMult × ATR
        risk = SL − entry
        TP = entry − RewardRatio × risk
```

Long and short rules are exact mirrors of each other. Once a position is open, the ATR stop and target manage the exit entirely — the EA holds a single position per magic number and does not stack entries.

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
Lookback	20	How many closed bars define the swing high (resistance) and swing low (support). Range 8–60, step 2.
RsiPeriod	14	RSI smoothing period. Range 7–28, step 1.
Oversold	35.0	Signal-bar RSI must be at or below this to fade a failed breakdown (long). Range 15–45, step 1.
Overbought	65.0	Signal-bar RSI must be at or above this to fade a failed breakout (short). Range 55–85, step 1.
MinPierceAtr	0.05	The poke beyond the level must be at least this fraction of ATR — ensures a real sweep, not a rounding touch. Range 0.00–1.00, step 0.05.
AtrPeriod	14	ATR period used for both the sweep filter and the stop distance. Range 7–30, step 1.
AtrSlMult	1.20	Stop buffer placed beyond the swept wick, as a multiple of ATR. Range 0.30–4.00, step 0.10.
RewardRatio	1.80	Take-profit distance as a multiple of the stop distance (reward-to-risk). Range 0.80–4.00, step 0.10.
MaxSpreadPoints	30	Skip the trade if the current spread (in points) is wider than this. Range 1–200, step 1.
Lots	0.10	Fixed trade volume in lots. Range 0.01–1.00, step 0.05.
Magic	5821	EA magic number used to identify and manage this strategy's positions. Range 0–9,999,999, step 1.

Recommended Settings

This is a swing / mean-reversion style strategy. It performs best where stop-runs at obvious structure are a recurring liquidity event, and where demanding a same-bar reclaim plus a stretched RSI screens out the genuine breakouts.

- **Instruments:** mean-reverting FX majors or metals — for example EURUSD, AUDUSD, or XAUUSD.
- **Timeframe:** M15 to H1.

- **Parameters:** the defaults are a sensible starting point. Tune `Lookback` to match the structure you want to fade, and `Oversold` / `Overbought` to control how stretched momentum must be before a sweep is faded.

Example — long setup (failed breakdown)

Over the last 20 bars the lowest low forms support. The signal bar dips its low below support by more than `0.05 × ATR`, but closes back above support, and the bar's RSI reads 33 (≤ 35). Both filters agree: a buy is placed at the ask, with the stop `1.20 × ATR` below the swept wick and the target `1.80 ×` the stop distance above entry.

Tip. Because every distance scales off ATR, the same parameter set adapts automatically across symbols and timeframes — there is no per-instrument pip math to retune. Keep `MaxSpreadPoints` aligned to the typical spread of your chosen instrument so wide-spread ticks do not trigger marginal entries.

How to Install on MetaTrader 5

1. Copy `RsiBoundaryRejection.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.