

Order Block RSI Retest

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Order Block Continuation

TIMEFRAME

M15 / M30

WEBSITE

www.algotbot.live

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Overview

Order Block RSI Retest is a Smart-Money continuation strategy that combines two ideas: **order blocks** and the **Relative Strength Index (RSI)**. An order block is the last opposing candle printed immediately before a sharp, one-sided move. The institutions that drove that move are presumed to have left unfilled orders behind in that candle; when price later drifts back into the zone, those resting orders tend to be defended and the original impulse direction resumes. The strategy trades that resumption.

What qualifies a move as institutional intent here is **displacement measured by ATR**, not a structural break. A candle only mints an order block if its body is large relative to current volatility. RSI then acts as a **momentum veto**: a retest is only taken when RSI still agrees with the impulse direction, screening out the retests that are really the start of a reversal. Risk is structural and volatility-scaled — the stop sits just beyond the far edge of the block, and the target is a fixed reward-to-risk multiple of that distance, so the logic adapts to any symbol or timeframe.

How It Works

1. Detecting the order block (ATR displacement)

On every newly-closed bar the EA measures the body of that bar against the current ATR. A move only counts as a displacement — institutional intent — when the body clears the `DisplacementAtr` threshold:

Bullish displacement : $(\text{Close} - \text{Open}) \geq \text{DisplacementAtr} \times \text{ATR}$

Bearish displacement : $(\text{Open} - \text{Close}) \geq \text{DisplacementAtr} \times \text{ATR}$

When a displacement is detected, the EA looks back up to `ObSearchBars` candles before the impulse for the most recent **opposite-colour** candle, and records its full high-low range as a zone:

- **Bullish impulse** → last **down** candle → a **demand zone** `[Low, High]`
- **Bearish impulse** → last **up** candle → a **supply zone** `[Low, High]`

2. The RSI veto

Naked order-block retests get run over when momentum has already rolled over against the block. Every entry must therefore agree with RSI on the retest bar:

- A **demand** retest only fires while RSI still reads bullish: `RSI ≥ RsiTrigger`.
- A **supply** retest only fires while RSI still reads bearish: `RSI ≤ 100 - RsiTrigger`.

With the default `RsiTrigger` of 50, this is simply the RSI midline; raising it demands stronger confirming momentum before a retest is accepted.

3. Entry conditions

The EA holds at most one position per magic number at a time, and skips any signal while the current spread exceeds `MaxSpreadPoints`.

LONG — demand retest

An active demand zone exists, and the just-closed bar dips into it (`Low ≤ zoneHigh`) but holds its base (`Close ≥ zoneLow`), closes up (`Close > Open`), and RSI is bullish (`RSI ≥ RsiTrigger`).

SHORT — supply retest

An active supply zone exists, and the just-closed bar rallies into it (`High ≥ zoneLow`) but holds below its top (`Close ≤ zoneHigh`), closes down (`Close < Open`), and RSI is bearish (`RSI ≤ 100 - RsiTrigger`).

4. Stop loss, take profit and zone life

Risk is anchored to the structure of the block and scaled by volatility. The stop sits a fraction of ATR beyond the far edge of the zone — if price trades cleanly through the block, the thesis is dead. The target is a fixed reward-to-risk multiple of that stop distance:

LONG : $SL = demandLow - StopAtrMult \times ATR$ $TP = Entry + RewardRatio \times (Entry - SL)$

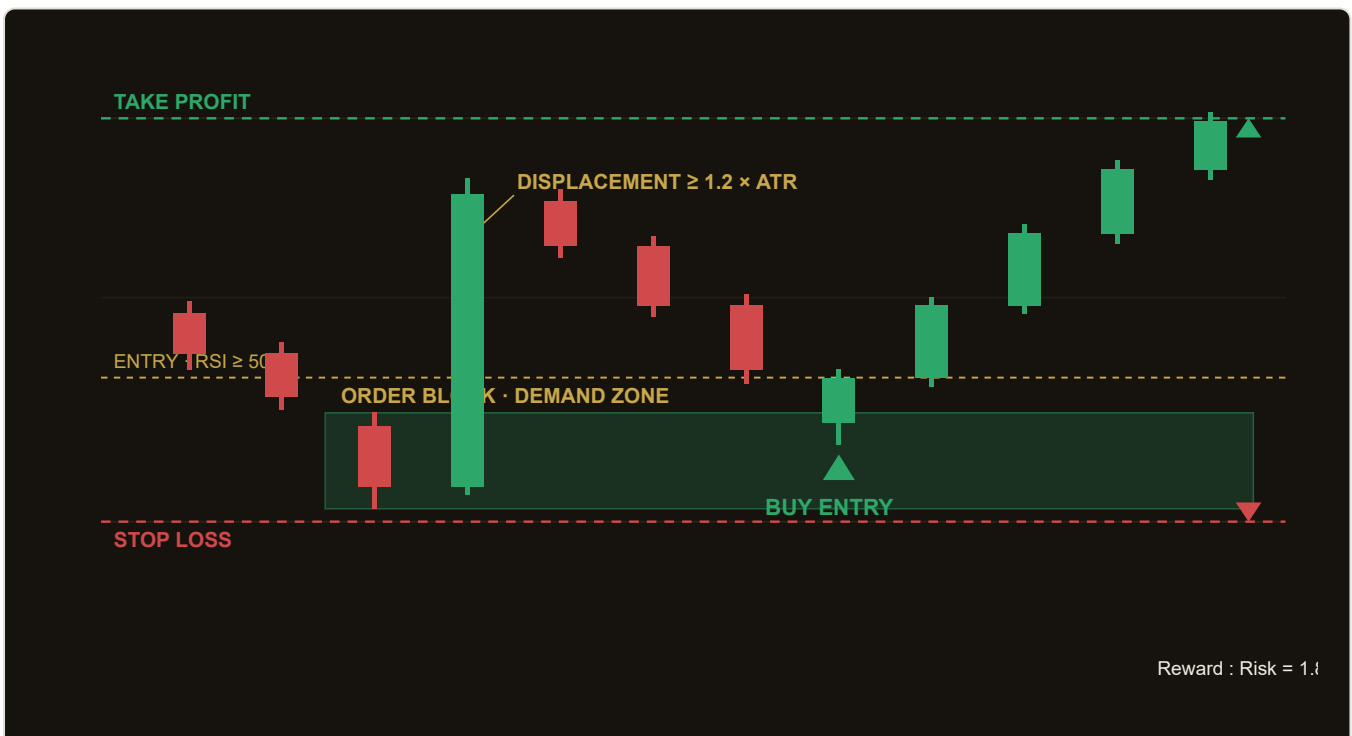
SHORT : $SL = supplyHigh + StopAtrMult \times ATR$ $TP = Entry - RewardRatio \times (SL - Entry)$

- Each zone **fires at most once** — it is deactivated the moment it triggers an entry.
- A zone **expires** after `MaxZoneAgeBars` closed bars, or immediately once price closes through it (a close below a demand zone's low, or above a supply zone's high).

Note: Because the stop is derived from the block's edge and ATR rather than a fixed pip count, the same parameter set behaves consistently across symbols and timeframes — wider stops in volatile conditions, tighter stops when ranges compress.

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.

A bullish displacement candle marks the last down candle before it as a demand zone. Price drifts back into that zone; the retest bar dips in, holds its base, closes up, and RSI still reads bullish — so a long is taken. The stop sits an ATR fraction below the zone, and the take profit is set at 1.8× that risk.

Parameters

Parameter	Default	Description
RsiPeriod	14	RSI smoothing period — the momentum veto. Range 7–28, step 1.
RsiTrigger	50.0	A long needs $RSI \geq \text{this}$; a short needs $RSI \leq (100 - \text{this})$. 50 is the plain midline. Range 50.0–70.0, step 1.0.
AtrPeriod	14	ATR period used for displacement sizing and the structural stop buffer. Range 7–28, step 1.
DisplacementAtr	1.20	Impulse body must be at least this multiple of ATR to mint an order block. Range 0.50–3.00, step 0.10.
ObSearchBars	8	How many bars before the impulse to look back for the originating candle. Range 2–20, step 1.
MaxZoneAgeBars	25	A zone is abandoned once it is older than this many closed bars. Range 5–100, step 5.
StopAtrMult	0.50	Stop buffer beyond the far edge of the block, as a multiple of ATR. Range 0.10–2.00, step 0.10.
RewardRatio	1.80	Take-profit distance as a multiple of the structural stop distance. Range 1.00–5.00, 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	4820	EA magic number used to identify and manage this strategy's positions. Range 0–9,999,999, step 1.

Recommended Settings

This is a momentum-continuation strategy, so it performs best on instruments that trend and displace cleanly rather than chop sideways.

- **Symbols:** trending majors such as **GBPUSD** or **USDJPY**.
- **Timeframe:** **M15** or **M30**, where displacement bodies are large enough to be meaningful yet frequent enough to trade.
- **Style:** momentum continuation — trading the resumption of an institutional impulse after a controlled pullback into the block.

Tuning tips: Raise `DisplacementAtr` for fewer, higher-conviction blocks and lower it for more frequent (but noisier) setups. Raising `RsiTrigger` above 50 demands stronger confirming momentum, trading fewer retests for higher quality. Widen `StopAtrMult` on volatile pairs to avoid being shaken out by the zone's own noise, and keep `MaxSpreadPoints` tight on majors to skip illiquid sessions.

Always validate first. Backtest in the MT5 Strategy Tester and run on a demo account across several market regimes before considering any live deployment. Optimise `DisplacementAtr`, `RsiTrigger` and `RewardRatio` together — they interact closely.

How to Install on MetaTrader 5

- 1 Copy `OrderBlockRSIRetest.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

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