

Quasimodo Right Shoulder Reversal

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Reversal / Price-Action Pattern	M15 – H1	www.algotbot.live

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Overview

The **Quasimodo Right Shoulder Reversal** is a price-action reversal Expert Advisor built around the **Quasimodo (QM)** pattern — also known as the “over-and-under” setup. A Quasimodo is a *failed head-and-shoulders*: price appears to be trending, breaks the prior structure to trap breakout traders, and then reverses hard back through the level that started the move.

The EA reads market structure from confirmed swing points, waits for a complete QM formation to appear, and then arms an entry at the **right-shoulder retest** of the left-shoulder line — the textbook Quasimodo entry. It trades both directions symmetrically: a **bearish QM** produces a short, and a **bullish QM** produces a long.

- **Pattern-based, not indicator-based.** Entries come from swing geometry (the QM structure), with ATR used only to size the stop buffer and to normalise the reward/risk filter.
- **Non-repainting swings.** Every swing is a confirmed 5-bar fractal, so the structure the EA acts on cannot change after the fact.
- **Defined risk from the outset.** Every trade ships with a hard stop (beyond the head) and a fixed take-profit (the broken structure low/high) attached at entry.
- **Single-timeframe compliant.** All logic runs on the chart’s primary timeframe — no multi-timeframe dependencies.

What is a Quasimodo? In a bearish QM the swing sequence runs left-shoulder high → low → a *higher* high (the head) → a low that *breaks below* the prior low. That break-of-structure fools trend-followers into expecting continuation. Instead, price rallies back to the left-shoulder line and reverses. The bullish QM is the exact mirror.

How It Works

1. Building market structure (swing detection)

On every newly-closed bar the EA evaluates a **5-bar fractal** centred three bars back. A swing high is confirmed when the centre bar's high is strictly greater than the highs of the two bars on each side; a swing low is confirmed the same way using lows. Because confirmation requires two bars to the right of the pivot, a swing is only ever recorded once it is fully closed and **cannot repaint**. Confirmed swings are appended to a rolling sequence (the last 12 are kept), each tagged as a high or a low.

2. Recognising the pattern

Whenever a new swing is added, the EA inspects the last four swings for a completed Quasimodo. Labelling them `p0 p1 p2 p3` from oldest to newest:

BEARISH QM (SHORT)

- Swing types must be **High → Low → High → Low**.
- The third swing (**the head**, `p2`) is a *higher high* than the left shoulder (`p2 > p0`).
- The final low (`p3`) *breaks below* the intermediate low (`p3 < p1`) — the break of structure.

BULLISH QM (LONG)

- Swing types must be **Low → High → Low → High**.
- The head (`p2`) is a *lower low* than the left shoulder (`p2 < p0`).
- The final high (`p3`) *breaks above* the intermediate high (`p3 > p1`).

3. Arming the entry

A completed pattern arms an entry line at the **left-shoulder level** (`p0`) and records the head (`p2`) and the target (`p3`). The armed line stays live for up to `ExpiryBars` closed bars. If price does not retest the line within that window, the setup is discarded.

4. Triggering the trade (the right-shoulder retest)

The EA only trades when it is flat (no open position on the same symbol and magic number). It then waits for price to return to the entry line:

- **Short:** when the last closed bar's high reaches the left-shoulder line, sell at the current Bid.

- **Long:** when the last closed bar's low reaches the left-shoulder line, buy at the current Ask.

5. Stop loss, take profit, and the reward/risk filter

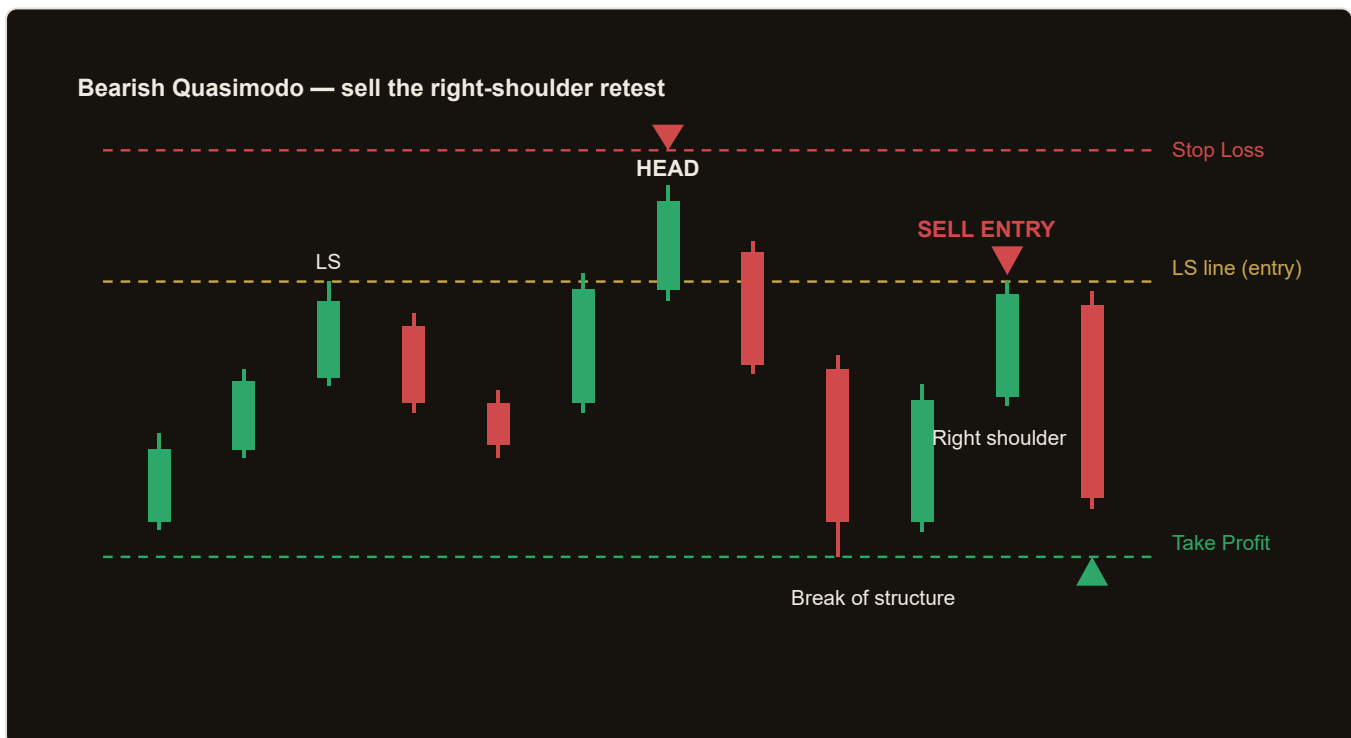
Risk is defined the moment the trade is armed:

- **Stop loss** is placed beyond the head, padded by an ATR-based buffer: short stop = $\text{head} + \text{StopBufferAtr} \times \text{ATR}$; long stop = $\text{head} - \text{StopBufferAtr} \times \text{ATR}$.
- **Take profit** is the broken structure level ($p3$) — the low that broke down for shorts, the high that broke up for longs.
- **Reward/Risk gate:** the order is only sent if $\text{reward} / \text{risk} \geq \text{MinRewardRisk}$ and both reward and risk are positive. A retest that arrives with an unfavourable payoff is skipped, and the setup is disarmed.

One shot per setup. Each armed pattern is taken at most once. Whether it fills, fails the reward/risk gate, or simply expires, the arm is cleared — the EA never stacks multiple entries on the same structure.

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 chart

Price prints a left-shoulder high (LS), pulls back, then rallies to a higher high (the HEAD). The next leg breaks below the prior low — a break of structure that traps traders betting on continuation. Price then rallies back to the left-shoulder line (the gold dashed line), forming the right shoulder, where the EA sells. The stop sits above the head; the target is the broken low.

Parameters

Parameter	Default	Description
AtrPeriod	14	Look-back period for the ATR used to size the stop buffer and normalise volatility. Range 7–30, step 1.
StopBufferAtr	0.40	Extra room beyond the head for the stop loss, expressed in ATR multiples. Larger values widen the stop. Range 0.0–2.0, step 0.10.
MinRewardRisk	1.00	Minimum reward-to-risk ratio required to take a trade. Retests offering a poorer payoff are skipped. Range 0.3–4.0, step 0.10.
ExpiryBars	25	Number of closed bars an armed entry line stays live. If price does not retest within this window, the setup is discarded. Range 3–100, step 1.
Lots	0.10	Fixed order volume in lots for each trade. Range 0.01–1.0, step 0.05.
Magic	6118	Magic number identifying this EA's orders, so it manages only its own positions. Range 0–9,999,999, step 1.

Recommended Settings

The strategy is designed for liquid instruments with clean swing structure. Suggested starting points:

- **Symbols:** EURUSD and XAUUSD (Gold). Other major FX pairs with tight spreads are reasonable candidates.
- **Timeframe:** M15 to H1. These give enough structure for reliable fractals without excessive noise.
- **ATR / stop buffer:** the defaults (`AtrPeriod 14` , `StopBufferAtr 0.40`) suit most conditions. Widen the buffer on higher-volatility instruments such as Gold if stops are being clipped by wicks.
- **Reward/Risk:** the default `MinRewardRisk 1.00` accepts any setup that pays at least 1:1. Raising it to 1.5–2.0 filters for higher-quality, more selective entries at the cost of fewer trades.
- **Expiry:** `ExpiryBars 25` keeps setups fresh. Lower it for faster invalidation, raise it to allow slower retests.

Tip: Because take-profit is fixed at the broken structure level, the effective reward/risk of each trade varies with the geometry of the pattern. Use `MinRewardRisk` as your primary quality dial — it is the single cleanest way to trade only the best-shaped Quasimodos.

Always validate first. Backtest and forward-test on a demo account with your broker's real spreads and execution before committing live capital. Pattern-recognition results are sensitive to spread, slippage, and how your broker prints highs and lows.

How to Install on MetaTrader 5

- 1 Copy `QuasimodoRightShoulderReversal.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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