

Doji Extreme Reversal

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Reversal (Counter-Trend)

TIMEFRAME

M15

WEBSITE

www.algoBot.live

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Overview

Doji Extreme Reversal is a counter-trend, price-action reversal Expert Advisor. A doji — a candle whose open and close almost coincide — is the market's single clearest fingerprint of indecision: a perfect tug-of-war with no winner. On its own a doji is just noise. Its meaning comes *entirely* from **location**. A doji printed at the very top of a recent up-push tells you buyers ran out of fuel exactly where they were strongest; a doji at the bottom of a down-push tells you sellers stalled at the lows.

The EA never anticipates. It waits for the **next candle** to resolve the indecision by closing back through the doji's range, and trades that resolution as a reversal. Pattern detection is pure geometry — a body-to-range ratio, a swing-window location test, and a directional confirmation close. The Average True Range (ATR) plays only a supporting role: it rejects micro-dojis that are too small to matter and buffers the structural stop. ATR never generates the entry signal itself.

The strategy is designed for **XAU/USD** or **EUR/USD** on the **M15** timeframe, but it works on any liquid symbol and timeframe. Its flavour is exhaustion / mean-reversion: it fades a stretched move at a swing extreme rather than chasing it.

Core idea in one sentence: find indecision (a doji) at exhaustion (a swing high or low), then trade the candle that confirms the turn by closing back through the doji — with the stop parked just beyond the rejected extreme.

How It Works

On every freshly-closed bar the EA inspects a small, fixed set of candles relative to the still-forming bar at shift 0. Bar indexing is the key to reading the logic:

- **D (shift 2)** — the doji candidate, two bars back.
- **C (shift 1)** — the confirmation candle, the bar that just closed.
- **Shifts 3 ... SwingLookback+2** — the swing window that *precedes* the doji.

Step 1 — The indecision (doji) test

Bar D qualifies as a doji only if both conditions hold:

```
body = |close - open|
range = high - low

isDoji = ( body <= DojiBodyRatio × range )    // tiny body relative to range
         AND ( range >= MinRangeAtr × ATR )    // big enough to matter
```

The first clause demands a near-equal open and close (genuine indecision). The second clause uses ATR as a noise filter: a doji whose entire range is smaller than `MinRangeAtr × ATR` is dismissed as a micro-doji with no meaning.

Step 2 — The location test (swing extreme)

The doji must sit at an extreme of the window that precedes it. The EA scans shifts 3 through `SwingLookback + 2`:

- **Swing top** — D's high is the highest high of that window. Buyers were strongest exactly where they faltered.
- **Swing bottom** — D's low is the lowest low of that window. Sellers were strongest exactly where they stalled.

If the doji is at neither extreme, there is no setup and the EA does nothing.

Step 3 — The confirmation close

Indecision alone is not a trade. The confirmation candle C must *resolve* the doji in the reversal direction:

- **Top reversal** → **SELL**: doji at swing high, and C is bearish (close < open) *and* closes **below D's low**.
- **Bottom reversal** → **BUY**: doji at swing low, and C is bullish (close > open) *and* closes **above D's high**.

Step 4 — Entry, stop, and target

The order is sent at market on the close of the confirmation bar — Bid for a sell, Ask for a buy. The stop is structural, parked just beyond the rejected doji extreme plus an ATR buffer, and the target is a fixed multiple of the measured risk:

```
SELL:  entry = Bid
        SL    = D.high + AtrBuffer × ATR
        risk  = SL - entry
        TP    = entry - RiskReward × risk

BUY:   entry = Ask
        SL    = D.low  - AtrBuffer × ATR
        risk  = entry - SL
        TP    = entry + RiskReward × risk
```

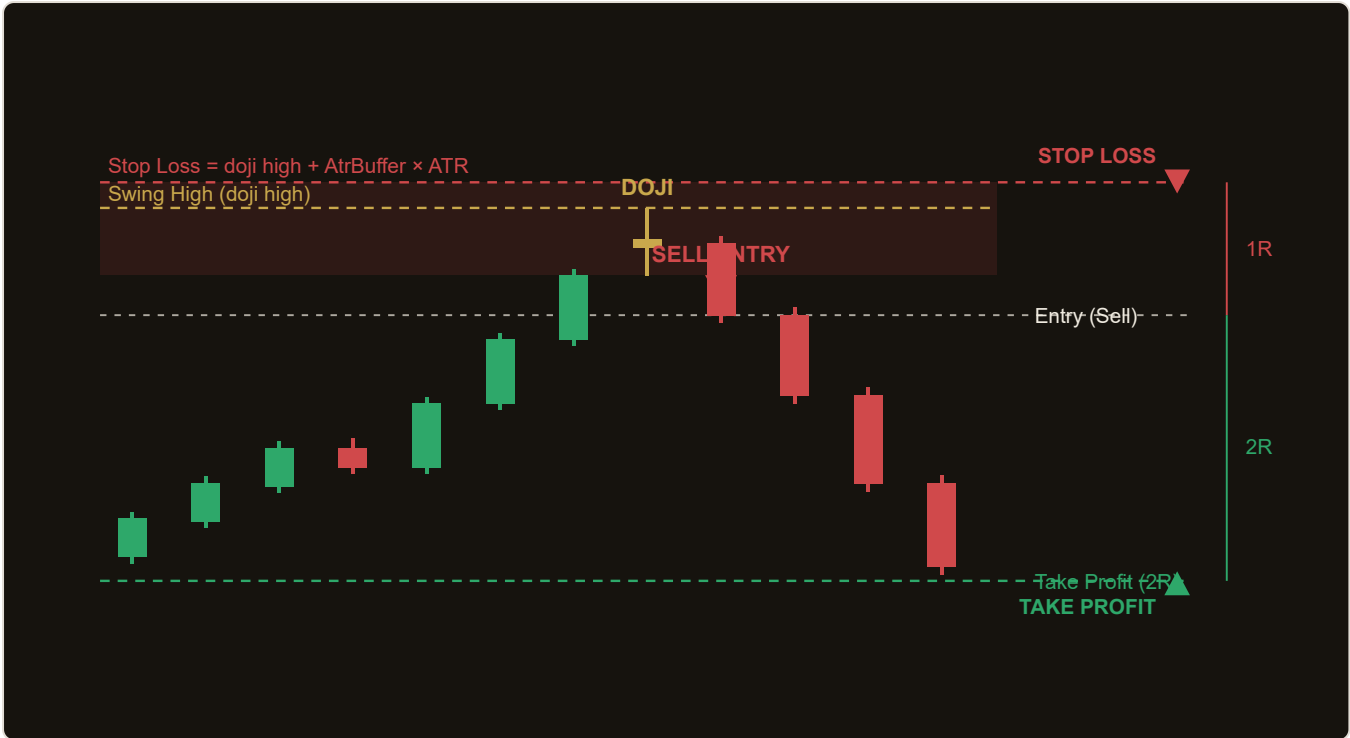
Trade management

- **One position at a time** per the EA's magic number — no stacking.
- **Acts once per closed bar.** Signals are evaluated only when a new bar opens, so the doji and confirmation are always finished candles (no repainting on intrabar ticks).
- **No trailing or break-even logic.** Each trade runs to its fixed stop loss or take profit.

Why the stop sits beyond the doji extreme: the doji's high (or low) is the precise price where the prevailing side ran out of fuel. If price reclaims that level, the reversal thesis is wrong — so the stop belongs just past it, padded by `AtrBuffer × ATR` to survive ordinary noise.

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. It depicts a **top reversal (SELL)**: an up-push climbs into a doji at the swing high, the next candle confirms by closing back below the doji's low, and the trade targets twice the risk to the downside.



Illustrative example only. Actual market behaviour varies.

Parameters

Parameter	Default	Description
Lots	0.10	Order volume in lots. Range 0.01–1.00, step 0.01. Size this to your account risk, not the default.
SwingLookback	10	Number of bars before the doji that define the swing window. The doji must be the highest high (or lowest low) of this window to qualify as a swing extreme. Range 4–40, step 1.
DojiBodyRatio	0.12	Maximum body-to-range ratio for a candle to count as a doji. Smaller values demand a more perfect doji; larger values admit spinning tops. Range 0.05–0.35, step 0.01.
AtrPeriod	14	Averaging period for the ATR used by the size filter and the stop buffer. Range 5–30, step 1.
AtrBuffer	0.25	ATR multiple added beyond the doji extreme when placing the stop loss. Larger values give the trade more room but widen risk. Range 0.00–1.50, step 0.05.
RiskReward	2.0	Reward-to-risk ratio for the take profit. With the default, the target is twice the distance from entry to stop. Range 1.0–5.0, step 0.5.
MinRangeAtr	0.50	Minimum doji range expressed as a multiple of ATR. Rejects micro-dojis too small to be meaningful. Set 0.00 to disable the filter. Range 0.00–2.00, step 0.10.
Magic	9311	Unique identifier tagging this EA's orders. Keep it distinct from other EAs running on the same account so position management stays isolated.

Recommended Settings

The defaults are tuned for the strategy's design market — **XAU/USD** or **EUR/USD** on **M15**. Start there, then adjust to the symbol's character before trading live.

STARTING POINT

- **Symbol & timeframe:** XAU/USD or EUR/USD, M15.
- **SwingLookback 10** — a balanced window; raise it to demand a more significant extreme, lower it for more frequent (but looser) setups.
- **DojiBodyRatio 0.12** with **MinRangeAtr 0.50** — a clean, meaningful doji filter.
- **AtrBuffer 0.25** and **RiskReward 2.0** — a structural stop with a 2:1 target.

Worked example — top reversal (SELL)

Price rallies for several M15 bars and prints a doji at a fresh swing high of 2410.0 (doji low 2408.5). With ATR = 1.20, the doji's range clears $\text{MinRangeAtr} \times \text{ATR} = 0.60$ and its body is well under $\text{DojiBodyRatio} \times \text{range}$, so it qualifies. The next candle is bearish and closes at 2408.0 — below the doji's low — confirming the turn. The EA sells at the Bid (≈ 2408.0). Stop = $2410.0 + 0.25 \times 1.20 =$

2410.30

(risk ≈ 2.30). Target = $2408.0 - 2.0 \times 2.30 =$

2403.40

Tuning tips: On more volatile symbols (e.g. gold), a larger `AtrBuffer` reduces stop-outs from noise around the extreme. To trade more selectively, tighten `DojiBodyRatio` and raise `MinRangeAtr` — you will get fewer but higher-quality setups. Always re-run the Strategy Tester after changing the symbol or timeframe.

Counter-trend caution: this EA fades moves at extremes. In a strong, sustained trend, exhaustion signals can fire repeatedly against the dominant direction. Validate on out-of-sample data and keep per-trade risk conservative before considering live use.

How to Install on MetaTrader 5

- 1 Copy `DojiExtremeReversal.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 (XAU/USD or EUR/USD, M15)
- 4 Configure the input parameters and click **OK**
- 5 Enable **Algo Trading** in the MT5 toolbar

Before going live: always validate the EA in the MT5 Strategy Tester on your broker's data for the exact symbol and timeframe you intend to trade. Confirm spread and commission assumptions match your account.

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.