Algobot
Maximize Your Profits

Fractal Swing Pullback

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Price-Action Swing (Trend Pullback)	H1 – H4 (Swing)	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

Fractal Swing Pullback is a pure price-action swing strategy built entirely on Bill-Williams-style fractals. It uses **no indicators** of any kind — swing points, trend structure, stop-loss levels and profit targets are all derived directly from raw bar geometry (the highs and lows of completed candles).

The core idea is to trade **pullback continuations** in the direction of the prevailing swing structure. The EA reads market structure from the most recent confirmed swing highs and swing lows, identifies whether price is in an uptrend or a downtrend, and then enters on the first confirmed counter-swing in that direction — buying confirmed **higher-lows** in an uptrend and selling confirmed **lower-highs** in a downtrend.

Because each fractal is only confirmed once a set number of bars have closed on both sides of the swing, the signal is deliberately lagged. That lag is exactly what filters out noise and turns the swing points into reliable, repeatable price-action structure rather than reactions to single spikes.

> **At a glance:** trend-following pullback entries · swing structure from confirmed fractals · structural stop beyond the protective swing · fixed reward:risk target · one position per symbol at a time · zero indicators.

How It Works

1. Confirmed Fractals (Swing Detection)

A fractal is a local swing point confirmed by the bars around it:

- **Up fractal (swing high):** a bar whose `High` is strictly above the highs of `FractalWing` bars on *both* sides.
- **Down fractal (swing low):** the mirror image — a bar whose `Low` is strictly below the lows of `FractalWing` bars on both sides.

With the default `FractalWing = 2`, a swing needs two confirming bars on each side, so a fractal is only confirmed **two bars after** the swing actually printed. This confirmation lag is intentional — it is what makes the swing reliable structure instead of noise.

2. Market Structure

The strategy keeps the **last two confirmed fractals of each kind** and reads trend directly from them:

```
Uptrend   = Higher-High AND Higher-Low   (HH + HL)
Downtrend = Lower-High  AND Lower-Low    (LH + LL)
```

In other words, an uptrend exists only when both the most recent swing high and the most recent swing low are higher than their predecessors. A downtrend requires the mirror condition. If neither is true, the structure is ambiguous and no trade is taken.

3. Entry Logic

Entries are **pullback continuations** — the EA waits for a fresh counter-swing that confirms the trend is resuming:

- **LONG:** a *new down-fractal* (swing low) confirms a **higher-low** while structure is an uptrend. The pullback has put in a higher low — the EA buys the continuation.
- **SHORT:** a *new up-fractal* (swing high) confirms a **lower-high** while structure is a downtrend. The bounce has put in a lower high — the EA sells the continuation.

Only one position per symbol and magic number is allowed at any time, so a new signal is ignored while a trade is already open.

4. Stop Loss & Take Profit

The stop is structural — it sits just beyond the **protective swing** (the fractal that triggered the entry), with a buffer scaled to that swing bar's own range:

```
swingRange = protectiveSwing.High - protectiveSwing.Low
buffer     = StopBufferFraction * swingRange

LONG :  SL = swingLow.Low   - buffer        risk = Ask - SL
SHORT:  SL = swingHigh.High + buffer        risk = SL  - Bid

TP = entry  ±  RewardRiskRatio × risk
```

The take-profit is placed a fixed multiple (`RewardRiskRatio`) of that structural risk away from the entry. With the default `RewardRiskRatio = 2.0`, every trade targets twice its risk. A trade is only sent when the computed risk is positive.

Worked example (LONG)

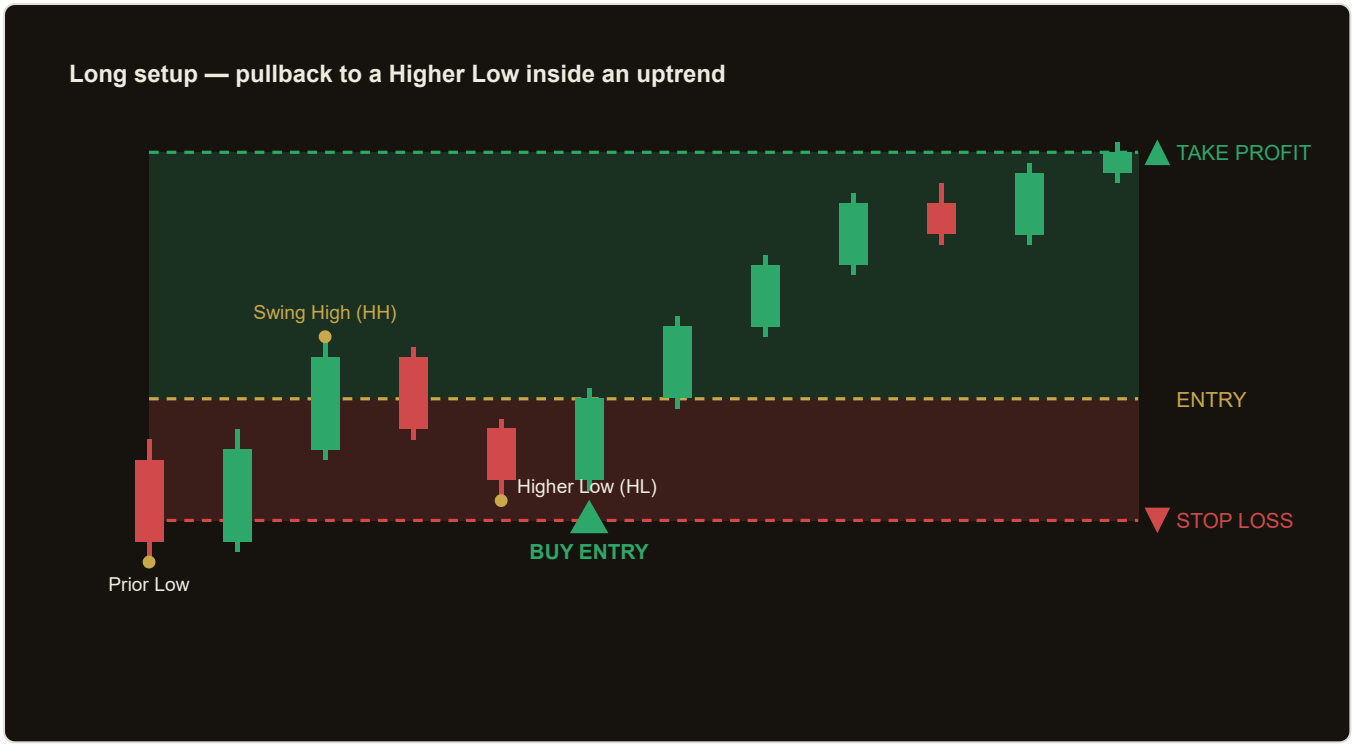
Price is in an uptrend. A pullback prints a confirmed higher-low whose swing bar spans 110.00–106.00 (range = 4.0). With `StopBufferFraction = 0.5`, the buffer is 2.0, so the stop is placed at 106.00 − 2.0 = **104.00**. If the entry (Ask) is 116.00, the risk is 12.0 points; at `RewardRiskRatio = 2.0` the target is 116.00 + 24.0 = **140.00**.

5. Bar-by-Bar Processing

All logic runs **once per closed bar**. On each new bar the EA appends the just-closed candle, re-evaluates the centre bar (`wing` bars back) for a fresh fractal, updates structure, and only then checks for an entry. Intrabar ticks are ignored, which keeps signals stable and backtests faithful to live 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
FractalWing	`2`	Half-width of a fractal: the number of bars required on each side of a swing for it to confirm. Range 2–5 (step 1). Larger values give slower but cleaner, higher-quality swings. Clamped to a minimum of 2.
RewardRiskRatio	`2.0`	Take-profit distance as a multiple of the structural (stop) risk. Range 1.0–4.0 (step 0.5). At 2.0, each trade targets twice its risk.
StopBufferFraction	`0.5`	Extra stop distance beyond the protective swing, expressed as a fraction of that swing bar's range. Range 0.0–2.0 (step 0.25). Higher values give the trade more breathing room at the cost of a wider stop.
Lots	`0.10`	Fixed trade size in lots. Range 0.01–1.0 (step 0.05). Size this to your account and per-trade risk tolerance.
Magic	`4201`	EA magic number used to identify and manage this strategy's positions. Give each instance a unique value if you run several EAs on the same account.

Note: `FractalWing`, `RewardRiskRatio`, `StopBufferFraction` and `Lots` are the four optimisable inputs exposed by the strategy. `Magic` is an additional input used only to tag this EA's orders.

Recommended Settings

The strategy is timeframe-agnostic but is designed as a swing system. The confirmation lag means it works best where individual swings are meaningful:

- **Timeframe:** H1 to H4 for swing trading; D1 for slower position-style entries.
- **Symbols:** trending, liquid instruments — major FX pairs (EURUSD, GBPUSD, USDJPY), gold (XAUUSD), or major indices.
- **FractalWing:** 2 for more frequent signals; 3–4 on lower timeframes or noisier symbols to demand cleaner swings.
- **RewardRiskRatio:** 2.0 as a balanced default; raise toward 3.0 in strongly trending conditions.
- **StopBufferFraction:** 0.5 as a starting point; widen toward 1.0 on volatile symbols to avoid premature stop-outs.

> **Tip:** always validate any combination in the MT5 Strategy Tester on several years of history, and keep `Lots` conservative so that a structural stop never risks more than 1–2% of account equity per trade.

How to Install on MetaTrader 5

1. Copy `FractalSwingPullback.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.