



01 - Strategy Overview

Pricework-Pressure Box is a MetaTrader 5 Expert Advisor for volatility-compression breakout trading. It searches for tight multi-candle ranges, marks them as Pressure Boxes, and trades only after a confirmed expansion candle breaks out of the box.

Important: This is not a Turtle Soup strategy and it is not a VWAP trend-continuation model. The core idea is compression, confirmed expansion, and fixed-percent position sizing.

Core workflow

- Detect a narrow box over closed candles only.
- Reject boxes that are too wide, too impulsive or too close to spread and broker stop-distance limits.
- Wait for a breakout candle that closes outside the box with sufficient range, body and close position.
- Build entry, stop-loss and take-profit from the selected mode.
- Check spread, session, daily trade limit, open exposure, drawdown brake, margin and lot size.
- Place a market or pending order and track the trade through OnTradeTransaction.

Best starting use cases

Market	Suggested timeframe	Starting style	Notes
EURUSD / GBPUSD	M15 or M30	Retest limit, Fixed RR	Good for clean London and New York compression-breakout tests.
XAUUSD	M5, M15 or M30	Retest or stop order	Use wider spread and stop-distance assumptions. Gold is broker-dependent.
DAX / NAS100	M5 or M15	Stop order or breakout close	Fast symbols may need wider breakout and SL settings.

02 - First Setup Checklist

- Attach the EA to the symbol and timeframe you want to test.
- Use the current chart timeframe or select a dedicated SignalTimeframe.
- Enable Algo Trading in MetaTrader 5.
- Start with fixed risk below 1 percent until the symbol has been tested.
- Run a visual backtest and confirm that boxes, breakout markers, entry, SL and TP match your expectation.
- Optimize in small blocks. Do not optimize every input at once.



03 - Complete Settings

01 - General Settings

Parameter	Default / options	What it does	Practical use
MagicNumber	ulong Default: 26051001	Unique identifier for EA positions and orders.	Use a different Magic Number for each symbol, timeframe or strategy variant.
TradeComment	string Default: Pricewerk-Pressure Box	Comment written to trades and journal entries.	Useful when filtering results or exporting broker history.
AllowLong	bool Default: true	Allows long setups.	Disable when testing short-only behavior or bearish market regimes.
AllowShort	bool Default: true	Allows short setups.	Disable when testing long-only behavior or bullish market regimes.
MaxTradesPerDay	int Default: 3	Maximum new trades per day.	Use 1 for very selective index tests; 2 to 3 is common for FX.
MaxOpenPositions	int Default: 1	Maximum open positions and pending orders from this EA.	Usually keep at 1 so boxes do not overlap.
OneTradePerBox	bool Default: true	Prevents more than one trade from the same detected box.	Keep enabled for clean statistical evaluation.
SlippagePoints	int Default: 20	Allowed deviation for trade execution.	Increase for volatile symbols or fast markets.
UseSpreadFilter	bool Default: true	Blocks new trades when spread is too high.	Always keep enabled for realistic backtests.
MaxSpreadPoints	double Default: 30	Maximum allowed spread in symbol points.	Must be adjusted per broker and symbol.

02 - Timeframe

Parameter	Default / options	What it does	Practical use
SignalTimeframe	ENUM_TIMEFRAMES Default: PERIOD_M15	Timeframe used for box and breakout detection.	Use M15 or M30 for FX; M5 or M15 for faster CFDs.
UseCurrentChartTimeframe	bool Default: true	If true, the EA uses the chart timeframe instead of SignalTimeframe.	Keep true for simple testing. Set false for fixed signal timeframe control.

03 - Session Filter

Parameter	Default / options	What it does	Practical use
UseSessionFilter	bool Default: true	Allows entries only inside the configured session.	Usually keep enabled. Compression breakouts work best during liquid sessions.
SessionStartHour / Minute	int Default: 08:00	Start of the permitted trading session in broker/server time.	Align this with London, New York or the active exchange session.
SessionEndHour / Minute	int Default: 18:00	End of the permitted trading session.	Avoid late illiquid periods unless specifically tested.
CloseOrdersOutsideSession	bool Default: true	Deletes pending orders outside the session.	Keep enabled so stale breakouts do not trigger later.
ClosePositionsAtSessionEnd	bool Default: false	Closes open positions when the session ends.	Use only for strict intraday rules or prop-firm constraints.



04 - Pressure Box Detection

Parameter	Default / options	What it does	Practical use
BoxLookbackBars	int Default: 16	Preferred box length used when several valid boxes exist.	Higher values favor longer compression zones.
MinBoxBars	int Default: 8	Minimum candles required for a box.	Lower values create more but weaker boxes.
MaxBoxBars	int Default: 30	Maximum candles considered for a box.	Increase for slower timeframes; reduce for fast index scalps.
MaxBoxATRMultiplier	double Default: 1.20	Maximum box range relative to ATR and the box window.	Lower is stricter. If no boxes appear, this may be too tight.
MaxBoxRangePercentOfAvgRange	double Default: 65.0	Maximum box range relative to historical average window range.	Useful for adapting to the symbol's normal volatility.
AvgRangeLookback	int Default: 100	Historical lookback for average range calculation.	100 is a balanced default. More smooths the reference.
ATRPeriod	int Default: 14	ATR period used for volatility calculations.	14 is standard. Use the same value across comparable tests.
MaxImpulseInsideBoxATR	double Default: 0.90	Maximum single candle range inside the box as ATR fraction.	Reduce to demand cleaner boxes; increase for Gold or indices.
MaxBodyInsideBoxATR	double Default: 0.65	Maximum candle body inside the box as ATR fraction.	Filters strong directional candles inside the compression zone.
MinBoxCompressionScore	double Default: 60.0	Minimum internal compression score.	Higher values reduce trades. Lower values increase box frequency.
RequireOverlappingCloses	bool Default: true	Requires clustered closes near the box middle.	Improves box quality and reduces noisy ranges.
MinCloseInsideBoxPercent	double Default: 70.0	Minimum percentage of closes inside the close cluster band.	If many boxes are rejected for close clustering, reduce gradually.

05 - Breakout Confirmation

Parameter	Default / options	What it does	Practical use
RequireBreakoutCloseOutsideBox	bool Default: true	Requires breakout confirmation by closed candle outside the box.	Keep enabled for stable backtests and no repainting.
MinBreakoutCloseDistanceATR	double Default: 0.10	Minimum close distance beyond the box as ATR fraction.	Increase to avoid weak breakouts; reduce if too few trades appear.
MinBreakoutCandleRangeATR	double Default: 1.00	Minimum breakout candle range as ATR multiple.	Higher values require stronger expansion.
MinBreakoutBodyATR	double Default: 0.60	Minimum breakout candle body as ATR multiple.	A key quality filter. Too high can miss valid breakouts.
MinClosePositionPercentLong	double Default: 65.0	Long breakout close must be near the candle high.	Higher values require stronger bullish close quality.
MaxClosePositionPercentShort	double Default: 35.0	Short breakout close must be near the candle low.	Lower values require stronger bearish close quality.
UseVolumeFilter	bool Default: false	Optionally requires increased tick volume on breakout.	Usually off for FX/CFD backtests unless volume behavior is reliable.
VolumeLookback	int Default: 20	Average tick-volume lookback.	Only relevant when UseVolumeFilter is true.
MinVolumeMultiplier	double Default: 1.10	Breakout volume must exceed average volume by this multiplier.	Use carefully; broker tick volume differs across feeds.

06 - Entry Mode

Parameter	Default / options	What it does	Practical use
EntryMode	ENUM_ENTRY_MODE Default: ENTRY_RETEST_LIMIT 0 = Breakout close 1 = Stop order 2 = Retest limit	Defines how the EA enters after the breakout is confirmed.	Retest can improve price but may miss trades. Breakout close is simplest.
PendingOrderExpirationBars	int Default: 8	Number of signal candles after which pending orders expire.	Keep short so old boxes do not trigger late.
RetestOffsetPoints	double Default: 0	Offset from the box edge for retest limit entries.	Positive values can make long retests slightly above the box high.
StopOrderBufferPoints	double Default: 5	Buffer beyond the box edge for stop orders.	Increase for volatile symbols or noisy tick behavior.



07 - Stop Loss

Parameter	Default / options	What it does	Practical use
StopLossMode	ENUM_SL_MODE Default: SL_BEHIND_BOX 0 = Behind box 1 = Behind breakout candle 2 = ATR based	Selects the stop-loss reference.	Behind box is the cleanest default logic.
SL_ATR_Buffer	double Default: 0.20	ATR buffer added beyond the selected stop reference.	Increase when stops are too tight or broker stop levels are large.
SL_MinPoints	double Default: 50	Minimum allowed stop distance in points.	Prevents unrealistic tiny stops.
SL_MaxPoints	double Default: 1000	Maximum allowed stop distance in points.	Blocks boxes whose stop is too wide for the trading model.

08 - Take Profit

Parameter	Default / options	What it does	Practical use
TakeProfitMode	ENUM_TP_MODE Default: TP_FIXED_RR 0 = Fixed RR 1 = Box multiplier 2 = ATR multiplier	Defines target calculation.	Fixed RR is easiest to compare during optimization.
FixedRR	double Default: 2.0	Target in R when Fixed RR mode is active.	2.0 is a robust starting point.
BoxTPMultiplier	double Default: 2.0	Target distance as a multiple of box range.	Useful when box size should drive the target.
ATRTPMultiplier	double Default: 2.5	Target distance as ATR multiple.	Useful when volatility should drive the target.
MinRR	double Default: 1.60	Minimum allowed reward-to-risk ratio.	Lower gives more trades; higher improves selectivity.
MaxRR	double Default: 4.00	Maximum allowed RR. Larger targets are capped.	Prevents unrealistic targets from distorting tests.

09 - Fixed Risk Management

Parameter	Default / options	What it does	Practical use
RiskPercent	double Default: 0.50	Account equity percentage risked per trade.	Start conservatively. 0.25 to 0.75 percent is common for testing.
MaxRiskPercent	double Default: 2.00	Hard cap for risk percentage.	Safety cap against accidental high input values.

10 - Drawdown Brake

Parameter	Default / options	What it does	Practical use
UseDrawdownBrake	bool Default: true	Blocks new trades when equity drawdown reaches the limit.	Keep enabled during tests and live operation.
MaxAllowedDD	double Default: 12.0	Maximum allowed drawdown from the EA's equity peak in percent.	If reached, the EA pauses new entries.



11 - Trade Management

Parameter	Default / options	What it does	Practical use
UseBreakEven	bool Default: false	Moves stop-loss toward entry after sufficient profit.	Useful for protection, but early break-even can reduce winners.
BreakEvenAtR	double Default: 1.0	R multiple at which break-even is allowed.	1.0 is a standard starting point.
BreakEvenOffsetPoints	double Default: 2	Small offset beyond entry when moving to break-even.	Covers costs or avoids exact-entry stop placement.
UseTrailingStop	bool Default: false	Activates simple ATR trailing stop.	Use with higher targets or trend-extension tests.
TrailStartR	double Default: 1.5	R multiple after which trailing begins.	Too early can limit winners; too late protects little.
TrailATRMultiplier	double Default: 1.0	ATR distance used for the trailing stop.	Higher gives more room. Lower trails more aggressively.
TrailMinMovePoints	double Default: 5	Minimum SL change required before modifying a position.	Prevents excessive modification requests.

12 - Logging / Dashboard

Parameter	Default / options	What it does	Practical use
ShowDashboard	bool Default: true	Shows the on-chart status dashboard.	Keep enabled during setup and visual testing.
EnableCSVLogging	bool Default: true	Writes closed-trade data to CSV.	Useful for deeper analysis outside MT5.
CSVFileName	string Default: Pricework-PressureBox_Trades.csv	CSV filename in the common files directory.	Keep unique when testing multiple EA versions.
PrintDebugLogs	bool Default: false	Prints additional technical logs.	Enable only when diagnosing behavior.

13 - Chart Visual Feedback

Parameter	Default / options	What it does	Practical use
ApplyChartTheme	bool Default: true	Applies the EA's chart color scheme.	Creates a consistent Pricework visual layout.
DrawVisualObjects	bool Default: true	Draws boxes, breakout markers and trade plan lines.	Keep enabled for visual control.
DrawRejectedBoxCandidates	bool Default: true	Shows rejected box candidates.	Useful for optimization because you can see what the EA is filtering.
EnableJournalDiagnostics	bool Default: true	Writes box, breakout and plan diagnostics to the Journal.	Helpful when tuning parameters.
JournalDiagnosticsEveryBars	int Default: 1	Controls how often diagnostics are printed.	Increase to reduce journal noise during long backtests.
DashboardWidth / Height	int Default: 390 / 260	Dashboard size in pixels.	Adjust if text overlaps on your screen or VPS.
DashboardX / Y	int Default: 14 / 18	Dashboard offset from the top-left corner.	Move the dashboard if it covers price action.
Theme and visual colors	color inputs	Colors for background, candles, dashboard and objects.	Leave defaults unless you use a different chart theme.



04 - Dashboard Status Guide

Status	Meaning	What to check
WAIT - NO PRESSURE	No valid compression box is available.	Check box range, compression score, cleanliness and close-cluster diagnostics.
BOX VALID - WAITING FOR BREAKOUT	A valid Pressure Box exists, but no breakout has been confirmed.	Wait for a closed breakout candle outside the box.
LONG / SHORT BREAKOUT CONFIRMED	The last closed candle confirmed direction.	The EA will now build and validate the trade plan.
BLOCKED - TRADE PLAN INVALID	Entry, SL, TP or geometry failed.	Check SL min/max, broker stop level, RR and entry mode.
BLOCKED - LOT SIZE OR MARGIN	Risk calculation or margin check prevented the trade.	Check risk percent, stop distance, volume step and free margin.
ORDER SENT	Market or pending order was accepted.	Entry, SL and TP lines should appear on the chart.
PAUSED - DRAWDOWN BRAKE	Equity drawdown reached MaxAllowedDD.	Trading is paused until the EA is restarted or equity peak logic changes.

05 - Troubleshooting

Issue	What to check
The EA does not place trades	Check Algo Trading, session filter, spread filter, daily trade limit, open exposure, drawdown brake and whether a confirmed breakout has occurred.
No boxes are drawn	Box conditions may be too strict. Check MaxBoxATRMultiplier, MaxBoxRangePercentOfAvgRange, MinBoxCompressionScore and close-cluster settings.
Boxes appear but no breakout trades	Check MinBreakoutCandleRangeATR, MinBreakoutBodyATR, close distance, close-position filters and volume filter.
Trade plan is invalid	Check SL_MinPoints, SL_MaxPoints, MinRR, MaxRR, broker stop level and entry mode geometry.
Orders are deleted before entry	Pending order expiration or session-end order cleanup may be active.
Backtest differs from live trading	Compare tick quality, spread, slippage, commission, swap, broker stop level and symbol point size.
Too few trades	Loosen one block at a time: box width, close cluster, breakout body, session length or MinRR.
Too many weak trades	Tighten breakout body/range, increase MinRR, reduce session hours or require stronger box cleanliness.

06 - Optimization Sequence

Optimize from broad structural choices toward small execution details. Avoid optimizing all inputs at once.

Step	Optimize	Goal	Typical action
1	Symbol and timeframe	Find where the concept naturally produces clean boxes.	Test M5/M15 for indices, M15/M30 for FX, M5-M30 for Gold.
2	Session window	Trade only liquid expansion periods.	Start with London/New York or the main exchange session.
3	Box strictness	Control setup frequency.	Tune MaxBoxATRMultiplier, AvgRange percent and MinBoxCompressionScore.
4	Breakout strictness	Filter weak expansions.	Tune candle range, body, close distance and close-position filters.
5	Entry mode	Balance fill quality and participation.	Compare breakout close, stop order and retest limit separately.
6	Stop and target	Stabilize RR and avoid broker constraints.	Tune SL buffer, SL min/max, target mode and FixedRR.
7	Risk and management	Control drawdown and trade behavior.	Tune RiskPercent, MaxTradesPerDay, break-even and trailing only after signal logic is stable.



Practical optimization ranges

Block	Conservative	Balanced	Aggressive
Box compression	Lower MaxBoxATRMultiplier, higher compression score	Default values	Higher range limits, lower compression score
Breakout	Higher body/range ATR requirements	Default values	Lower body/range requirements
Entry	Retest limit	Retest or stop order	Breakout close or stop order
Target	FixedRR 1.6-2.0	FixedRR around 2.0	FixedRR 2.2-3.0 or ATR target
Risk	0.25-0.50%	0.50-0.75%	Only after robust testing

07 - Risk Notice

Pricework-Pressure Box is a systematic trading tool and does not guarantee profits. Every parameter set must be tested for the specific symbol, broker, account type, spread model, commission model and trading objective. Use conservative risk in live operation and validate results with realistic tick data where possible.

Trading involves substantial risk. Past performance, optimized backtests and visual tester results are not indicative of future results.