

MASTER METHODOLOGY ENCYCLOPEDIA

Crossovers Scanner

Volume 5 · Adaptive / ML-aware / Regime / Master · CR-161 to CR-200

The capstone Crossovers volume. Forty methodologies covering adaptive methods, ML-aware crossovers, regime-conditional crossovers, and master/capstone crossovers including the Crossover Encyclopedia Master Capstone (CR-200) — a weighted score across all 200 Crossover methodologies in the encyclopedia.

ENROLLED-STUDENT EDITION

ABOUT THIS VOLUME

Crossovers Scanner Volume 5

This is Volume 5 of the Crossovers Scanner category in the Master Methodology Encyclopedia. Forty methodologies, codes CR-161 to CR-200. Every methodology in the standard eight-section encyclopedia template.

SCOPE

- **Section A — Adaptive Methods (CR-161 to CR-170)** — Self-adjusting indicators for changing regimes.
- **Section B — ML-aware Methods (CR-171 to CR-180)** — Logistic regression, random forest, GBM, HMM, change-point.
- **Section C — Regime-Conditional Crossovers (CR-181 to CR-190)** — Signals gated by trend/vol/time/event regime.
- **Section D — Master / Capstone Crossovers (CR-191 to CR-200)** — Composite scores; CR-200 is the encyclopedia capstone.

COMPLIANCE

Every methodology is presented as education, not advice. All examples are anonymised, use a 30-day minimum data lag, and avoid specific securities. No methodology is presented as a real-time signal, recommendation, or model portfolio.

HOW TO READ

Each methodology follows the uniform eight-section template (Markets → Diagram → Formula → Formula Note → Parameters → Interpretation → Signal → Example → Mistakes → Timeframes). Use the consistent structure to compare methodologies by jumping directly to the section you need.

CR-161 · Ehlers Adaptive Cycle Cross

Adaptive
Stage 3 - Cycle period adapts

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: Close > Adaptive Cycle MA

4 · FORMULA NOTE

John Ehlers' adaptive cycle method auto-detects dominant market cycle and adjusts MA period.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Ehlers Adaptive Cycle Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-162 · Volatility-Adaptive EMA Cross

Adaptive
Stage 3 - Vol-scaled

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: Close > Vol-adaptive EMA

4 · FORMULA NOTE

EMA period scaled inverse to recent volatility; tighter in calm markets, looser in volatile.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Volatility-Adaptive EMA Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-163 · Variable Period MA Cross

Adaptive
Stage 3 - Period scales with regime

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
Reference threshold ■■■■■■
Cross signals regime change

3 · FORMULA

Cross: Close > VarPeriod MA

4 · FORMULA NOTE

MA period adjusts based on regime classification (trending vs ranging).

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Variable Period MA Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-164 · Efficiency Ratio Cross

Adaptive
Stage 3 - Kaufman ER

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: $ER > 0.5$

4 · FORMULA NOTE

Kaufman's Efficiency Ratio crossing 0.5 marks shift from random to directional regime.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Efficiency Ratio Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-165 · Smoothed Heikin-Ashi Adaptive Cross

Adaptive
Stage 3 - HA composite

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: Smoothed HA changes colour with adaptive smoothing factor

4 · FORMULA NOTE

Smoothed Heikin-Ashi with adaptive smoothing reduces whipsaws further.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Smoothed Heikin-Ashi Adaptive Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.

- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-166 · DEMA / KAMA Adaptive Cross

Adaptive
Stage 3 - Two adaptives

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: DEMA > KAMA

4 · FORMULA NOTE

Two adaptive MAs crossing each other; benefits stack across both adaptations.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; DEMA / KAMA Adaptive Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-167 · Adaptive Bollinger Cross

Adaptive
Stage 3 - Adaptive bands

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: Close > Adaptive Bollinger Upper

4 · FORMULA NOTE

Bollinger Bands with adaptive period scaled to current volatility.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Adaptive Bollinger Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-168 · Adaptive RSI Threshold Cross

Adaptive
Stage 3 - Dynamic OB/OS

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: $RSI > \text{adaptive threshold (volatility-scaled)}$

4 · FORMULA NOTE

RSI thresholds (default 70/30) adapted to current volatility regime.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Adaptive RSI Threshold Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-169 · Cycle-Period Detection Cross

Adaptive
Stage 3 - Period detection

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
Reference threshold ■■■■■■
Cross signals regime change

3 · FORMULA

Cross: Detected period change > 20% from prior

4 · FORMULA NOTE

Detected market cycle period changing materially marks regime shift.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Cycle-Period Detection Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-170 · Universal Adaptive Cross (composite)

Adaptive
Stage 3 - Adaptive quorum

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
Reference threshold ■■■■■■
Cross signals regime change

3 · FORMULA

Cross: Quorum (≥ 3 of 5 adaptive methods agree)

4 · FORMULA NOTE

Composite adaptive cross: quorum across multiple adaptive methods reduces single-method failure risk.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Universal Adaptive Cross (composite) fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.

- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-171 · Logistic Regression Up-Probability Cross

ML-aware
Stage 4 - LR probability

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
Reference threshold ■■■■■■
Cross signals regime change

3 · FORMULA

Cross: $P(\text{up} \mid \text{features}) > 0.55$

4 · FORMULA NOTE

Logistic regression on hand-engineered features producing up/down probability; cross threshold marks high-conviction direction.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Logistic Regression Up-Probability Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.

- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-172 · Random Forest Probability Cross

ML-aware
Stage 4 - Tree ensemble

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■■
Reference threshold ■■■■■■■
Cross signals regime change

3 · FORMULA

Cross: RF prob > 0.6

4 · FORMULA NOTE

Random forest classifier output crossing high-conviction threshold; less interpretable than LR but handles non-linearities.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Random Forest Probability Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.

- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-173 · Gradient Boost Probability Cross

ML-aware
Stage 4 - GBM

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■■
Reference threshold ■■■■■■■
Cross signals regime change

3 · FORMULA

Cross: GBM prob > 0.6

4 · FORMULA NOTE

Gradient-boosted classifier; powerful when properly cross-validated and out-of-sample tested.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Gradient Boost Probability Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-174 · Hidden Markov Regime Cross

ML-aware
Stage 4 - HMM

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal
 Reference threshold
 Cross signals regime change

3 · FORMULA

Cross: HMM regime probability favours bullish state > 0.7

4 · FORMULA NOTE

HMM identifies discrete market regimes; cross of regime probability marks regime switch.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Hidden Markov Regime Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-175 · Change-Point Detection Cross

ML-aware
Stage 4 - CPD

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
Reference threshold ■■■■■■
Cross signals regime change

3 · FORMULA

Cross: Change-point detected with $p\text{-value} < 0.05$

4 · FORMULA NOTE

Statistical change-point detection (Bayesian or CUSUM) flagging regime change.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Change-Point Detection Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-176 · Volatility Cluster Cross

ML-aware
Stage 4 - GARCH

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
Reference threshold ■■■■■■
Cross signals regime change

3 · FORMULA

Cross: GARCH conditional vol > 1.5*recent average

4 · FORMULA NOTE

GARCH-modeled volatility clustering crossing high-vol threshold; precedes regime shifts.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Volatility Cluster Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-177 · Cointegration Spread Cross

ML-aware
Stage 4 - Pair trading

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
Reference threshold ■■■■■■
Cross signals regime change

3 · FORMULA

Cross: Spread (Stock A - hedge ratio * Stock B) crosses ± 2 standard deviations

4 · FORMULA NOTE

Cointegration-based pair trading; spread mean-reversion entries.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Cointegration Spread Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-178 · Kalman Filter State Cross

ML-aware
Stage 4 - Kalman

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal
 Reference threshold
 Cross signals regime change

3 · FORMULA

Cross: Kalman-filtered trend slope flips direction

4 · FORMULA NOTE

Kalman filter output for noise-reduced trend estimation; slope flip marks pivot.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Kalman Filter State Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-179 · K-Nearest-Neighbours Cross

ML-aware
Stage 4 - kNN

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■■
Reference threshold ■■■■■■■
Cross signals regime change

3 · FORMULA

Cross: kNN majority vote on N similar historical patterns

4 · FORMULA NOTE

K-Nearest-Neighbours classification on historical similar patterns; intuitive but data-hungry.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; K-Nearest-Neighbours Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-180 · Composite ML Quorum Cross

ML-aware
Stage 4 - Multi-model

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■■
Reference threshold ■■■■■■■
Cross signals regime change

3 · FORMULA

Cross: Quorum (≥ 3 of 5 ML models agree on direction)

4 · FORMULA NOTE

Multi-model quorum reduces single-model overfitting risk; institutional standard for production ML.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Composite ML Quorum Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-181 · Trending-Regime EMA Cross

Regime
Stage 3 - Conditional

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: $EMA_{fast} > EMA_{slow}$ ONLY IF $Hurst > 0.5$

4 · FORMULA NOTE

EMA cross active only when Hurst exponent confirms trending regime; inactive in ranging.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Trending-Regime EMA Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-182 · Ranging-Regime Stochastic Cross

Regime
Stage 3 - Conditional

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: Stoch %K > %D ONLY IF Hurst < 0.5

4 · FORMULA NOTE

Stochastic cross active only when regime is ranging; inactive in trending markets.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Ranging-Regime Stochastic Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-183 · Volatility-Regime SuperTrend Cross

Regime
Stage 3 - Vol-conditional

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: SuperTrend flip ONLY IF VIX < SMA(VIX, 50)

4 · FORMULA NOTE

SuperTrend signals filtered by low-volatility regime; reduces high-volatility whipsaw.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Volatility-Regime SuperTrend Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.

- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-184 · Time-of-Day Regime Cross

Regime
Stage 3 - Intraday

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: SuperTrend flip ONLY IF time in 09:45-14:30 IST window

4 · FORMULA NOTE

Intraday signals filtered to mid-day window; excludes opening and closing volatility extremes.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Time-of-Day Regime Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-185 · Day-of-Week Regime Cross

Regime
Stage 3 - DoW

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
Reference threshold ■■■■■■
Cross signals regime change

3 · FORMULA

Cross: Signal active ONLY on Tuesday-Thursday

4 · FORMULA NOTE

Some Indian markets show different behaviour on Mondays (post-weekend gap effects) and Fridays (expiry).

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Day-of-Week Regime Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-186 · Earnings-Calendar Regime Cross

Regime
Stage 3 - Event-aware

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: Signal active ONLY if no earnings within 7 days

4 · FORMULA NOTE

Suppress technical signals around scheduled earnings; reduces event-driven noise.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Earnings-Calendar Regime Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-187 · Macro-Calendar Regime Cross

Regime
Stage 3 - Macro-aware

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: Signal active ONLY outside RBI policy / Budget windows

4 · FORMULA NOTE

Suppress technical signals during major macro events.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Macro-Calendar Regime Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-188 · Sector-Regime Conditional Cross

Regime
Stage 3 - Sector-conditional

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: EMA cross active ONLY IF sector index aligned

4 · FORMULA NOTE

Stock signals filtered by sector alignment; reduces individual-stock idiosyncratic risk.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Sector-Regime Conditional Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-189 · Breadth-Regime Conditional Cross

Regime
Stage 3 - Breadth-conditional

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
Reference threshold ■■■■■■
Cross signals regime change

3 · FORMULA

Cross: Active ONLY IF AD line > AD MA

4 · FORMULA NOTE

Signals only active when broad-market breadth supports the direction.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Breadth-Regime Conditional Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-190 · Composite Regime Filter Cross

Regime
Stage 3 - Multi-regime

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: Active ONLY IF (trending) AND (low vol) AND (positive breadth)

4 · FORMULA NOTE

Multi-regime AND-gate; rare but high-conviction when conditions align.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Composite Regime Filter Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-191 · Crossover Master Score (10-input)

Master
Stage 3 - Master composite

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■■
Reference threshold ■■■■■■■
Cross signals regime change

3 · FORMULA

Cross: Master Score (sum of 10 normalised crossover scores) > 6

4 · FORMULA NOTE

Master Score: sums standardised outputs from 10 crossover families. Score > 6 is institutional-grade conviction.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Crossover Master Score (10-input) fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.

- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-192 · Stage Detection Master Cross

Master
Stage 3 - Weinstein stage

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: Stage transitions from 1 to 2 (basing to advancing)

4 · FORMULA NOTE

Stan Weinstein's stage analysis as a master crossover signal.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Stage Detection Master Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-193 · Trend-Strength Master Cross

Master
Stage 3 - Strength composite

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: $ADX > 25$ AND $Aroon\ Up > 80$ AND $HMA\ slope\ positive$

4 · FORMULA NOTE

Trend-strength composite: three independent strength indicators all aligned.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Trend-Strength Master Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-194 · Momentum Master Cross

Master
Stage 3 - Momentum composite

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
Reference threshold ■■■■■■
Cross signals regime change

3 · FORMULA

Cross: $RSI > 50$ AND $MACD > Signal$ AND $Stoch > 50$

4 · FORMULA NOTE

Three-momentum-indicator agreement; classic composite for momentum traders.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Momentum Master Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-196 · Risk-On Master Cross

Master
Stage 3 - Risk-on composite

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: VIX falling + High Beta / Low Beta rising + Cyclical leading

4 · FORMULA NOTE

Risk-on regime composite for tactical asset allocation.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Risk-On Master Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-197 · Pre-Trend Master Cross

Master
Stage 3 - Pre-trend

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: Squeeze release + Vol expansion + Breadth turning

4 · FORMULA NOTE

Pre-trend composite: catches regime transition before full trend establishes.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Pre-Trend Master Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-199 · Regime-Transition Master Cross

Master
Stage 3 - Transition

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ■■■■■■
 Reference threshold ■■■■■■
 Cross signals regime change

3 · FORMULA

Cross: HMM regime probability switches AND volatility expanding

4 · FORMULA NOTE

Regime transition master cross combining HMM and vol expansion.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Regime-Transition Master Cross fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.
- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.

CR-200 · Crossover Encyclopedia Master Capstone

Master
Stage 3 - Final composite

1 · MARKETS

All liquid markets; some methods require sufficient history (3+ years).

2 · DIAGRAM

Adaptive / ML signal ████████
 Reference threshold ████████
 Cross signals regime change

3 · FORMULA

Cross: Master Capstone Score (weighted sum of all 200 methodologies) > 80

4 · FORMULA NOTE

The final master capstone: weighted score combining all 200 Crossover methodologies. >80 = institutional-grade signal; >90 = severe extreme.

5 · PARAMETERS

| Parameter | Default | Range | Notes |
|--------------|---------|-----------|--------------------------------------|
| Period | varies | varies | Method-specific |
| Source | Close | Close/HL2 | Price source |
| Lookback | 250 | 125-500 | Training window for adaptive methods |
| Confirmation | 1 bar | 1-3 | Persistence |

6 · INTERPRETATION

- Adaptive methods self-adjust to changing market regimes.
- ML-aware methods require sufficient history to be reliable.
- Regime-conditional signals only fire when regime conditions match.
- Master/composite signals combine multiple inputs for highest conviction.

7 · SIGNAL CRITERIA & ENTRY RULES

- Method-specific cross with confirmation.
- Volume support where applicable.
- Higher-timeframe regime aligned.
- Stop: structural; target: 1.5R+

8 · EXAMPLE

Hypothetical liquid market; Crossover Encyclopedia Master Capstone fired during a regime transition with confluence factors aligned. (Anonymised, 30-day data lag.)

COMMON MISTAKES

- Treating the cross as a stand-alone entry signal with no regard for trend context.
- Using too-tight stops at the cross point — typical noise will trigger them.
- Position sizing identically across regimes — high-volatility crosses need smaller size.
- Ignoring volume confirmation on the cross bar.
- Backtesting only winners and dismissing losers as 'unusual'.

- Trusting ML signals without out-of-sample validation.
- Treating adaptive parameters as fire-and-forget without periodic recalibration.

RECOMMENDED TIMEFRAMES

Daily and weekly primary.