Strategy Settings Optimization — Executive Summary

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This memo outlines key adjustments to enhance the "Full Confirmation TK+Span Exit" strategy's risk-adjusted performance. The recommendations address the critical issues of excessive drawdown and marginal profitability observed in the backtest results.

*   **Refine Entry Signal for Better Timing**
    The current five-condition entry signal is overly conservative, causing late entries at points of high exhaustion and increasing vulnerability to whipsaws. We recommend relaxing the entry criteria by **removing the `ChikouAboveCloud` condition**. This change aims to facilitate earlier entries into developing trends, providing a larger price buffer and improving the potential reward-to-risk ratio of each trade.

*   **Implement a Dynamic Risk Management Framework**
    The strategy's severe 63% maximum drawdown is a direct consequence of its static risk controls.
    *   **Stop-Loss:** The fixed 5% stop-loss is frequently triggered by normal market volatility. We advise replacing it with a wider, more structurally sound stop, such as one placed below the Kijun-sen or based on an ATR multiple. A preliminary test range of **8-12%** is suggested.
    *   **Position Sizing:** Fixed position sizing amplifies drawdown during volatile periods. We strongly recommend transitioning to a **volatility-based sizing model**. This will normalize risk per trade, ensuring consistent capital exposure and mitigating the impact of large adverse price swings.

*   **Calibrate Ichimoku Parameters for the Crypto Market**
    The strategy employs standard Ichimoku parameters (9, 26, 52) that are not optimized for the 24/7 crypto market. We recommend **systematically testing alternative parameter sets** to better align the indicator with Bitcoin's unique cyclicality. A suggested starting point is to explore faster Tenkan periods (e.g., 7-12) for improved responsiveness and slower Kijun and Senkou B periods (e.g., 30-36 and 60-72) for more robust trend definition.

These targeted adjustments are designed to create a more resilient and profitable strategy by improving signal timing, adapting risk to market conditions, and tuning the core indicator to the specific asset class.

Recommended setting changes:
- tenkan_period: current=9, suggested=[7, 12]. The standard period may be too slow for 24/7 crypto markets. A faster Tenkan-sen can provide earlier entry and exit signals, potentially improving responsiveness.
- kijun_period: current=26, suggested=[28, 36]. A slightly longer Kijun-sen period can create a more stable baseline for trend assessment and stop-loss placement, reducing noise from short-term volatility.
- senkou_b_period: current=52, suggested=[60, 72]. Extending the Senkou Span B calculation period may better capture the longer-term trend memory inherent in crypto market cycles, leading to more robust cloud signals.
- chikou_offset: current=26, suggested=26. Maintain synchronization with the Kijun-sen period as a baseline; primary optimization focus should be on the calculation periods first.
- senkou_offset: current=26, suggested=26. The standard forward projection period is sufficient; modifying core calculation periods offers higher impact for initial optimization.
- Signal logic:
  • buy_logic: AND -> AND (The AND logic for confirmation is core to the strategy's design; the focus should be on refining the conditions themselves rather than the logic.)
  • sell_logic: AND -> AND (Maintaining the AND logic ensures a confirmed exit signal, which is appropriate for this strategy type.)
  • remove_conditions: ['ChikouAboveCloud']
- Risk management:
  • stop_loss_pct: 5.0 -> [8.0, 12.0] (The 63% drawdown and frequent stop-outs on losers indicate the 5% SL is too tight for BTC's volatility. A wider stop is necessary to prevent premature exits on minor pullbacks.)
  • take_profit_pct: None -> None (Retain trend-following nature by not using a fixed take-profit. However, implementing a trailing stop based on the Kijun-sen is highly recommended to protect profits and reduce drawdowns.)
  • position_sizing: fixed -> volatility (Fixed sizing directly contributes to the severe max drawdown. Volatility-based sizing (e.g., ATR-adjusted) normalizes risk per trade, leading to a smoother equity curve.)

Experiments to run:
- Ichimoku Parameter Sweep: Systematically sweep core Ichimoku periods to find a configuration better optimized for BTC's 24/7 market structure.
- Signal & Risk Framework A/B Test: Evaluate the impact of a less restrictive entry signal combined with a more robust, volatility-adjusted risk management framework.