# Luxstella LLC (Infinitia Link Limited) developed Strategy "Automated Program Trading" System (PAMM & EA System)

# Luxstella LLC (Infinitia Link Limited) Developed Strategy (PAMM & EA System) Product Concept "Automated Program Trading System (CFD Trading)"

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# Strategy Name: Luxstella Bright Star Strategy <> PAMM & EA System >> (Infinitia Link Limited)

■ A management method that combines "Fintech (fusion of IT and finance)" with "traditional finance" and "behavioral finance" to create a "hedge fund" (PAMM & EA system)

# **《5 Key Features》**

1 . A fund aiming for absolute returns

2. PAMM (Percent Allocation Management Module) System equipped with "Automated Program Trading" System (EA: Expert Adviser).

3. Developing trading logic based on the "anomalies" occurring from market participants like individual investors, institutional investors, corporate finance, options, futures, and foreign exchange and associated behavioral concepts.

4. Effectively utilizing the "PAMM & EA System" (Managed Account) concept from "Fintech (fusion of IT and finance)", transforming it into a hedge fund at a low cost.

5. Equipping AI (with learning capability) in the selection of the "optimal factor" that constructs "optimal allocation" by estimating the "parameter (expected return rate)" aiming for the maximization of each strategy's "Sharpe ratio" and implementing optimal MPT.

· CFD (Contract for Difference) trading refers to "difference settlement trading".

• EA stands for "Expert Adviser", which refers to the "Automated Program Trading" System. PAMM stands for "Percent Allocation Management Module", referring to the "Managed Account" System.

# Luxstella Bright Star Strategy «PAMM & EA System» (Infinitia Link Limited) Product Highlights

• Not only confirmed superiority over a backtest period of more than 10 years but also uses only logic that can be explained from macro and statistical data for future market advantages.

• Diversifying the return and risk of the operating EA to stabilize performance, equipping EAs with low correlation in entry and exit timings.

• Based on individual EAs, materializing unsystematic risk into actual returns, estimating the expected return rate [ER] based on factors estimated by AI, and implementing the optimal MPT (integration with "traditional asset management").

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# 1. Sirius (Profit-oriented)

- · Currency/Strategy: 5 currencies/3 Strategies (USD/JPY, GBP/JPY, EUR/JPY, GBP/USD, EUR/USD)
- Expected return rate: 40%-60%
- Expected maximum drawdown range: 5%-20%
- Overall period Sharpe ratio: 14.59

• Portfolio management of 5 EAs (backtesting & simulation) – 10-year backtest result: Average annual interest (simple interest) 41.9% (maximum drawdown: 5.6%).

\*Conducted under stricter conditions than actual market environments.

### 2. Vega (Stability-oriented)

Currency/Strategy: 3 currencies/3 Strategies (USD/JPY, GBP/JPY, EUR/JPY) Expected return rate: 25%-40% Expected maximum drawdown range: 3%-15% Overall period Sharpe ratio: 12.20 Portfolio management of 5 EAs (backtesting & simulation) – 10-year backtest result: Average annual interest (simple interest) 32.0% (maximum drawdown: 4.3%). \*Conducted under stricter conditions than actual market environments.

# 3. Betelgeuse (Balanced-type)

Currency/Strategy: 2 currencies/3 Strategies (USD/JPY, GBP/JPY) Expected return rate: 15%-30% Expected maximum drawdown range: 1%-10% Overall period Sharpe ratio: 5.98 Portfolio management of 5 EAs (backtesting & simulation) – 10-year backtest result: Average annual interest (simple interest) 23.2% (maximum drawdown: 4%). \*Conducted under stricter conditions than actual market environments.

# **«Issues and Challenges of Traditional Asset Management»**

1. The "traditional asset management" under the Modern Portfolio Theory (MPT) assumes market participants to be "risk-averse" investors, and the market to be efficient. (This assumes the inclusion of fundamental analysis, technical analysis, behavioral finance, framing, etc.)

2. From the investor's perspective, MPT doesn't distinguish between the needs of "institutional investors" and "individual investors."

3. Markets can become inefficient when there are transitions in economic activities or technological innovations. This lack of efficiency isn't only during transitions but can happen regularly in daily economic activities, a fact that isn't accounted for.

4. In "traditional asset management," the investment philosophy is more about achieving returns higher than the market average, in line with market efficiency, rather than focusing on "investment targets," "investment strategies," or "individual stock selection."

\*George Soros: "The more people believe in the efficiency of the market, the less efficient it becomes." \*Warren Buffett: "If markets were always efficient, I'd be sitting on a street corner with a tin cup."

### $\langle\!\langle What \, is \, a \, Hedge \, Fund? \rangle\!\rangle$

Hedge funds invest in any "investment target" and employ "investment methods and strategies" that are different from traditional asset managers due to regulatory constraints or other issues. In a fully competitive environment, hedge funds operate with the aim of absolute returns, based on the discretion of the managers and are a limited partnership. The primary revenue of hedge funds comes from a performance-based "success fee" (incentive fee) (carry) which is 20% of the performance using the High Water Mark (HWM).

# Luxstella LLC (Infinitia Link Limited) developed hedge fund (PAMM & EA System).

- 《Strategy Categories》
- · Global macro
- Market timing
- Algorithm trading

# 《Strategy Concept》

This strategy seeks to capture  $\delta$  (delta) &  $\alpha$  (alpha) profit opportunities by balancing the "strategy" and "leverage." It manages the risk-return by controlling the "absolute profit value" and "drawdown."

- 1. Anomaly strategy (based on the anomalies of various currencies)
- 2. Breakout scalping strategy
- 3. Breakout swing trade strategy
- $\boldsymbol{4}$  . Trend-following strategy

#### 《Strategy Essence》

#### Alternative Investments:

Investing in assets with risk-return characteristics different from traditional assets like bonds and stocks. It aims for absolute returns that are unaffected by any market conditions. Also translated as "alternative investments."

#### **Derivatives Trading:**

Financial products whose value is determined relative to the value (market value or index) of an underlying asset. Examples include futures trading in securities, securities indices, currency (forex) futures trading, options trading, and swap trading, etc.

#### Global Macro:

A strategy that predicts the economic and financial market environment reflected in stock prices, currencies, or bonds (interest rates), and takes long or short positions in specific markets. Often uses futures and tends to be highly leveraged.

#### Market Timing:

An investment method that captures the price discrepancy between market prices and the inherent value of underlying assets, turning the gap into profit. It captures profit opportunities through anomalies, breakouts, trend-following, etc.

#### Algorithm Trading:

A method that focuses on market trends and events, captures profit opportunities based on price distortions and biases, primarily in short-term trading. It utilizes various investment methods such as scalping, swing, and day trading. In the market, it is referred to as "model-based".

#### Managed Futures:

Investors deposit funds into multiple funds managed by CTA (Commodity Trading Adviser) and CPO (Commodity Pool Operator). The strategy aims to generate profits through futures trading.

#### Behavioral Finance:

Through empirical analysis of behavioral finance, the distortion of market prices is examined. It identifies "anomalies" known as "phenomena", capturing the "customary price fluctuations" that cannot be eliminated. It operates on the assumption that markets are not efficient, implying that strategies like "fundamental analysis", "anomaly analysis", and "technical analysis" vary depending on the market environment, leading to a combination or restructuring of multiple strategies.

#### Note on Behavioral Finance:

Behavioral finance stands as an alternative and complementary theory to "traditional finance" that advocates the "efficient market hypothesis". Phenomena that cannot be explained within the framework of "traditional finance" are identified as "anomalies" that cause price distortions based on empirical results that contradict the "efficient market

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hypothesis". While "traditional finance" assumes investors are rational, "behavioral finance" assumes an ordinary investor who might make mistakes. In an "efficient market", if investors are rational, "price formation" becomes rational. However, actual market participants like "individual investors", "institutional investors", and "arbitrage traders" exhibit psychological biases, making "price formation" inefficient.

#### Fundamental Analysis:

Fundamentals refer to the "basic conditions of the economy". "Fundamental analysis" uses economic data from a country to predict the market. In a broader sense, statements from influential figures that might affect the economy are also utilized as fundamentals. Collecting daily economic indicators and such statements is crucial in conducting fundamental analysis.

#### Technical Analysis (Chart Analysis):

Technical analysis fundamentally focuses on price and movement cycles by looking at charts. In addition to charts that represent past price movements, it combines with technical indicators for analysis. Examples of technical indicators include moving averages, Bollinger Bands, RSI, and MACD.

#### **Overlay Management Application:**

The fluctuation of exchange rates is more susceptible to supply and demand or political factors compared to bonds and stocks, since economic fundamentals influence it. Exchange rates are "foreign" entities, and investors often express that they "don't quite understand exchange rates". Consequently, fund managers who specialize in foreign stock, foreign bond, or currency-based fund management aren't necessarily skilled in currency management. Hence, the currency division of foreign currency assets is separated from the original assets to implement specialized currency management.