HowToTrade

8-13-21 TRADING STRATEGY [PDF]
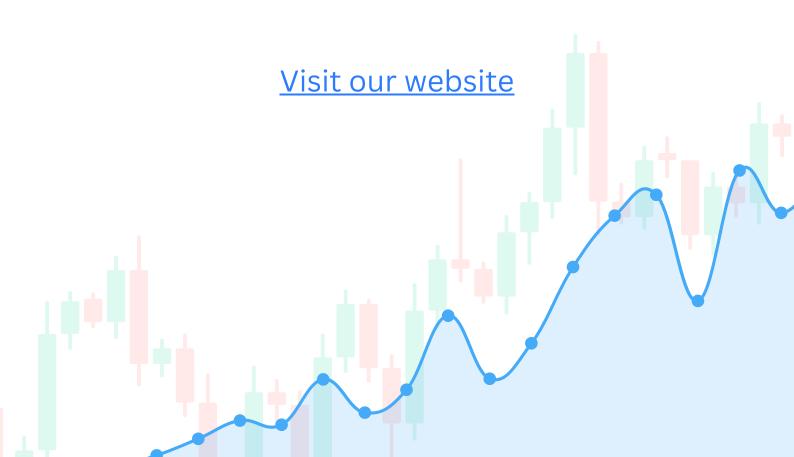
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What is the 8, 13, 21 EMA Strategy?

The 8, 13, 21 Exponential Moving Average (EMA) strategy employs three EMAs: the 8-day EMA, 13-day EMA, and 21-day EMA, each offering insights into market trends and potential trade entry and exit points. Unlike the 9 EMA strategy or the 20 EMA strategy, the choice of these specific numbers (8, 13, and 21) is not arbitrary; they are Fibonacci numbers, which are often used in trading strategies due to their natural occurrence in various natural phenomena and their relevance in financial markets.

The EMAs are calculated by averaging the closing prices over their respective time frames (8, 13, and 21 days). Unlike simple moving averages, EMAs give more weight to recent price data, making them more responsive to current market conditions, especially in volatile markets. This typically makes EMAs much more useful in short-term trading techniques such as scalping and day trading.

In practice, this triple exponential moving average strategy generates buy and sell signals based on the positioning and crossing of these EMAs. These EMA crossovers assist traders in identifying trends and price reversals and, thus, making informed trading decisions.

For instance, a common signal for a bullish trend is when the 8 EMA crosses above both the 13 and 21 EMAs, while a bearish trend signal is indicated when the 8 EMA crosses below the 13 and 21 EMAs. The 13 EMA acts as a middle ground, often serving as a trailing stop loss to protect profits and limit losses. It's important to note that while the EMA strategy is effective, it requires constant monitoring due to the nature of intraday trading.
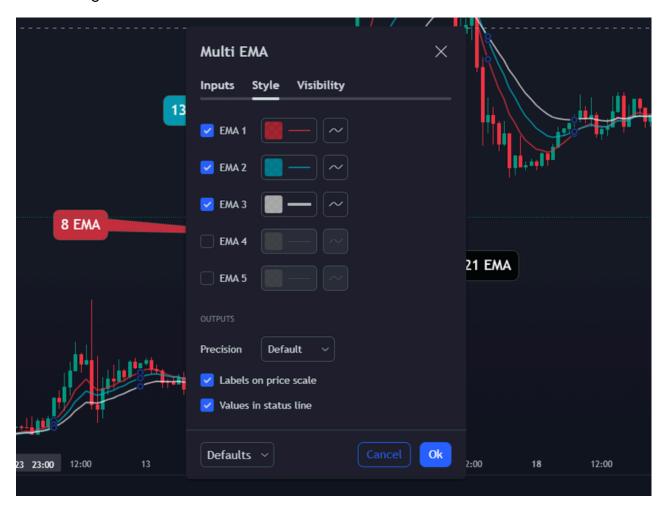
The 8, 13, 21 EMA Strategy – Trading Setup

To effectively set up and use the 8, 13, and 21 Exponential Moving Average (EMA) strategy in intraday trading, it's crucial to understand both the technical aspects and the strategic application of these EMAs on your trading charts. Here's a step-by-step guide on how to go about it:

Setting Up the EMAs on Trading Charts

- Choose a suitable trading platform that allows the use of EMAs. Most modern trading platforms like TradingView or MetaTrader offer this functionality.

- Apply the 8, 13, and 21-period EMAs to your trading chart. This is typically done by selecting the EMA option from the indicator list and setting the specific periods (8, 13, 21) for each EMA. Alternatively, you can use the "Multi EMA" indicator and configure its parameter to fit what you're looking for, as shown in the image above.

- It's beneficial to use different colors for each EMA for easy identification and tracking.

is strategy is flexible and can be applied across various timeframes. However, for intraday trading, shorter timeframes (like 1-hour or 4-hour charts) are usually more effective. For that matter, the 8, 13, and 21, strategy can be highly effective when used with [multiple timeframe analysis](#).

- Ensure that the timeframes chosen align with your trading style and the market's volatility.

How to Trade Using the 8, 13, 21 EMA Strategy?

We have earlier glossed over how to trade these EMAs. Now, in this section, we will go over the whole process of placing a trade with the 8, 13, and 21 strategy on a live chart, starting with the trade setup.

Trade Setup

The success of your trading starts with your setup. You want to ensure you have the right indicators on your screen before hitting the trade execution button. So, for this example, we are simply going to manually overlay the 8 EMA, 13 EMA, and 21 EMA on the chart individually, as we showed in the previous section.

As said earlier, we assign different colors to each EMA to avoid confusion. With this out of our way, it's time to find a trade entry.

Trade Entry

New traders generally subscribe to the fallacy of complexity, thinking "the more complex the strategy is, the better its result." In this case, nothing can be further from the truth. Having a simple rule-based entry can save you a lot of "analysis paralysis" when you hit the chart.

So, here's how we go about our entries with this strategy:

- A bullish signal is indicated when the 8 EMA crosses above the 13 and 21 EMAs.

- Conversely, a bearish signal is suggested when the 8 EMA crosses below the 13 and 21 EMAs.

- And if you're an advanced trader, you can incorporate [other technical indicators](#) like the MACD or Parabolic SAR for additional confirmation of the signals. However, it's optional, and we won't be using it in this example.

As you can see, the above chart shows our entry. You can see that we have a SELL entry after the 8 EMA has crossed below the other two EMAs. That's all we need to enter a position when using the 8, 13, and 21 trading strategy.

Stop Loss and Target Profit

The approach to risk management when working with moving averages is very important, especially because they are lagging indicators. Therefore, to set our stop loss points when using this strategy, we can either:

- Place a static stop loss order below the swing low when in a LONG or above the swing high when in a SHORT position.

- Also, you can use the 13 EMA to trail our stop loss if you're interested in riding the trend for a long time.

Similarly, you can take two approaches to setting your target profit. The first and easiest method is to set a definite target profit, say 1.5R, 2R, or 3R. On the other hand, you can hold the trade until the 8 EMA crosses the 13 and 21 EMAs in the opposite direction to the trade.

Why Should You Use the 8, 13, and 21 EMA in Intraday Trading?

At this point, you should have a very good grasp of the 8,13, 21 EMA strategy. Yet, you might wonder if it's the right trading strategy for you.

So, primarily, the 8, 13, and 21 are considered highly effective as a scalping or intraday trading strategy. As a result of its combo of short-term exponential moving averages, this indicator gives more weight to recent prices, which can be very useful in finding short-term trades. Moreover, the integration of the three EMAs is relatively straightforward and does not disrupt your chart analysis.

All in all, there's no reason not to add the 8, 13, and 21 trading techniques to your trading tools, especially if you consider yourself a short-term trader. It's an excellent and simple trading strategy that can help you find lots of trading opportunities.

Still, as always, we suggest [backtesting this strategy](#) before you apply it in live markets; it also builds your confidence when you're trading. Additionally, a study shows how you can greatly improve a skill by watching how professionals perform the said skill. In this case, having a mentor to follow can shorten your learning curve significantly.

Frequently Asked Questions

Here are some frequently asked questions about the 8, 13, 21 EMA strategy:

What is the 8, 13, 21 EMA strategy in intraday trading?

The 8, 13, 21 EMA strategy involves using three exponential moving averages (EMAs) set at periods of 8, 13, and 21. This strategy helps traders identify trends and potential entry and exit points in intraday trading based on the crossover and positioning of these EMAs.

What timeframes are best for the 8, 13, 21 EMA strategy?

While this strategy can be applied across various timeframes, for intraday trading, shorter timeframes such as 1-hour or 4-hour charts are usually more effective. It's important to select a timeframe that aligns with your trading style and the market's volatility.

What are the buy and sell signals in the 8, 13, 21 EMA strategy?

A typical buy signal is generated when the 8 EMA crosses above both the 13 and 21 EMAs, suggesting a bullish trend. Conversely, a sell signal is indicated when the 8 EMA crosses below the 13 and 21 EMAs, suggesting a bearish trend. These trading signals should ideally be confirmed with additional indicators.

- **Risk Management:** Developing effective risk management protocols is crucial. HFT involves rapid trading and exposure to market volatility. Robust risk controls are essential to protect your capital.

2. Learn Programming Languages

A solid foundation in programming is essential for anyone aiming to engage in high-frequency trading. You need to understand and work with programming languages that are commonly used in algorithmic trading, such as:

- **Python:** Python is a versatile and widely used programming language in the finance industry. It's known for its simplicity and extensive libraries, making it an excellent choice for developing trading algorithms.

- **C++:** C++ is known for its speed and efficiency, making it a favored language for high-frequency trading systems. Mastery of C++ allows you to optimize algorithms for rapid execution.

- **Java:** Java is another popular choice, offering portability and a robust ecosystem for developing trading applications.

- **MATLAB:** MATLAB is often used to research and prototype trading strategies. It provides a wide range of financial modeling and analysis tools.

- **R:** R is valuable for statistical analysis and modeling in algorithmic trading. It's particularly useful for developing statistical arbitrage strategies.

Once you learn the programming language of your trading platform, you can automate your trading based on your trading strategy. Remember, you can automate your trading manually or use a built-in automated plugin on your trading platform. Either way, knowing programming languages is a key step in mastering HFT.

Note that you can also automate your trading using AI bots, such as ChatGPT. For more information, you can read our guide about ChatGPT trading strategies.

3. Purchase Expert Advisors

For those looking to start indirectly with HFT without establishing a hedge fund or learning programming languages, you can consider purchasing Expert Advisors. EAs are pre-built trading algorithms designed for specific trading platforms, like MetaTrader 4 and 5. They provide a shortcut to implementing HFT strategies and can be a cost-effective way to begin. However, these EAs can cost a fortune to acquire. Also, you need to learn how to download and install customer indicators to MT4 and MT5.

High-Frequency Trading – Pros and Cons

High-frequency trading is a trading strategy that has polarized the financial world. But while its profitability is unquestionable for large financial institutions, it has some advantages and disadvantages for the average Joe trader. Let's dive into the pros and cons of this controversial practice.

Pros

- **High Chances of Profitability:** HFT can encompass high chances of profitability. If a strategy is tested and proven accurate, it is a money-making machine. Moreover, HFT traders are neutral and have no side in the market. In any market condition, HFT traders are expected to make profits.

- **Speed and Efficiency:** HFT excels in executing orders with incredible speed, capitalizing on microsecond opportunities that may otherwise go unnoticed. For retail traders, this means swift trade execution, reducing exposure to market fluctuations and potentially resulting in better trading results.

- **Automated Precision:** HFT relies on algorithmic precision to execute trades. This means that trading decisions are not influenced by human emotions or fatigue. Retail traders can implement automated trading strategies that execute trades consistently, following predefined rules, which can lead to more disciplined trading.

- **Lower Trading Costs:** The liquidity provided by HFT can result in tighter spreads and reduced commissions. These cost-saving benefits can be passed on to retail traders, making trading more affordable in the long run.

Cons

- **Capital Requirements:** HFT typically demands substantial capital to compete effectively. Retail traders may find it challenging to amass the financial resources required to engage in HFT fully. Without adequate capital, they may struggle to compete with larger players.

- **Complex Technology:** Establishing the necessary technology infrastructure for HFT can be complex and expensive. This includes acquiring high-performance computers, securing low-latency connectivity to the markets, and maintaining a stable and redundant trading setup. The cost and complexity of this technology can be a significant barrier for retail traders.

- **Regulatory Challenges:** HFT operates within a complex regulatory environment, with rules designed to ensure market fairness and integrity. Complying with these regulations can be time-consuming and daunting. Retail traders must invest effort in understanding and following these rules, or risk regulatory actions that can harm their trading activities.

- **Ethical Concerns:** HFT has faced ethical scrutiny, with concerns that it gives an unfair advantage to large firms and disrupts market balance. Some market participants argue that HFT can manipulate markets and impact prices unfairly. Retail traders should consider these ethical concerns and their implications when engaging in HFT.