

Trading Screener platform helps retail traders all over the world to get the real time financial data from the best trading algorithms. With the amount of the data available on our platform, retail traders can get lost and this is why we wanted to create this small guide to give you the best tricks and tips on how to improve your trading with the help of our data.

Purpose of the Guide

The primary purpose of this guide is to simplify the process of building and managing an investment portfolio through automated trading. Whether you are a seasoned investor looking to integrate technology into your trading strategy or a novice aiming to understand the basics, this guide will offer valuable insights and practical steps.

Key Objectives:

- 1. **Educational Insight**: Equip clients with a thorough understanding of automated trading, including its benefits and challenges. This includes a historical overview, key concepts, and the evolution of algorithmic trading.
- 2. **Practical Guidance**: Provide step-by-step instructions on setting up an automated trading system, from selecting appropriate assets and developing trading strategies to risk management and performance monitoring.
- 3. **Risk Management** Techniques: Highlight the importance of managing risk in automated trading and present various strategies to mitigate potential downsides.
- 4. **Real-World Examples**: Illustrate concepts with case studies and examples from the real world to show how automated trading can be applied effectively.

By the end of this guide, readers should have a solid foundation in using the trading screener platform and be well-prepared to leverage our technology to enhance their investment portfolios.

Whether your goal is to achieve better trade execution, reduce emotional bias, or diversify your investment strategies, this guide will serve as a valuable resource on your journey towards automated portfolio management.

Understanding Automated Trading

Definition of Automated Trading

Automated trading, also known as algorithmic trading or algo trading, is the process of using computer programs to execute trades in **financial markets** <u>based on pre-set</u> <u>rules and algorithms</u>. These algorithms analyze market data and execute orders without human intervention, ensuring trades are conducted at optimal prices and times. The primary goal is to leverage the speed and precision of computers to gain an advantage in the market.

History and Evolution

The concept of automated trading dates back to the early 1970s when stock exchanges began to transition from floor trading to electronic trading systems. This shift laid the groundwork for more sophisticated trading strategies and the use of computers in trading.

- 1970s: The New York Stock Exchange (NYSE) introduced the Designated Order Turnaround (DOT) system, which allowed for the electronic transmission of orders.
- 1980s: The development of program trading, where large orders were executed using computer algorithms, gained popularity. This period also saw the rise of portfolio insurance strategies, which utilized algorithms to manage large investment portfolios.
- 1990s: The advent of high-frequency trading (HFT) emerged as technology advanced. Traders began to use complex algorithms to execute a large number of trades in fractions of a second.
- 2000s and Beyond: The proliferation of advanced computing power, big data, and machine learning has further revolutionized automated trading. Today, it encompasses various sophisticated strategies and covers a wide range of financial instruments, including stocks, bonds, commodities, and cryptocurrencies.

Key Components of Automated Trading

- Algorithms: The heart of automated trading systems. These are sets of rules and mathematical models that dictate the timing, pricing, and quantity of trades. Algorithms can range from simple strategies based on technical indicators to complex models incorporating multiple data sources and machine learning techniques.
- 2. Application Programming Interfaces (APIs): APIs facilitate the connection between trading algorithms and financial markets. They allow algorithms to retrieve market data and execute trades in real-time. APIs are crucial for ensuring that automated trading systems can operate seamlessly and efficiently. Data Feeds: Real-time and historical market data feeds are essential for the functioning of automated trading systems. They provide the necessary information for algorithms to analyze market conditions and make trading decisions.
- 3. **Trading Platforms:** Software platforms that provide the infrastructure for developing, testing, and deploying trading algorithms. Popular platforms include MetaTrader, TradeStation, and custom-built solutions.
- Risk Management Systems: Automated trading systems include risk
 management algorithms to mitigate potential losses. These systems use
 techniques such as stop-loss orders, position sizing, and portfolio diversification
 to manage risk.

Types of Automated Trading

- High-Frequency Trading (HFT): A subset of automated trading that involves
 executing a large number of orders at extremely high speeds. HFT strategies rely
 on small price discrepancies and require sophisticated infrastructure to minimize
 latency. HFT is often used by institutional investors and hedge funds to capitalize
 on short-term market inefficiencies.
- Algorithmic Trading: Encompasses a broad range of automated trading strategies that use algorithms to execute trades. These strategies can be based on technical analysis, statistical arbitrage, mean reversion, momentum, and more. Algorithmic trading is widely used by both institutional and retail traders.
- 3. **Quantitative** Trading: A type of automated trading that relies on quantitative analysis to identify trading opportunities. Quantitative traders use mathematical models, statistical techniques, and machine learning to develop and implement trading strategies.
- 4. **Market Making**: Automated trading systems can act as market makers by providing liquidity to financial markets. These systems continuously quote buy and sell prices, profiting from the bid-ask spread. Market-making algorithms are essential for ensuring market efficiency and liquidity.
- 5. Arbitrage Trading: This strategy involves exploiting price differences between related financial instruments. Arbitrage algorithms identify and execute trades to profit from these discrepancies, often requiring rapid execution to capitalize on fleeting opportunities.
- 6. **Execution Algorithms**: Designed to minimize market impact and transaction costs, these algorithms execute large orders by breaking them into smaller trades. Common execution algorithms include Volume-Weighted Average Price (VWAP), Time-Weighted Average Price (TWAP), and Implementation Shortfall.

Understanding the intricacies of automated trading is crucial for building a successful trading portfolio. The rapid evolution of technology continues to shape the landscape, offering traders unprecedented opportunities to leverage automation for improved trading outcomes.

Benefits of Automated Trading

Automated trading has revolutionized the way financial markets operate, offering a multitude of benefits that enhance trading performance, efficiency, and risk management. Here's a detailed look at the key advantages:

Efficiency and Speed

Automated trading systems can execute trades at lightning speed, far surpassing human capabilities. This speed is critical in financial markets, where opportunities can emerge and vanish in fractions of a second.

- Order Execution: Automated systems can analyze market conditions and execute trades almost instantaneously. This ensures that trades are placed at the best possible prices, minimizing the risks associated with price slippage.
- Market Scanning: These systems can monitor multiple markets and assets simultaneously, identifying potential trades based on predefined criteria. This extensive coverage allows traders to capitalize on a wider range of opportunities, something manual trading cannot achieve.
- Latency Reduction: High-frequency trading (HFT) algorithms are designed to reduce latency, the time delay between the occurrence of an event and the execution of a trade. Lower latency means quicker response times, which is essential in volatile markets where prices can change rapidly.

Emotional Detachment

One of the most significant benefits of automated trading is the removal of human emotions from the trading process. Emotions such as fear, greed, and overconfidence can lead to irrational decision-making and inconsistent trading results.

- Consistency: Automated trading systems follow strict rules and strategies, ensuring that trades are executed consistently without emotional interference.
 This helps maintain discipline and adherence to the trading plan.
- Stress Reduction: By delegating the execution of trades to automated systems, traders can reduce the stress and anxiety associated with manual trading. This leads to a more relaxed trading environment and can improve overall decision-making.
- Elimination of Biases: Automated trading eliminates biases such as confirmation bias and loss aversion, which can negatively impact trading performance. The system executes trades based solely on data and predefined rules, ensuring objective decision-making.

Backtesting Capabilities

Backtesting allows traders to evaluate the effectiveness of their strategies using historical market data. Automated trading systems provide robust backtesting capabilities, which are crucial for refining and optimizing trading strategies.

- **Strategy Optimization**: By backtesting strategies on historical data, traders can identify the strengths and weaknesses of their algorithms. This process helps in fine-tuning strategies to enhance performance and profitability.
- Risk Assessment: Backtesting provides valuable insights into the potential risks and drawdowns associated with a strategy. This information enables traders to implement appropriate risk management measures and avoid significant losses.
- Performance Metrics: Automated systems can generate detailed performance metrics, such as Sharpe ratios, drawdown analysis, and profit factors. These metrics help traders understand the effectiveness of their strategies and make data-driven adjustments.

Diversification

Automated trading systems enable traders to diversify their portfolios across various assets, markets, and strategies. Diversification is a key component of risk management, as it helps spread risk and reduces the impact of adverse market movements.

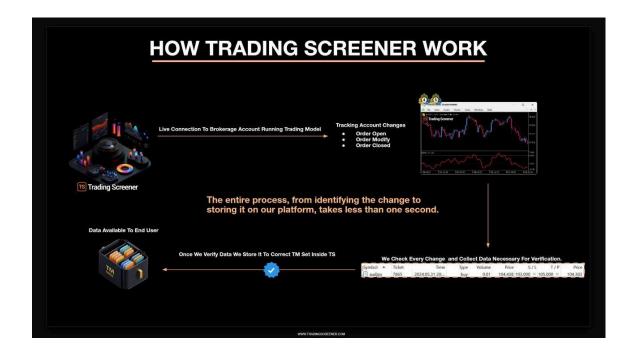
- Multiple Strategies: Automated systems can execute multiple trading strategies simultaneously, capturing opportunities in different market conditions. This multi-strategy approach enhances the overall performance and stability of the portfolio.
- Cross-Market Trading: Traders can deploy algorithms across a wide range of asset classes, including equities, forex, commodities, and cryptocurrencies. This cross-market trading capability ensures that the portfolio is not overly exposed to a single market or asset, thus reducing risk.
- Global Reach: Automated trading allows traders to access and trade in global markets 24/7. This global reach enables better diversification and the ability to take advantage of opportunities across different time zones and regions.

The Real Power Of Trading Screener

Trading Screener is more than just a platform for traders, it's a unique algorithmic data catalog that helps traders make smarter decisions. Our goal from day one is to become a leader in financial data for algorithmic traders.

How Trading Screener Process The Data?

Trading Screener collects and delivers real-time algorithmic data to end users. The image below visually represents how the entire process is designed. Our main data collection tool is connected to a live brokerage account where a trading model is running. The tool scans for any changes in that account (Order Open, Order Modify, Order Close). As soon as a new change is detected, we immediately send the data to our main TS Database, where it is stored under the correct TMSN (Trading Model Serial Number). Clients receive instant updates on all new information via our Trading Screener platform or through API integration.



Our data connection tools for MT4 and MT5 enable clients to automatically receive and manage this data within the most popular retail trading applications worldwide, allowing them to create a portfolio from our data.

How To Create Portfolio With Trading Screener Data Catalog?

The Trading Screener data catalog is constantly evolving. Our goal is to deliver 100 unique trading models to our clients within the first year and an additional 100 models in the second year. This means you can always expect more options to better diversify your portfolio. However, the key is to find something that works for you.

Trading Model Tracker									
TRADING MODEL NAME ASSET - OWNER - TMSN	3M	6M	1Y	TG	DD	PF	RS	PRICE	
NZD Trading FX - TS - TS100001	23.14	26.42	37.77	89.41	7.98	2.30	4	1 тис	GET ACCESS
NZD Aggressive (available soon) FX - TS - TS 100002	0.00	0.00	0.00	0.00	0.00	0.00		1 те	GET ACCESS
D2D FX - D2D - TS100003	-18.83	-6.58	31.52	73.83	33.50	1.67	5	3 тис	GET ACCESS
Counter Beast FX - 8D - TS100004	76.61	94.59	141.77	332.10	47.35	2.86	5	2 тис	GET ACCESS
EG GRID FX - TS - TS 100005	0.00	6.16	21.27	131.79	30.00	5.54	3	1 тис	GET ACCESS
Waka Waka FX - DDM - TS100006	2.30	2.30	2.30	2.30	0.76	1.44	3	1 тис	GET ACCESS
Counter Beast EURO EX - 8D - TS100007	17.74	42.31	48.55	48.55	25.60	5.48	3	1 тис	GET ACCESS
Yen Reversals Ex - 8D - T\$100008	0.00	33.95	38.04	38.04	18.20	10.68	3	1 тис	GET ACCESS
Grid X FX - DDM - T\$100009	17.48	31.43	35.59	35.59	0.00	2.88		1 тис	GET ACCESS
Kiwi Zones FX - DDM - TS100010	33.33	67.67	79.37	79.37	0.00	2.04		2 тис	GET ACCESS

In the image above, you can see some of the **trading models** in our **data catalog**. If this is your first time seeing it, the information may seem overwhelming. That's why we want to first explain how to interpret this section.

For each trading model in our catalog, the tracker page displays the **Trading Model**Name, the asset class it trades, the owner, and the **TMSN** (Trading Model Serial

Number). If you look at the first marked part, you'll see that the <u>trading model name is</u> "NZD Trading," it operates in the FX (Forex) asset class, and its TMSN is TS100001.

Next to that, we always display the following metrics:

- **3M** Represents the total gain in the last 3 months.
- **6M** Represents the total gain in the last 6 months.
- 1Y Represents the total gain in the last 12 months.
- **DD** Represents the maximum drawdown experienced from a single position.
- **PF** Represents the profit factor calculation.
- **TG** Represents the total gain achieved on the current account.
- **RS** Represents the risk score set by our system.
- Price Indicates the cost for 30 days of access to the trading model's live data, denominated in TMC (Trading Model Credits).

For example, if we consider the "**NZD Trading**" model, it has made <u>23.14%</u> in the last <u>3</u> months, 26.2% in the last 6 months, 37.2% in the last year, and 89.41% since inception. The highest drawdown from one position was 7.98% to date, the profit factor is 2.30, the risk score is 4, and the cost for live access is 1 TMC per month.

This section provides a quick glance at the statistical data we offer. It helps you get a faster overview of what you can expect from the trading models. If you want more detailed statistics, just click on the trading model name to access a deeper analysis of the data.

Before diving into more detailed stats, it's important to consider your portfolio goals.

There is **no such thing as risk-free trading**, and we would never claim otherwise. However, as long as you understand the risk associated with each trading model, you can organize your portfolio more effectively.

Each client has different expectations from trading. The first thing that can help you in selecting the best trading models for your portfolio is the Risk Score. **The Risk Score is automatically calculated by analyzing the last 100 setups from our data catalog**. If we see lower drawdowns and a good win rate, our system will assign the trading model a lower score, typically between **1-3**. If the trading model exhibits higher drawdowns than expected, it will receive a score between **4-5**. Any significant loss will automatically trigger a score of 5, allowing clients to understand the level of risk they can expect.

Since hedging is not permitted for all clients due to country regulations, if our tools detect that a hedging position has been made by a trading model, the risk score will automatically be set to 5, and the model will be re-evaluated after the next 100 trades.

As mentioned earlier, there is no 100% safe trading. If you're aiming for a portfolio with a maximum drawdown of around 10%, we suggest focusing on trading models with lower RS values, in the range of 2-3. However, if you're seeking higher returns, you may need to consider models with an RS of 4-5.

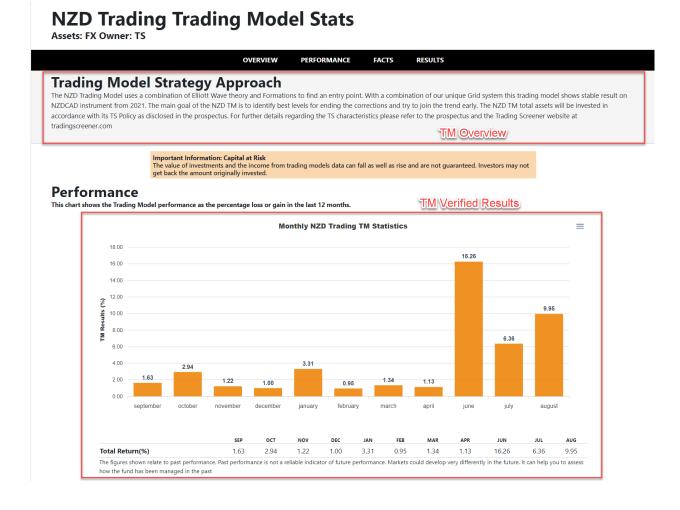
You also have the option to scale your positions using our data copy tool, which we will explain later in this guide.

When you select 2-3 trading models that you want to understand better, **simply click** on the trading model name to access more detailed statistics.



How To Get All Information About Trading Model?

After clicking on the trading model name, you will be redirected to what we call the "**Trading Model Stats**" page, where you can learn more about the selected trading model.

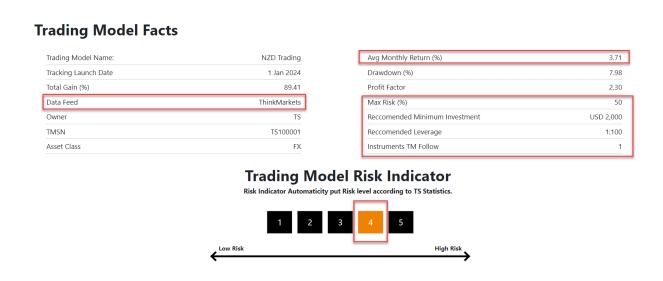


The first thing we want you to understand is the <u>Trading Model Strategy Approach</u>. Each algorithm in our database is unique, and we display all the information we have. It's important to note that each trading model owner provides an explanation of how their trading model works. For example, <u>the NZD Trading model is a Grid System that uses a combination of Elliott Wave theory and patterns to find entries. This trading algorithm focuses solely on a single instrument: NZDCAD.</u> So, if you plan to use it, ensure that your broker provides access to the NZDCAD instrument.

Below the approach, you will see the last 12 months of performance data collected by our tools in real time.

As you can see, there is no fixed return. All algorithms created by our team, including this one, are constantly being optimized to achieve better results. We observed that our algo performed exceptionally well during the summer, with returns of **16.26% in June**, **6.3% in July, and 9.95% in August**. Our goal with optimization is to maximize returns without significantly increasing drawdowns and to adjust for current market conditions. We aim for a **3-5% return** on any trading model owned by us, and anything above that is considered a successful month.

Below the performance data, you'll find the **Facts** and **Trading Model Risk Indicator** sections. Understanding these two parts is crucial if you want to build a solid portfolio.



The Facts section provides deeper details that you need to know. First, you'll want to know what data feed we use for the selected trading model. In the image above, you can see that the official data feed for NZD Trading is "ThinkMarkets," which means the NZD Trading Model is running on the ThinkMarkets platform. After that, you'll see the average monthly return. In the case of NZD Trading, it's 3.71%. This is based on all the data in our platform, so we always suggest adjusting that number slightly (to

3.2-3.5% in this example) or using the returns from the last 6 months to calculate your own short term average return.

The **Maximum Risk** is listed as **50%**, meaning the trading model is allowed a **maximum drawdown of 50% at any given time**. This is important information if you plan to scale your investment. For example, if you want to scale up by 50% (**scale factor 1.5**), you need to calculate that your maximum drawdown should be set to 75%. Conversely, if you want to downscale by 50% (**scale factor 0.5**), your maximum drawdown should be calculated as 25%.

You'll also see the **Recommended Minimum Investment** and **Leverage**, which in this case is **\$2,000** and **1:100**, respectively. While you don't have to follow our recommendations, we highly suggest adhering to the leverage recommendation to ensure you can handle the same number of trades if the trading model has multiple positions. If you can't change leverage, consider scaling down your profit expectations.

Next is the **Risk Indicator**. As mentioned above, we rate all of our **Trading Models** from 1 to 5, with 1 being less risky compared to models with a risk score of 5. This score can change as we collect new data from the trading model, so we recommend checking the risk score at least twice a month to ensure you're using the correct risk settings. For example, the NZD Trading model currently shows a Risk Score of 4. While it has produced better returns compared to the past 6 months, we've also seen an increase in the number of trades in the last 3 months. Therefore, we consider this a trading model where there is a higher chance of experiencing larger drawdowns from time to time. If you plan to pair it with other models to build your portfolio, you might want to find a model with a **lower Risk Indicator**.

Trading Model History

Trading Model History Display Last 50 Setups Results.

Instrument	Close Date	Direction	Entry	Stop	Target	Result
NZDCAD	2024.08.20	SHORT	0.838x	0.938x	0.835x	4.81%
NZDCAD	2024.08.20	SHORT	0.837x	0.937x	0.835x	1.05%
NZDCAD	2024.08.20	SHORT	0.836x	0.936x	0.835x	-0.12%
NZDCAD	2024.08.20	SHORT	0.835x	0.935x	0.835x	-0.44%
NZDCAD	2024.08.20	SHORT	0.834x	0.934x	0.835x	-0.43%
NZDCAD	2024.08.19	SHORT	0.832x	0.932x	0.835x	-0.33%
NZDCAD	2024.08.19	SHORT	0.831x	0.931x	0.835x	-0.45%
NZDCAD	2024.08.14	SHORT	0.833x	0.934x	0.830x	1.77%
NZDCAD	2024.08.13	SHORT	0.832x	0.932x	0.830x	0.67%
NZDCAD	2024.08.13	SHORT	0.831x	0.931x	0.830x	0.22%
NZDCAD	2024.08.08	SHORT	0.825x	0.925x	0.830x	-0.24%
NZDCAD	2024.08.05	LONG	0.817x	0.717x	0.822x	0.25%
NZDCAD	2024.08.05	LONG	0.821x	0.721x	0.822x	-0.07%
NZDCAD	2024.08.02	SHORT	0.825x	0.926x	0.822x	2.39%
NZDCAD	2024.08.01	SHORT	0.824x	0.924x	0.822x	0.82%
NZDCAD	2024.08.01	SHORT	0.822x	0.922x	0.822x	0.05%
NZDCAD	2024.07.31	SHORT	0.821x	0.921x	0.822x	-0.10%

The Trading Model History section provides full transparency of all the setups executed in the brokerage account where the trading model is run. This information helps you understand how many instruments are traded and how many setups you can expect. For example, in the NZD Trading model, we see that 16 trades were executed this month. This gives us an idea that a similar number of setups can be expected each month. However, based on our experience, it's advisable to reduce the expected number of setups by 20% since each month can vary. By analyzing the last 50 trades available, you'll gain a better understanding of the number of setups you can expect.

If you are building a portfolio and have selected the NZD Trading model as part of it, it's important to diversify. I would first search for other trading models with a Risk Score of 2-3 and look for models that trade different pairs.

Trading Model Facts

Trading Model Name:	NZD Trading
Tracking Launch Date	1 Jan 2024
Total Gain (%)	89.41
Data Feed	ThinkMarkets
Owner	TS
TMSN	TS100001
Asset Class	FX

Avg Monthly Return (%)	3.71
Drawdown (%)	7.98
Profit Factor	2.30
Max Risk (%)	50
Reccomended Minimum Investment	USD 2,000
Reccomended Leverage	1:100
Instruments TM Follow	1

Trading Model Risk Indicator

Risk Indicator Automaticity put Risk level according to TS Statistics.



Trading Model Facts

Trading Model Name:	Counter Beast EURO
Tracking Launch Date	1 Jan 2024
Total Gain (%)	48.55
Data Feed	RoboForex
Owner	BD
TMSN	TS100007
Asset Class	FX

Avg Monthly Return (%)	7.43
Drawdown (%)	25.60
Profit Factor	5.48
Max Risk (%)	50
Reccomended Minimum Investment	USD 2,000
Reccomended Leverage	1:100
Instruments TM Follow	

Trading Model Risk Indicator

Risk Indicator Automaticity put Risk level according to TS Statistics.



For example, if we consider the best complement to the NZD Trading model, something like the Counter Beast EURO, which focuses on the EURUSD pair with a Risk Score of 3, would be a better choice compared to Waka Waka, which has the same Risk Score but also focuses on NZDCAD. If we want to pair NZD and Counter Beast, we need to account for the slightly higher drawdown observed in Counter Beast. Although it's something from the past, we should pay attention to it. When building a portfolio, we might set a lower profit factor for this trading model (a profit scale of 0.5% would be the minimum acceptable for us).

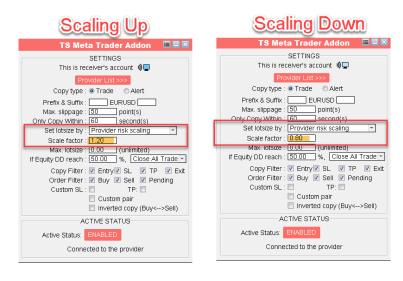
Important: Avoid using two trading models that focus on the same instruments, as this would increase risk rather than optimize it.

Best Way to Setup Your Portfolio for Success

One question that is frequently asked is how to set up a portfolio style with a trading screener and what the best approach is. Let's examine this from a risk perspective: to build a well-balanced portfolio, you will need to re-analyze data each month and adjust your portfolio according to the latest information.

If we have \$5,000 for our initial portfolio, we would start by setting up two accounts, each with \$2,500, and select two trading models with a risk score between 2-4 that do not trade the same instruments. We would begin by assigning one trading model to each account and leave everything as is for 30 days.

After the first 30 days, you should re-check how your portfolio is performing. If the results meet your expectations (if you achieve anything above 80% of the expected return), leave everything unchanged. However, if you are not satisfied with the results on one account, replace that trading model with another from our database. **At the end of every month, we recommend moving all gains to a separate account** (a third one), and as soon as you accumulate a minimum of \$1,000, you can use it to add another trading model.



If you see that the **drawdown** is acceptable over a **minimum of 90 days** and you fully understand the associated risks, you can start tweaking the scale factor. By default, our data copy tool will copy risk 1:1 from our main account. If you feel comfortable with the risk observed in your account during the first 90 days, you can start **increasing** the **scale factor by 20-30%** (e.g., from the default 1.0 to 1.2-1.3). You can continue to increase the scale factor till 2 maximum from our point of view (1.5 ideal)

In case you notice that the risk has increased during the 90 days but you are still satisfied with the results, you can downscale the risk factor to 0.8. This will reduce overall risk while maintaining a good return.

Your goal in building a portfolio is to add as many profitable setups as possible across different accounts. This way, if one of the trading models experiences a drawdown in a particular month, others can compensate, allowing your portfolio to continue growing.

You should check your data at least once a week to ensure everything is functioning correctly. To ensure that all the data is being copied, we suggest running your MetaTrader platform on a VPS (Virtual Private Server).

Make sure you are on **Trading Screener Members** email list, to get the latest important information about any changes we made to our platform.