

Telegram to MT5 Auto Trading Bot (Userbot-Based)

User Manual and Setup Guide

Overview

This document provides a comprehensive guide for setting up and using the Telegram to MT5 Auto Trading Bot, a fully automated Python-based solution. The bot connects your Telegram account (as a user, not a bot) to MetaTrader 5 (MT5), listens to a private Telegram channel for trading signals, and automatically places and manages trades on your MT5 account.

Key Features

- **Userbot-based:** Connects as a real Telegram user (no bot token required).
- **Private Channel Monitoring:** Monitors a single designated Telegram channel for signals.
- **Real-time Signal Parsing:** Processes multi-line and multi-message trading signals efficiently.
- **Auto Order Execution:** Places market and limit orders in MT5 with precision.
- **Risk Management:** Dynamically calculates lot sizes with a maximum loss limit per signal.
- **Trade Management:** Implements TP1 hit logic, moves SL to breakeven, and cancels pending orders.
- **Telegram Controls:** Offers start/stop functionality, adjustable risk, order counts, split ratios, and a reset option via inline menu or commands.
- **Reset Config Button:** Instantly resets all settings to default from the Telegram inline menu.
- **Logging:** Sends detailed notifications and errors to a separate Telegram logging bot.
- **No EA Required:** A pure Python solution, eliminating the need for MT5 Expert Advisors.

Detailed Setup Instructions

Follow these steps carefully to configure and run the bot successfully.

1. Setting Up the Python Environment

- Ensure Python 3.8 or higher is installed on your system.
- Download or clone the project files to your local machine.
- Open a terminal in the project folder.
- Install required dependencies by running:

```
pip install -r requirements.txt
```

- Verify installation by checking for errors. If issues arise, ensure your internet connection is active and pip is up-to-date ('pip install --upgrade pip').

2. Configuring the 'config.json' File

- Locate the 'config.json' file in the project directory.
- Edit the file with your personal details:
 - **Telegram API ID and API Hash:** Obtain these from [https://my.telegram.org](https://my.telegram.org/my.telegram.org) by creating an app.
 - **Telegram Phone Number:** Enter your phone number with country code (e.g., +923001234567).
 - **Telegram Channel ID or Username:** Provide the ID or @username of your private channel (e.g., @SignalChannel).
 - **Logging Bot Token and Chat ID:** Create a logging bot via @BotFather on Telegram and note its token and your chat ID.
 - **MT5 Login, Password, and Server:** Obtain these from your MT5 broker (e.g., login: 123456, server: BrokerName-Demo).
 - **Initial Settings:** Set default values for risk (e.g., 3%), market orders (e.g., 3), limit orders (e.g., 30), and split ratio (e.g., "70/30").
- Example 'config.json':

```
{
  "telegram_api_id": "YOUR_API_ID",
  "telegram_api_hash": "YOUR_API_HASH",
  "telegram_phone": "+923001234567",
  "telegram_channel_id": "@SignalChannel",
  "logging_bot_token": "YOUR_LOGGING_BOT_TOKEN",
  "logging_chat_id": "YOUR_CHAT_ID",
  "mt5_login": "123456",
  "mt5_password": "YOUR_PASSWORD",
  "mt5_server": "BrokerName-Demo",
  "risk_per_signal_percent": 3,
  "num_market_orders": 3,
```

```
"num_limit_orders": 30,  
"limit_order_split_ratio": "70/30"  
}
```

- Save the file after editing.

3. Initial Telegram Login

- Run the bot for the first time using:

```
python main.py
```

- You will receive a Telegram code on your phone via SMS or the Telegram app.
- Enter the code when prompted to authorize the userbot session.
- This step is required only once; the session will be saved for future runs.

4. Running the Bot

- Start the bot by executing:

```
python main.py
```

- Ensure your MT5 terminal is open and logged in with the provided credentials.
- The bot will connect to Telegram and begin monitoring the specified channel.

How to Use the Bot (Client Guide)

This section explains how to interact with the bot via Telegram for seamless operation.

1. Telegram Controls (Commands & Buttons)

Control the bot using either typed commands or the inline keyboard menu.

Inline Menu Buttons

- Upon starting the bot, a menu with the following buttons appears:
 - **Status:** Displays current bot status and configuration details.
 - **Current Balance:** Shows your MT5 account balance.
 - **Set Risk %:** Adjusts the risk percentage per signal (e.g., 2%, 3%, 4%, Custom).
 - **Set Market Orders:** Changes the number of market orders (e.g., 5, 10, 15, Custom).

- **Set Limit Orders:** Modifies the number of limit orders (e.g., 20, 30, 40, Custom).
- **Set Split Ratio:** Sets the split ratio for limit orders (e.g., 70/30, 50/50, Custom).
- **Reset Config:** Resets all settings to their default values instantly.

Commands (Typed or Reply Keyboard)

- **/startbot** Activates the bot and enables trading.
- **/stopbot** Deactivates the bot and disables trading.
- **/status** Views current configuration and bot status.
- **/resetconfig** Resets all settings to default.
- **/setrisk 2** Sets risk per signal to 2% (replace 2 with desired percentage).
- **/setmarketorders 5** Sets number of market orders to 5 (replace 5 with desired number).
- **/setlimitorders 20** Sets number of limit orders to 20 (replace 20 with desired number).
- **/setsplit 70/30** Sets split ratio to 70/30 (replace with desired ratio).
- **Tip:** Use buttons for convenience or type commands as needed.

2. Example Workflow

1. **Start the Bot:** Press "Start Bot" or send `/startbot` in your Telegram chat.
2. **Check Status:** Press "Status" or send `/status` to review current settings.
3. **Adjust Settings:** Use menu buttons or commands to modify risk, order counts, or split ratio.
4. **Reset Config:** Press "Reset Config" or send `/resetconfig` to revert to default settings.
5. **Monitor Trades:** The bot will automatically process signals from your channel and manage trades in MT5.
6. **Stop the Bot:** Press "Stop Bot" or send `/stopbot` to pause trading anytime.

How the Bot Works

1. The bot monitors your private Telegram channel for signals, e.g.:
 - 'Gold buy now'
 - 'Gold buy now 2350.0 - 2345.0'
 - 'SL: 2340'

- ‘TP: 2355‘
- 2. It parses the signal and executes market/limit orders in MT5.
- 3. Risk and lot sizes are calculated dynamically.
- 4. All actions and errors are logged to your designated logging bot.

Troubleshooting & FAQ

This section addresses common issues and provides solutions for a smooth experience.

- **Bot Not Trading?**
 - Verify ‘/startbot‘ is active.
 - Check MT5 login, password, and server in ‘config.json‘.
 - Ensure MT5 terminal is running and logged in.
 - Solution: Restart the bot and MT5, then recheck credentials.
- **No Notifications?**
 - Confirm logging bot token and chat ID are correct.
 - Ensure the logging bot is active and added to your chat.
 - Solution: Recreate the logging bot via @BotFather and update ‘config.json‘.
- **Lot Size Too Small/Large?**
 - Adjust the risk percentage in the menu or via ‘/setrisk‘.
 - Verify your MT5 account balance.
 - Solution: Recalculate risk based on current balance and update settings.
- **How to Reset Everything?**
 - Use the "Reset Config" button or send ‘/resetconfig‘.
 - Solution: This resets all settings to default values instantly.
- **Still Stuck?**
 - Contact your developer or support for assistance.
 - Provide logs from the logging bot for debugging.

Security & Operational Notes

- **Security:** Your credentials are stored locally in ‘config.json‘ and never shared.
- **Control:** Only you can manage the bot via Telegram commands or buttons.
- **24/7 Operation:** Run the bot on a VPS or always-on PC for continuous trading.
- **Backup:** Regularly back up your ‘config.json‘ and session files to avoid data loss.

Demo Video

A separate demo video is provided, illustrating the setup process and live trading functionality. Watch it for a step-by-step guide.