CRYPTO TRADING BOT

Complete Beginner's Guide

From Zero to Your First Automated Trade

⚠ IMPORTANT DISCLAIMER ⚠

Trading cryptocurrencies is extremely risky. You can lose ALL your money. This software is for EDUCATIONAL PURPOSES ONLY. Never trade with money you cannot afford to lose. Past performance does not guarantee future results.

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1. What is This Trading Bot?

Think of this trading bot as a robot that watches cryptocurrency prices 24/7 and makes buy/sell decisions based on mathematical rules. Instead of you staring at charts all day, the bot does it for you.

What Does It Actually Do?

- **Watches prices:** Continuously monitors Bitcoin, Ethereum, or other crypto prices
- **Analyzes trends:** Uses math formulas to figure out if prices are going up or down
- **Makes decisions:** Decides when to buy (expecting price to go up) or sell (expecting price to go down)
- **Manages risk:** Automatically sets "stop-loss" orders so you don't lose too much on any single trade

What This Bot Does NOT Do

- Guarantee profits - no trading system can do this
- Predict the future - it analyzes patterns, but markets are unpredictable
- Work perfectly all the time - it will have losing trades

2. What You Need Before Starting

Required Items Checklist

Item	What It Is	Where to Get It
Computer	Windows, Mac, or Linux PC	You probably have one!
Python 3.9+	Programming language the bot uses	python.org/downloads
Binance Account	Free account on Binance exchange	binance.com
Text Editor	To edit configuration files	VS Code (free) or Notepad

Skill Level Required

You do NOT need to know how to code. You just need to be comfortable with:

- Typing commands in a terminal/command prompt
- Editing text files
- Following step-by-step instructions

3. Step-by-Step Installation Guide

Step 1: Install Python

1. Go to **python.org/downloads**
2. Download Python 3.11 or newer
3. **IMPORTANT:** Check the box that says "Add Python to PATH" during installation
4. Click "Install Now"

Step 2: Download the Trading Bot

5. Unzip the **crypto_trading_bot.zip** file you received
6. Put the folder somewhere you can find it (like your Desktop or Documents)

Step 3: Open Terminal/Command Prompt

On Windows:
- Press **Windows Key + R**
- Type `cmd` and press Enter

On Mac:
- Press **Command + Space**
- Type `Terminal` and press Enter

Step 4: Navigate to the Bot Folder

Type this command and press Enter (replace the path with where you put the folder):

```
cd Desktop/crypto_trading_bot
```

Step 5: Install Required Packages

Type this command and press Enter:

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

Wait for it to finish. You'll see a lot of text scroll by - this is normal!

4. Setting Up Your Binance Account

Create a Binance Account (if you don't have one)

7. Go to **binance.com**
8. Click "Register"
9. Complete identity verification (required for trading)

Enable Futures Trading

10. Go to "Derivatives" → "USDT-M Futures"
11. Complete the quiz to enable futures
12. Transfer some USDT to your Futures wallet

Create API Keys (VERY IMPORTANT)

13. Click your profile icon → "API Management"
14. Click "Create API"
15. Give it a name like "TradingBot"
16. Complete security verification
17. **COPY YOUR API KEY AND SECRET - you can only see the secret once!**

> 🔒 **SECURITY SETTINGS - DO THIS!**
>
> • Enable "Enable Futures" permission
> • **NEVER enable "Enable Withdrawals"**
> • Restrict to your IP address (adds extra security)

5. Configuring the Bot

Create Your Configuration File

18. Find the file called `.env.example` in the bot folder
19. Make a copy of it and rename the copy to `.env` (just remove the .example part)
20. Open `.env` with a text editor

Fill In Your API Keys

Your .env file should look like this:

```
BINANCE_API_KEY=paste_your_api_key_here
BINANCE_API_SECRET=paste_your_secret_here
BINANCE_TESTNET=true
```

Keep BINANCE_TESTNET=true for now! This uses fake money for practice.

Understanding the Settings

Setting	What It Means
`BINANCE_TESTNET=true`	Use fake money (practice mode). Set to false for real money.
`RISK_PER_TRADE=0.01`	Risk 1% of your account per trade. Lower = safer.
`MAX_POSITIONS=3`	Maximum number of trades open at the same time.

6. Running Your First Backtest

A backtest shows you how the bot *would have performed* in the past. It's like a practice run using historical data.

Run a Backtest

In your terminal, type:

```
python main.py --backtest --symbol BTCUSDT --start 2024-01-01 --end 2024-06-01
```

Understanding the Results

Metric	What It Means
Total Return	How much money you made or lost (positive = profit)
Win Rate	Percentage of trades that made money. 40-50% is normal!
Max Drawdown	Biggest loss from peak. Under 15% is good.
Sharpe Ratio	Risk-adjusted return. Above 1.0 is decent, above 2.0 is good.

⚠️ **WARNING ABOUT BACKTESTS**

Backtest results look better than real trading because they don't include all the real-world problems like slippage, delays, and market impact. Expect real results to be 20-30% worse than backtests.

7. Paper Trading (Practice Mode)

Paper trading is like a flight simulator for trading. The bot runs in real-time but only *pretends* to make trades. No real money is involved.

Start Paper Trading

```
python main.py --paper --symbol BTCUSDT --timeframe 1h
```

What Happens

- The bot watches real Bitcoin prices
- When it sees a good trade, it LOGS what it would do (but doesn't actually trade)
- You can see these logs in the terminal and in `trading_bot.log`

How Long to Paper Trade?

At least 30 days. This gives you enough trades to see if the strategy works in current market conditions. Don't skip this step!

8. Understanding the Strategy

How the Bot Decides to Trade

The bot uses multiple "indicators" (math formulas) and only trades when they all agree. Think of it like getting multiple opinions before making a decision.

The Indicators (Simplified)

Indicator	What It Checks
EMA (Moving Averages)	Is the price trending up or down?
ADX	Is the trend strong or weak?
RSI	Is the price overbought or oversold?
MACD	Is momentum increasing or decreasing?
ATR	How volatile is the market right now?
Volume	Are enough people trading to confirm the move?

Risk Management

- **Stop-Loss:** Automatically sells if the price drops too much (limits your losses)
- **Take-Profit:** Automatically sells when you've made enough profit
- **Position Sizing:** Only risks 1% of your account per trade
- **Daily Limit:** Stops trading if you lose 3% in one day

9. Going Live (When You're Ready)

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🛑 STOP AND READ THIS 🛑

Before using real money, make sure you have:

- Backtested for multiple time periods
- Paper traded for at least 30 days
- Money you can afford to lose completely
- Understood that you WILL have losing trades

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Steps to Go Live

21. Edit your `.env` file
22. Change `BINANCE_TESTNET=true` to `BINANCE_TESTNET=false`
23. Start with a SMALL amount (like $100-500)
24. Run:

```
python main.py --live --symbol BTCUSDT --timeframe 1h
```

25. Type **YES** when prompted to confirm

10. Troubleshooting Common Problems

Problem	Solution
"python not found"	Reinstall Python and check "Add to PATH"
"API key invalid"	Double-check your .env file. No spaces around the = sign!
"Connection refused"	Check your internet. Try again in a few minutes.
"Insufficient funds"	Transfer USDT to your Futures wallet on Binance
Bot not making trades	This is normal! The bot only trades when conditions are right. Could take hours/days.

How to Stop the Bot

Press **Ctrl + C** in the terminal window.

11. Glossary of Terms

Term	Definition
API	A way for the bot to talk to Binance automatically
Backtest	Testing a strategy on past data to see how it would have performed
Drawdown	How much your account dropped from its highest point
Futures	A type of trading that lets you profit from prices going down too
Long	Betting the price will go UP
Short	Betting the price will go DOWN
Stop-Loss	An automatic order that closes your trade to limit losses
Take-Profit	An automatic order that closes your trade to lock in profits
Testnet	A practice version of Binance with fake money
USDT	A cryptocurrency that equals $1 USD (used for trading)

Good luck and trade safely!

Remember: Start small, learn constantly, and never risk more than you can afford to lose.