

# Money Matrix: The Universal Option Chain (User Manual)

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## 1. Disclaimer

Trading in the stock market, especially in derivatives (Options & Futures), involves substantial risk.

- This tool is a **Decision Support System**, not a "Magic Money Button."
  - It provides mathematical data and calculated probabilities. It does **not** guarantee profits.
  - The signals ("STRONG BUY", "Bearish Bias") are algorithmic interpretations of data, not financial advice.
  - **Always** use Stop Losses. The creator (Money Matrix) assumes no responsibility for financial losses incurred while using this system.
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## 2. What is this System?

The **Money Matrix** is a professional-grade trading dashboard that bridges the gap between institutional tools and retail traders.

Instead of looking at a static webpage that refreshes every 3 minutes, this system:

1. **Connects Directly** to the Fyers Broker API (Legal, Free, Millisecond Latency).
  2. **Calculates** advanced metrics (Greeks, IV) using a custom "Math Engine" (Black-Scholes Model).
  3. **Detects** hidden market movements (Smart Trend Logic).
  4. **Streams** everything into a live Google Sheet, allowing you to analyze **BankNifty**, **Nifty**, or **any Stock** in real-time.
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## 3. Killer Features

- **The "Key Hunter"**: It is crash-proof. It automatically detects the correct data labels from the API, so the script never breaks when the broker changes data formats.
- **Math Engine**: Even if the broker hides the Implied Volatility (IV) or Greeks, this system calculates them from scratch using option pricing formulas.
- **Smart Trends**: It doesn't just look at "Price Up/Down." It analyzes the relationship between **Price Change** and **Open Interest (OI) Change** to tell you if a move is a "Long Buildup" (Real Buying) or just "Short Covering" (Temporary Bounce).

- **Deep Market Vision:** Unlike free websites that show only 10 strikes, this system pulls upto **500 strikes**, covering the entire market depth.
- **The "Greeks" Edge:**
  - **Theta (The Silent Killer):** Shows how much money you lose per day just by holding the trade.
  - **Gamma (The Explosion Index):** Shows which strike price will explode fastest if the market moves.

## 4. Key Trading Problems Solved

Problem	The Money Matrix Solution
"Is the market Bullish or Bearish?"	Look at <b>PCR (Put-Call Ratio)</b> . If $> 1.2$ , Big Players are Bullish. If $< 0.6$ , they are Bearish.
"Which Strike Price do I pick?"	Check the <b>Delta</b> column. <ul style="list-style-type: none"> <li>• <b>0.50 (ATM):</b> Best balance.</li> <li>• <b>0.70+ (ITM):</b> High speed, acts like a Future.</li> <li>• <b>&lt; 0.20 (OTM):</b> Garbage/Lottery ticket. Avoid.</li> </ul>
"Should I Buy or Sell (Write)?"	Check the <b>Trend</b> column. <ul style="list-style-type: none"> <li>• <b>Long Buildup:</b> BUY (Momentum is up).</li> <li>• <b>Short Buildup:</b> SELL/WRITE (Big players are selling).</li> </ul>
"Where will the market stop?"	The Sheet calculates <b>Ultimate Support &amp; Resistance</b> based on max OI concentrations. Exit your trades there.

## 5. How to Setup (Installation Guide)

### Phase A: One-Time PC Setup

1. **Install Python:** Download Python 3.10+ from [python.org](https://python.org).
2. **Install Libraries:** Open Command Prompt (`cmd`) and run:

Bash

```
pip install pandas gspread oauth2client fyers-apiv3 scipy numpy
```

*(Tip for Windows Users: Enable "File Name Extensions" in your File Explorer View settings. This prevents you from accidentally naming files like `main.py.txt`.)*

## Phase B: Creating The Files

You need to create a folder named `option_chain` and create **4 specific files** inside it.

### 1. `credentials.json`

- Go to **Google Cloud Console**.
- Enable "Google Sheets API" and "Google Drive API".
- Create Credentials > Service Account > Create Key (JSON).
- Download and rename this file to `credentials.json`.
- **Crucial:** Open this JSON file, find the `client_email`, copy it, and **Share** your Google Sheet with that email (give Editor access).

### 2. `config.py`

- Create a new text file and rename it to `config.py`. Paste your settings code inside.
- **Important:** When entering `EXPIRY_DATE`, **ALWAYS** use the format **YYYY-MM-DD** (e.g., 2026-01-29). Do **not** use DD-MM-YYYY.
- **Important:** For `SPREADSHEET_ID`, do not paste the name. Paste the long ID found in your sheet's URL (between `/d/` and `/edit`).

### 3. `get_token.py`

- Create a new text file, rename it to `get_token.py`, and paste the login script code.

### 4. `main.py`

- Create a new text file, rename it to `main.py`, and paste the final V2.1 script code.

## Step-by-Step Fyers API Registration

*(For users doing this for the first time)*

**Prerequisite:** You must have an active trading account with Fyers.

1. **Go to the Developer Portal:** Open <https://myapi.fyers.in/dashboard> in your browser.
2. **Login:** Use your standard Fyers Client ID and Password/OTP.
3. **Create a New App:**
  - Click on the **"Create App"** button (usually top right).
  - **App Name:** Give it any name (e.g., MoneyMatrix).
  - **Redirect URL:** Enter `https://google.com` (This **must** match the URL in your `config.py` file exactly).
  - **Description:** Enter "Personal Trading Dashboard".
  - **Permissions:** Select all available permissions (Order, Data, etc.) or just "Data" if prompted.
  - Click **"Create App"**.
4. **Get Your Credentials:**

- Once created, you will see your app in the list.
- **App ID:** This is your `CLIENT_ID` (It looks like `XP00000-100`).
- **Secret ID:** Click the "eye" icon to reveal it. This is your `SECRET_KEY`.
- Copy these two codes and paste them into your `config.py` file.

## Can people use other brokers (Zerodha, Dhan, Angel One)?

**The Short Answer: No.** This specific software (V2.1) will **only** work with Fyers.

**The Explanation (to include in FAQ/Manual):**

- **Unique Language:** Every broker speaks a different "coding language" (API). This system is written specifically in the **Fyers** language (`fyers_apiv3` library). It cannot "talk" to Zerodha or Dhan.
- **Why Fyers?** We chose Fyers for this system because:
  1. **It is FREE:** Zerodha charges ₹2,000/month for their API. Fyers gives it for free.
  2. **Option Chain Data:** Fyers provides a pre-built "Option Chain" data packet (which we utilize). Other brokers like Dhan or Angel often require us to fetch 100 different symbols individually, which is slower and more complex to code.
- **Can it be converted?** Yes, a developer could rewrite the "Engine" part of this script to support Dhan or Angel One, but the current `main.py` file will strictly require a Fyers account to function.

## Phase D: Daily Routine

Every morning at 9:00 AM:

1. Open Terminal (`cmd`) inside your folder.
2. Run: `python get_token.py`
  - Login to Fyers in the browser window.
  - Paste the Result URL back into the terminal.
3. Run: `python main.py`
  - The system starts. Leave it running all day.

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## 6. How to identify correct stock and index symbol?

The format `NSE:NIFTYBANK-INDEX` comes from the Fyers specific symbol naming convention. Since Fyers is the data source, you must use their exact format, or the API will say "Symbol Not Found."

### The Universal Logic for Fyers Symbols

The format is always: `EXCHANGE:SYMBOL-SUFFIX`

#### 1. For Indices (Nifty, BankNifty, FinNifty)

Indices always end with `-INDEX`.

- **Bank Nifty:** `NSE:NIFTYBANK-INDEX`
- **Nifty 50:** `NSE:NIFTY50-INDEX`
- **Fin Nifty:** `NSE:FINNIFTY-INDEX`
- **Midcap Nifty:** `NSE:MIDCPNIFTY-INDEX`

#### 2. For Stocks (Reliance, HDFC, Tata Motors)

Stocks that have Future & Options (FnO) end with `-EQ`.

- **Reliance:** `NSE:RELIANCE-EQ`
- **HDFC Bank:** `NSE:HDFCBANK-EQ`
- **Tata Motors:** `NSE:TATAMOTORS-EQ`
- **Infosys:** `NSE:INFY-EQ`
- **State Bank of India:** `NSE:SBIN-EQ`

### How to Find Any Symbol (If You Are Not Sure)

If you are confused (e.g., is it `M&M` or `MNM`?), follow this simple trick:

1. **Go to the Fyers Web Platform:** (<https://trade.fyers.in/>)
  2. **Search for the stock** in the search bar (e.g., "Mahindra").
  3. **Add it to your Watchlist.**
  4. **Look at the name:**
    - If you see `NSE:M&M-EQ`, that is your symbol.
    - Copy that exact text into your `config.py` file.
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## 7. How to Take Trade Decisions (The Strategy)

Do not trade on every tick. Wait for the **data to align**.

### Scenario 1: The Bullish Breakout (Call Buy)

- **PCR:** Rising and above **1.0**.
- **Signal:** Column M shows "**STRONG BUY CE** □" or "**Bullish Bias** □".
- **Trend:** Call Side shows "**Long Buildup**" (Green).
- **Volume Check:** Ensure the "Call Vol" column is high (liquidity is present).
- **Action:** Buy an **ATM Call (Delta ~0.5)**.
- **Target:** The "Resistance" strike price shown in Row 2.

### Scenario 2: The Bearish Crash (Put Buy)

- **PCR:** Falling and below **0.7**
- **Signal:** Column M shows "**STRONG BUY PE** □" or "**Bearish Bias** □".
- **Trend:** Put Side shows "**Long Buildup**".
- **Action:** Buy an **ATM Put**.
- **Target:** The "Support" strike price shown in Row 2.

### Scenario 3: The Trap (Do Not Trade)

- **PCR:** Stuck between **0.8 and 1.1** (Neutral).
- **Trend:** Shows "Short Covering" or "Long Unwinding" (No real buying/selling, just profit booking).
- **Action:** **Sit on hands**. Option Buyers lose money here due to Theta Decay.

Trend Name	Simple Explanation	Sentiment
Long Buildup	"Big players are buying." Price is up, Interest is up.	Bullish
Short Covering	"The Jackpot Move." Sellers are trapped and exiting fast. This causes sudden spikes.	Super Bullish
Short Buildup	"Big players are selling." Price is down, Interest is up.	Bearish
Long Unwinding	"Buyers are tired." They are booking profits.	Weak / Paused

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## 8. Troubleshooting & Maintenance

- **"Access Token Invalid"**: Fyers tokens expire every night. You **must** run `get_token.py` once every morning.
- **"Quota Exceeded"**: If Google Sheets stops updating, you might be refreshing too fast. The script is set to 60 seconds, which is safe. Do not lower it to 5 seconds.
- **"Expiry Not Found"**: Double-check your `config.py`. Ensure the date format is `YYYY-MM-DD`.
- **Empty Columns**: If columns go blank, check the terminal window. The "Key Hunter" feature will print a debug list of keys. You can verify if Fyers has changed their data format.

### **SUPPORT THE CHANNEL**

We coded this tool to help the community. If this dashboard helps you book a profit, or if you appreciate the effort, you can support the channel here: [Scan QR Code in Video "Time Stamp: 51:10"]