

# Synapse Pro — MT5 Listener

## MT5 Expert Advisor — Setup Guide

JAO Consulting LLC · v1.00

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### 1 Prerequisites

Before installing the EA, confirm the following:

- ✓ MT5 build 2361 or newer (Help → About in MT5)
- ✓ A demo or live MT5 account with the broker of your choice
- ✓ Your Synapse **ListenerId** and **ListenerApiKey** — provided after purchase
- ✓ The **TraderId** of the trader you want to follow — provided after purchase

### 2 Installing the EA File

#### Step 1 Open the MQL5 Data Folder

In MetaTrader 5: click **File** → **Open Data Folder**. A Windows Explorer window opens at MT5's data directory.

#### Step 2 Copy the EA file

Navigate into **MQL5** → **Experts**. Copy **jao\_mt5\_listener.mq5** into this folder.

#### Step 3 Compile the EA

In MT5, open the Navigator panel (Ctrl+N). Right-click **Expert Advisors** → **Refresh**. Double-click **jao\_mt5\_listener** to open it in MetaEditor. Press **F7** to compile. Confirm **0 errors** in the Toolbox panel.

■ *If you see compile errors, make sure your MT5 build is 2361 or newer. Go to Help → Check for Updates.*

### 3 Configuring MT5 Permissions

The EA uses MT5's built-in Socket API to connect to the Synapse server. Two settings are required.

#### 3.1 Enable Algorithmic Trading

##### Step 1 Open Options

Go to **Tools** → **Options** (or press Ctrl+O).

##### Step 2 Expert Advisors tab

Check ✓ **Allow algorithmic trading**. Also check ✓ **Allow DLL imports**. Click OK.

##### Step 3 Enable on the toolbar

Ensure the **Auto Trading** button in the main toolbar is green/active. If it is grey, click it once.

■ *These settings persist between MT5 restarts. You only need to do this once.*

### 3.2 Whitelist the Server URL

MT5 blocks outbound socket connections unless the host is explicitly allowed.

#### Step 1 Open Options → Expert Advisors tab

Go to **Tools** → **Options** → **Expert Advisors**.

#### Step 2 Add the server URL

Check  **Allow WebRequest for listed URLs**. Click the green + button and add:

```
https://synapse-trading.link
```

```
http://synapse-trading.link
```

Click OK.

■ *The URL must match exactly. If connecting via IP directly, add http://32.194.21.43:8000 instead.*

## 4 Attaching and Configuring the EA

#### Step 1 Open a chart

Open any chart in MT5. The symbol and timeframe do not affect the EA's behaviour — it runs on a timer, not price ticks.

#### Step 2 Drag the EA onto the chart

In the Navigator panel, expand **Expert Advisors**. Drag **jao\_mt5\_listener** onto the chart, or double-click it. The EA Properties dialog opens.

#### Step 3 Common tab

Check  **Allow live trading** and  **Allow DLL imports**.

#### Step 4 Inputs tab — fill in your settings

See the Input Reference table below for all available settings.

#### Step 5 Click OK

A smiley face icon appears on the chart when the EA is running. Check the **Experts log** tab for a connection confirmation.

## 5 Input Reference

All fields below are required.

Input	Description	Example
ListenerId	Your listener account user_id — provided after purchase.	joe_mt5
ListenerApiKey	Your listener API key — keep this secret.	sk_abc123...
TraderId	The user_id of the trader you want to follow — provided after purchase.	joe_nt
SymbolMapping	Maps NT8 instrument names to MT5 symbols. Format: NT8name=MT5name, comma-separated for multiple.	MNQ JUN26=MNQM25

Input	Description	Example
LotMultiplier	Scale factor for position size. 1.0 = full size, 0.5 = half size, 2.0 = double.	1.0
LotPerContract	How many MT5 lots equal 1 NT8 contract.	1.0
Slippage	Maximum allowed slippage in points.	10
EnableTrading	Master on/off switch. Set false to receive signals without executing trades.	true
LogVerbose	Set true to log every received WebSocket frame (useful for debugging).	false

## 6 Symbol Mapping

NinjaTrader and MetaTrader 5 use different names for the same instrument. The **SymbolMapping** input tells the EA how to translate between them.

Format:

```
NT8name=MT5name ,NT8name2=MT5name2
```

NT8 Instrument	MT5 Symbol	Notes
MNQ JUN26	MNQM25	Micro Nasdaq futures
ES SEP26	ESU26	E-mini S&P 500 futures
NQ SEP26,ES SEP26	NQU26,ESU26	Multiple symbols

■ The MT5 symbol must be visible in your Market Watch. Right-click Market Watch → Show All, or search for the symbol and add it manually.

## 7 Verifying the Connection

After attaching the EA, open the **Experts** log tab at the bottom of MT5. You should see lines similar to:

```
[Listener] Id=joe_mt5 | Following=joe_nt | Multiplier=1.0
[Listener] Connecting to synapse-trading.link:8000/ws/joe_mt5
[Listener] Connected as 'joe_mt5' - following 'joe_nt'
```

Once connected, the EA will silently wait for trade signals. Each time the trader opens, adds, reduces, or closes a position you will see a reconcile log entry.

```
[Listener] Signal | MNQ JUN26 → MNQM25 | action=BUY | position=2
[Listener] Reconcile MNQM25 | now=0 → target=2
```

■ If you see 'Read error — reconnecting', the EA will automatically reconnect and resume. No action is needed unless the error persists — in that case check your whitelist and API key.

## 8 Troubleshooting

Error / Symptom	Fix
SocketConnect failed: 4014	The server URL is not whitelisted. Go to Tools → Options → Expert Advisors and add the URL to Allow WebRequest for listed URLs.
TLS handshake failed: 5274	You used wss:// but the server does not have TLS. Change ServerUrl to use ws:// instead.
Upgrade rejected (401 / 1008)	Wrong API key or user_id. Double-check ListenerApiKey and ListenerId match your account exactly.
No mapping for 'MNQ JUN26'	Add the symbol to SymbolMapping input. Format: NT8name=MT5name. The MT5 symbol must also be in your Market Watch.
not enough money (10019)	Insufficient margin. Reduce LotMultiplier or LotPerContract so the position size fits your account balance.
Smiley face is grey / sad	Algorithmic trading is disabled. Click the Auto Trading button in the toolbar, or re-check Tools → Options → Expert Advisors.
Symbol not in Market Watch	Open Market Watch (Ctrl+M), right-click → Show All, or search for the symbol and add it.

## 9 Quick-Start Checklist

- ✓ MT5 build 2361 or newer
- ✓ EA file copied to MQL5/Experts and compiled with 0 errors
- ✓ Tools → Options → Expert Advisors: Allow algorithmic trading
- ✓ Tools → Options → Expert Advisors: Allow DLL imports
- ✓ synapse-trading.link added to WebRequest whitelist
- ✓ Auto Trading button in toolbar is green
- ✓ ListenerId, ListenerApiKey, and TraderId entered correctly
- ✓ SymbolMapping matches your broker's symbol names
- ✓ MT5 symbol visible in Market Watch
- ✓ Experts log shows 'Connected as...' message

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Questions or issues? Email [jaoconsultingfirm@gmail.com](mailto:jaoconsultingfirm@gmail.com)