**Note:** The manufacturer does not officially support this software on Operating systems newer than Windows 7. However, some PCs with Win10 and Win11 will still run the software. See the ADC Community Forum for more information:

https://community.automationdirect.com/s/question/0D5Dp00000WPRm8KAH/fix-for-dm805ai-protune

## QuickStart Guide for ProTuner for DM805-AI

Almost all DM805-AI applications can be configured with the onboard DIP switches and potentiometers. See the AutomationDirect Leadshine Stepper Drives QuickStart Guide and the Leadshine DM805-AI User Manual to get your drive up and running quickly. If your application needs different settings than the DIP switches offer (different PPR, other current settings for your motor, special tuning, etc.) you may need to use the ProTuner for DM805-AI software.

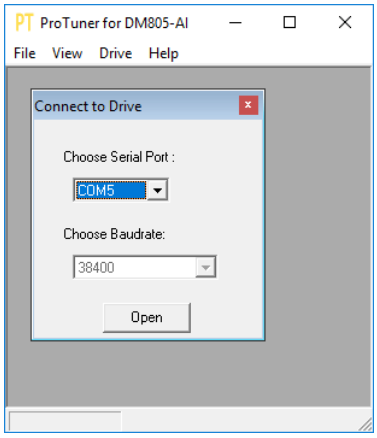
To use the software, download and install ProTuner for DM805-AI from AutomationDirect.Com. The software can be found on the Support page on our website or linked from the DM805-AI Item Page. The software does not install an icon on the Windows start menu, so go to the install folder (typically C:\Program Files (x86)\Leadshine Technogy Co., Ltd\Pro Tuner DM805-AI) and double-click DM805AI.exe to start the program. The software manual DM805-AIsm_P.pdf (not included in the software install) covers the use of the software very well. Download that PDF separately from AutomationDirect.Com.

Here are some tips on using the most commonly-used features of the software. For a full explanation of how to use all the features of the software, please download the software manual DM805-AIsm_P.pdf.

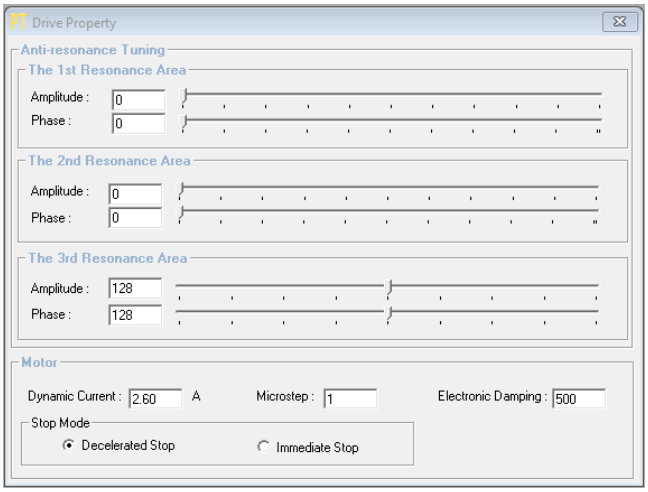
## CONNECT TO THE DRIVE

The following sequence is required to properly connect to the drive. If your PC does not successfully connect to the drive, repeat this sequence in the correct order.

1) Ensure power to the stepper drive is OFF.
2) Ensure that ProTuner for DM805-AI is NOT running.
3) Install a USB to RS232 comm adapter on your PC (USB-RS232 from AutomationDirect works well). You can skip this step if your PC has a built-in RS-232 port.
4) Open Device Manager and make sure the USB adapter has no errors/warnings. Verify which COM port the adapter is assigned to (needed in step 8).
5) Connect cable 1.4.4-0609505-B3 to the USB adapter and to the DM-805-AI drive.
   **Do not connect/disconnect the serial cable with power connected to the drive.**
6) Power up the stepper drive. Ensure the green LED is ON.
7) Start the ProTuner for DM805-AI software.
8) Choose the correct COM Port from step 4. The baud rate is fixed at 38400. Click Open to connect to the drive.




## DRIVE PROPERTY Screen



**Anti-Resonance**

If vibration/resonance is a problem with your application, you may need to adjust the **Anti-Resonance** filters. See the Software User Manual for typical values for the **Amplitude** and **Phase** settings. Note that the **Anti-Resonance** slider bars take effect immediately when moved.

**Dynamic Current and Microstep**

The **Dynamic Current** and **Microstep** settings are usually set by DIP switches on the drive. If you need other settings that are not listed on the drive, set the DIP switches for that setting to the "Default" selection. This allows the software to set the value.

Set DIP switches SW1, SW2, and SW3 = OFF to allow the software to set **Dynamic Current**:

Current Table (Peak=RMS×1.4)

| Peak | RMS | SW1 | SW2 | SW3 |
|---|---|---|---|---|
| Default | | off | off | off |
| 2.6A | 1.8A | on | off | off |
| 3.4A | 2.4A | off | on | off |
| 4.0A | 2.8A | on | on | off |
| 4.8A | 3.4A | off | off | on |
| 5.4A | 3.8A | on | off | on |
| 6.1A | 4.3A | off | on | on |
| 7.0A | 5.0A | on | on | on |

Set DIP switches SW5 and SW6 = ON to allow the software to set **Pulses/Revolution**:

Pulses/Revolution(PUL/DIR mode)

| Pul/rev | SW5 | SW6 |
|---|---|---|
| Default | on | on |
| 400 | off | on |
| 1600 | on | off |
| 12800 | off | off |

Mode Table

| Mode | SW7 | SW8 |
|---|---|---|
| 0~5V Speed | on | on |
| Lo/Hi Speed | off | on |
| External POT | on | off |
| Pulse/Direction | off | off |

SW7 and SW8 must both be OFF (Mode = Pulse/Direction) for the software to allow entries in the **Microstep** field. After typing in the number, you must press ENTER for the **Dynamic Current**, **Microstep**, and **Electronic Damping** settings to take effect.

The **Microstep** field represents the number of microsteps between each full motor step (based on a standard stepper motor with 200 steps per revolution). Example: a value of 1 = 200 steps per motor revolution (full step), a value of 2 = 400 steps per rev (half-step), a value of 4 = 800 steps per rev, a value of 8 = 1600 steps per rev, etc..

See the Software User Manual DM805-AIsm_P for complete information on using ProTuner for DM805-AI.