

# MOTOZA PERFORMANCE SUITE 2.0T USER MANUAL



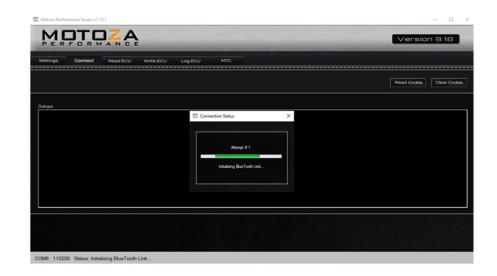


## **SETTINGS**

Before getting started, Windows 10 and 11 users should ensure COM ports are mounted. Instructions are found at: https://motozaperformance.com/mounting-com-ports-in-windows/

The "Settings" tab controls how the Motoza PS interface will communicate with your vehicle's ECU. Before Motoza PS can connect to your vehicle, the settings tab needs to be configured. In most cases, this can be done using the "Auto-detect" feature.

The software will scan through the available ports for a few seconds and should return with the message, "Interface found." Once the interface has been found, click "Save".



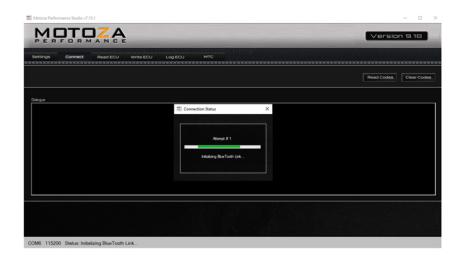
The settings are now saved and this process does not need to be repeated the next time Motoza PS is used. If Auto Detect cannot find the interface, please refer to the troubleshooting guide or contact us.

# **QUICK TIP**

An option for connection type can also be found under interface settings. The default connection type of automatic works well with most vehicles. In some cases, it may be necessary to manually select a connection type to improve connection with the ECU.



## CONNECT



Connect establishes a direct connection between your Windows device and the vehicle's ECU. Clicking "Connect" launches the connection dialog which gives a brief description of the connection status while making a maximum of 5 attempts to connect with a supported ECU.

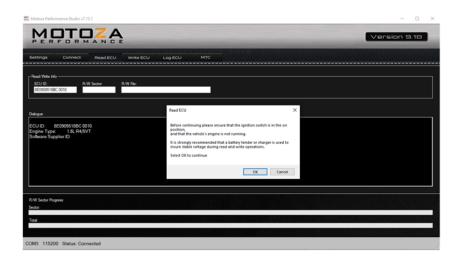
Once a connection is established with the ECU, the connection tab will display your ECU ID, the engine type, and software supplier if applicable.

## **QUICK TIP**

Diagnostic features are available on the connect tab. "Read Codes" retrieves all fault codes from the ECU and displays them with a brief description. "Clear Codes resets the fault codes; clearing codes also has the effect of resetting adaptation channels and readiness monitors.



#### **READ ECU**



Reading the ECU uploads a complete copy of the ECU's operating system to your PC. The ECU can only be read with the key ON and engine OFF. The initial read of the ECU is a longer process than writing new files to the ECU. The software will read each sector of the ECU.

When complete, the user is prompted to save the readout. This file will be saved with the extension .mtz. This initial file may be written back to the ECU if at any time the vehicle needs to be returned to stock.

# **QUICK TIP**

Upload your saved .mtz file to http://members.motozaperformance.com to initiate the tuning process. The member site will automatically email us and we will schedule your tune. Once scheduled, you'll receive an email confirming your initial tune setup.

Typically, you will not need to repeat the ECU read.





# **WRITE ECU**

#### Writing the ECU is the most sensitive operation performed with Motoza PS.

Special care should be taken when writing the ECU to ensure that the vehicle's battery is in good condition and accessories which can cause unstable voltage, (such as audio equipment), should be turned off. We strongly recommend the use of a **battery tender** (not a battery charger), when writing the ECU to ensure stable voltage. We recommend 1 to 3 amps as the setting for your battery tender.

The write process is similar to the read process. The ECU can only be written with the key ON and engine OFF. The write function is performed much faster than the read function as only sectors of the ECU which have been changed will be written.

When the writing process begins, the user will be prompted to select the file to be written. **Files must be of the .mtz format**. By default, Motoza PS will look for files in **C:\Motoza PS\My ECU**. You may store files in any directory on your computer that you wish, but you will need to point the software to the directory you have chosen.

Once a file is selected, the software will begin transferring the file to the ECU. During this process a series of progress bars will report the status of the transfer. When finished, the user will receive an "ECU Write Successful" message and be prompted to switch the ignition to the OFF position. Wait for at least 5 seconds before switching the key back on and starting the engine.

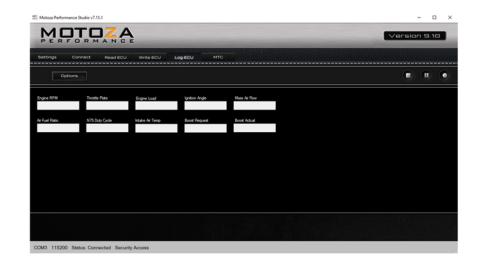


# **LOG ECU**

The Log ECU tab allows users to easily send files to Motoza for review. Additionally, it can be used to view various sets of data from the ECU. Use the drop-down menu to select the data set to be displayed while logging. Regardless of the data set selected, all data will be recorded in the log.

To begin logging, click the record button at the top right of the screen.

A file dialog is opened after clicking record. Enter a filename and click OK. Your file will be saved as a .csv file. The software will then setup the high speed session and begin logging.



To end your logging session, click stop. Sessions may also be paused and resumed by clicking the pause button.

Once completed, this file type is viewable as a spreadsheet in programs such as Microsoft Excel or Google Docs. All units are metric.

## **QUICK TIP**

Before recording a data log after installing a tune, 20 minutes of normal driving is suggested to allow the ECU to adapt.

After this period, we suggest logging for 15 minutes or so. Ideally a log will include, idle, throttle, acceleration and deceleration. If it is safe to do so, a hard pull in 3rd gear to redline is helpful.



# **OPTIONAL FEATURES**

#### MTC (MULTI-TUNE CONTROL)

The MTC feature retrieves a list of available tunes from the ECU and displays a brief description of each. The current tune will be highlighted. There are 4 calibrations in an MTC file, select the one you want to use and press Save to switch to it immediately.

Generally, each tune in the MTC has progressively more ignition and boost.

Unless purchased separately, the MTC tab will not be selectable.



- -We recommend switching octanes when the fuel tank is 1/8 full or less.
- -For safety, you cannot switch tunes while the vehicle is in motion, but you can switch with the engine running.
- -Once a selection is made, it will stay selected when you switch the car on and off. After flashing the ECU, the MTC will return to the tune in the first position on the list. (You may notice lower timing and boost). You can switch to the appropriate selection immediately after flashing. If you disconnect the battery, the MTC will return to the tune in the first position.

## **QUICK TIP**

Water methanol may be added to any fuel map or as a separate map based on your preference.
We suggest taking your cable and laptop to the pump with you when switching fuels so that you may select the appropriate fuel after filling up, particularly when switching to or from E85.