



EcuTek Setup for Fast Flash and/or Remote Tuning

Welcome and thank you for purchasing your EcuTek from the leading GT-R, 370Z, Q50/60 and Nissan Z Performance Tuning shop – AAM Competition, LLC.

SECTION 1 – ECUTEK APP AND PHONEFLASH

1. ECU Connect with PhoneFlash: Getting started guide: <https://youtu.be/SumpSU76kbg>
2. ECU Connect with PhoneFlash: Set up an account and tuner: https://youtu.be/io9DNMfN_0A
3. Once you upload your vehicles information to EcuTek, we will receive your vehicles information and your vehicles ROM File name, and we can now create your new upgraded ROM File (this generally takes 48 to 72 hours). ROM stands for Rear Only Memory and these read only files are the actual hard-coded instruction sets used by EcuTek and the car's ECU to run the engine. It is common for people to call ROM Files the following: *Maps, Tunes, Calibrations, Flash, etc.* These are all different names for the same thing – the ROM File. The ROM File is made up of hundreds of *Maps*, which is essentially the computer software that contains all the *Calibrations* that run the engine. We *Tune* or make changes to these maps to increase efficiency and better run the engine. Now we get to Flash or Flashing. Flashing is when you use the EcuTek ProECU software to exchange information between your laptop and your vehicles ECU. When you Flash your ECU you are overwriting the factory ROM File with a new ROM File that contains all of the improvements that AAM Competition, LLC has created to increase the efficiency of your vehicle and make better use of how the ECU commands the engines mechanical components. This allows us to create more power, add new improved features, add better safety mechanisms, improve running commands and in some cases even increased fuel efficiency. Basically, culminating in what most people refer to as a “tuned” engine.

SECTION 2 – PROGRAMMING THE ROM FILE USING PHONEFLASH

Installation to your vehicle is simple and takes approx. 3 minutes. Please make sure your battery is fully charged and all accessories (headlights, air conditioning, radio) are turned off. If you have not driven your vehicle in a while please drive your vehicle above 1,500rpm for fifteen minutes to charge your vehicle's battery.

1. Hook the supplied OBD-II cable to your vehicles diagnostic port. The diagnostic port is located above where your left or right knee is when you are sitting in your driver's seat. The OBD-II cable will only install one way into your vehicles diagnostic port, so you cannot improperly plug it in.
2. Without touching any foot pedals (so that the engine does not turn on) push the Start button once to get the vehicle in the “ON” key position (as opposed to just the ACC or accessory position). Make sure all accessories are turned off (ie. Headlights, air conditioning, radio, etc.)
3. ECU Connect with PhoneFlash: How to program your vehicle and recover your ECU if programming fails or is interrupted: <https://youtu.be/9qU7fj7T-wE>

NOTE: DO NOT INTERRUPT THE ECUTEK WHILE INSTALLING OR CHANGING MAPS. MAKE SURE YOUR CELL PHONE BATTERY IS FULLY CHARGED. AT NO POINT DURING THIS PROCESS WILL YOU BE STARTING YOUR ENGINE. THE BEST WAY TO AVOID ANY ACCIDENTAL ENGINE STARTING IS TO KEEP YOU FEET OFF ALL FOOT PEDALS WHILE YOU ARE LINKED TO THE OBD-II PORT. IF INTERRUPTED ECU MAY BECOME LOCKED AND THE RECOVERY PROCESS WILL HAVE TO BE DONE!

Once completed, follow the EcuTek prompts that will ask you to cycle the key to clear the check engine light. If you skip this operation by accident don't worry; you can easily reset the codes with the EcuTek Vehicle DTC Tool option in the EcuTek program. Your vehicle is now running with its new AAM Competition, LLC ROM File! For most applications your vehicle will now be running exceptionally well with all the added power, benefits and features of the new programming.

SECTION 4 – DATA LOGGING (OPTIONAL FOR MOST APPLICATION)

1. Select **Data logging** in the EcuTek App
2. The Data Log screen will already have pre-set the parameters needed:
 - Standard Default Parameters (leave as is – no need to select or deselect any parameters)
 - If you have a Nissan 370Z or Infiniti G37, please select two additional parameters of Custom Map F Interim and Custom Map G Interim
 - a. If you have the optional AAMC/EcuTek Boost Control Solenoid Kit, please select the following
 - i. Boost Error
 - ii. Boost Target
 - iii. WG Duty Final
 - If you have a Nissan GT-R, please deselect all parameters except for these:
 - Accelerator Pedal Sensor #1 (%)
 - AFR B1 (afr)
 - AFR B2 (afr)
 - AFR Target Base (afr)
 - AFR Target Final B1 (afr)
 - AFR Target Final B2 (afr)

Boost Bank 1 (psi)
Boost Bank 2 (psi)
Boost Target (psi)
CSP Flags
Engine Load (%)
Engine Oil Pressure (psi)
Engine Speed (rpm)
Failsafe Flags
Failsafe Stored Flags
FlexFuel Ethanol Content (%)
Fuel Temperature (°F)
Fuel Trim Combined (%)
Fuel Trim Long Term Bank #1 (%)
Fuel Trim Long Term Bank #2 (%)
Fuel Trim Short Term Bank #1 (%)
Fuel Trim Short Term Bank #2 (%)
Gear (gear)
Ignition Timing (°)
Injector Duty B1 (%)
Injector Pulse Width Bank #1 (ms)
Intake Air Temperature (°F)
Knock Correction (°)
Manifold Absolute Pressure (psi)
Manifold Gauge Pressure (psi)
Mapswitch Mode
Mass Airflow Sensor Bank #1 (V)
Mass Airflow Sensor Bank #2 (V)
MIL Source
RBC Maximum Desired Boost (psi)
Throttle Angle Bank #1
Vehicle Speed (mph)
Wastegate Duty (%)

3. You should now see the Live Data Parameters units changing on the screen (this indicates that you have a live connection)
4. To datalog select **Start**
5. Safely make a third gear (in manual mode) full throttle run from **2,000rpm to 7,000rpm**
6. To finish datalog select **Stop**
7. Repeat **Step 4-6** one additional time
8. Submit the two datalogs to AAM Competition through the EcuTek cloud.

If your car is equipped with larger injectors, follow these steps instead:

1. To datalog select **Start**
2. Take a datalog at idle (engine already warmed up) for one minute
3. To finish this datalog select **Stop**
4. Take a part throttle datalog in 3rd gear from 1,500rpm to 5,000rpm (do not run any boost, part throttle = 0 boost)
5. To finish this datalog select **Stop**
If everything is running smoothly proceed to step 6 below. If car is not running smoothly submit the two datalogs to AAM Competition through the EcuTek cloud.
6. Safely make a 3rd gear (in manual mode) full throttle run from 2,000rpm to 7,000rpm
7. To finish this datalog select **Stop**
8. Submit the datalogs to AAM Competition through the EcuTek cloud.

NOTE: WE SUGGEST A TRACK SETTING TO PERFORM THE DATALOGGING. NEVER DRIVE RECKLESSLY OR EXCEED POSTED SPEED LIMITS ON PUBLIC ROADS.

SECTION 5 – RETRIEVING DATALOGS

1. The datalog is automatically saved to your phone
2. To retrieve the datalog, go to the main ECUTEK APP screen and select **My Files**
3. Click on **Data logs**
4. Select the datalogs and email the datalogs to mikem@aamcompetition.com

If you have any questions, please e-mail mikem@aamcompetition.com or call 301-497-9212.

*** All Products Sold for Off-Road Racing Use Only***