



1. download ecutek software <http://www.ecutek.com/Support/Downloads>
2. you can choose query ecu to connect/confirm your ecu
3. program ecu and choose the engine calibration file. To flash the TCM must select TCM program, not ECM program. will take some time to flash. suggest use battery charger. as usual make sure climate control/lights off
4. In TCM tools after flashing both ecm and tcm files go to TCM tools and perform a gear relearn if tcm is 75'c

boost controller

<http://www.ecutek.com/Products/ProECU-Tuning-Suites/Nissan-Tuning-Suites/Nissan-GTR/RaceROM/RaceROM-Boost-Controller.aspx>

how to map switch

<http://www.ecutek.com/Products/ProECU-Tuning-Suites/Nissan-Tuning-Suites/Nissan-GTR/RaceROM/Map-Switching.aspx>

launch control

<http://www.ecutek.com/Products/ProECU-Tuning-Suites/Nissan-Tuning-Suites/Nissan-GTR/RaceROM/Launch-Control.aspx>

live logging

<http://www.ecutek.com/Products/ProECU-Tuning-Suites/Nissan-Tuning-Suites/Nissan-GTR/RaceROM/Extra-Parameter-Logging.aspx>

How to datalog-

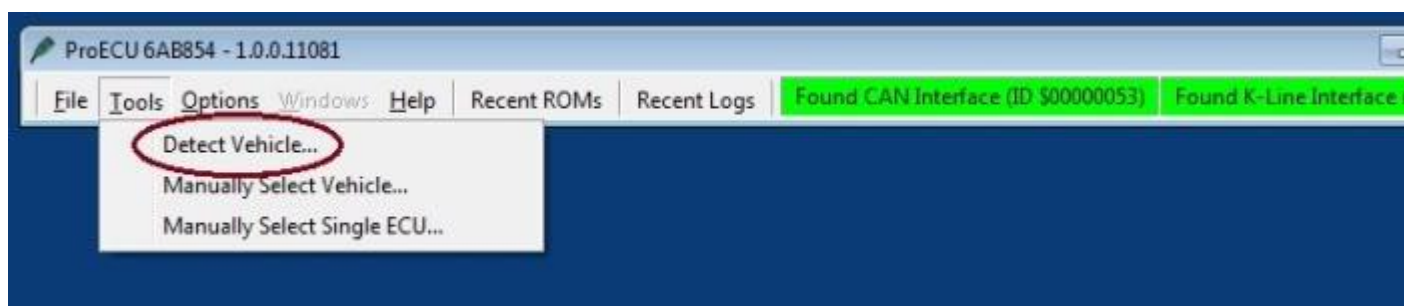
### Here's what you will need:

- Windows-based laptop with two USB ports
- DES Key (dongle) plugged into USB port
- EcuTek cable plugged into OBDII port and USB port
- A copy of the ECU tuning file from your tuner on the laptop
- EcuTek ProECU installed on the laptop

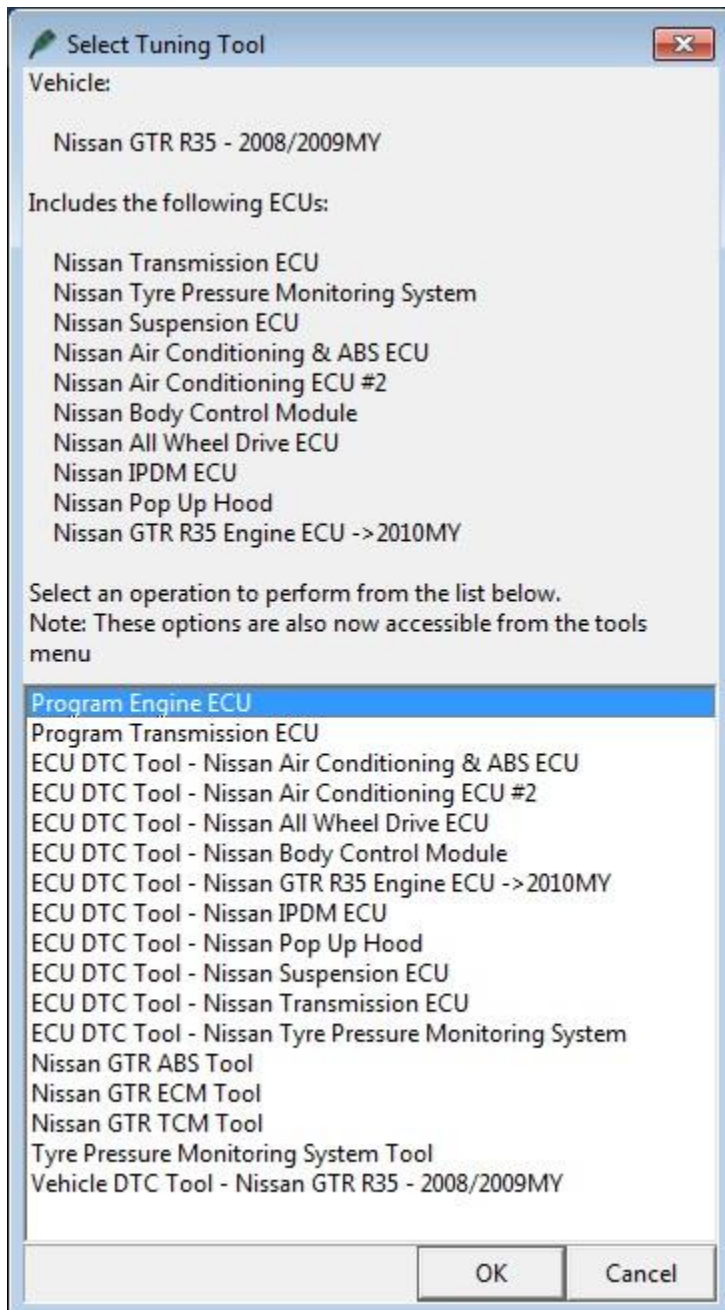
**STEP 0. After installing EcuTek ProECU and plugging both the dongle and cable into your laptop, turn your car ON. You can do this either by starting the car or by pressing the Start button on the car twice with your foot OFF the brake. Then start the ProECU application on your laptop.**

**NOTE: Steps 1-5 only need to be completed the FIRST time you datalog. After that you can skip directly to STEP 6.**

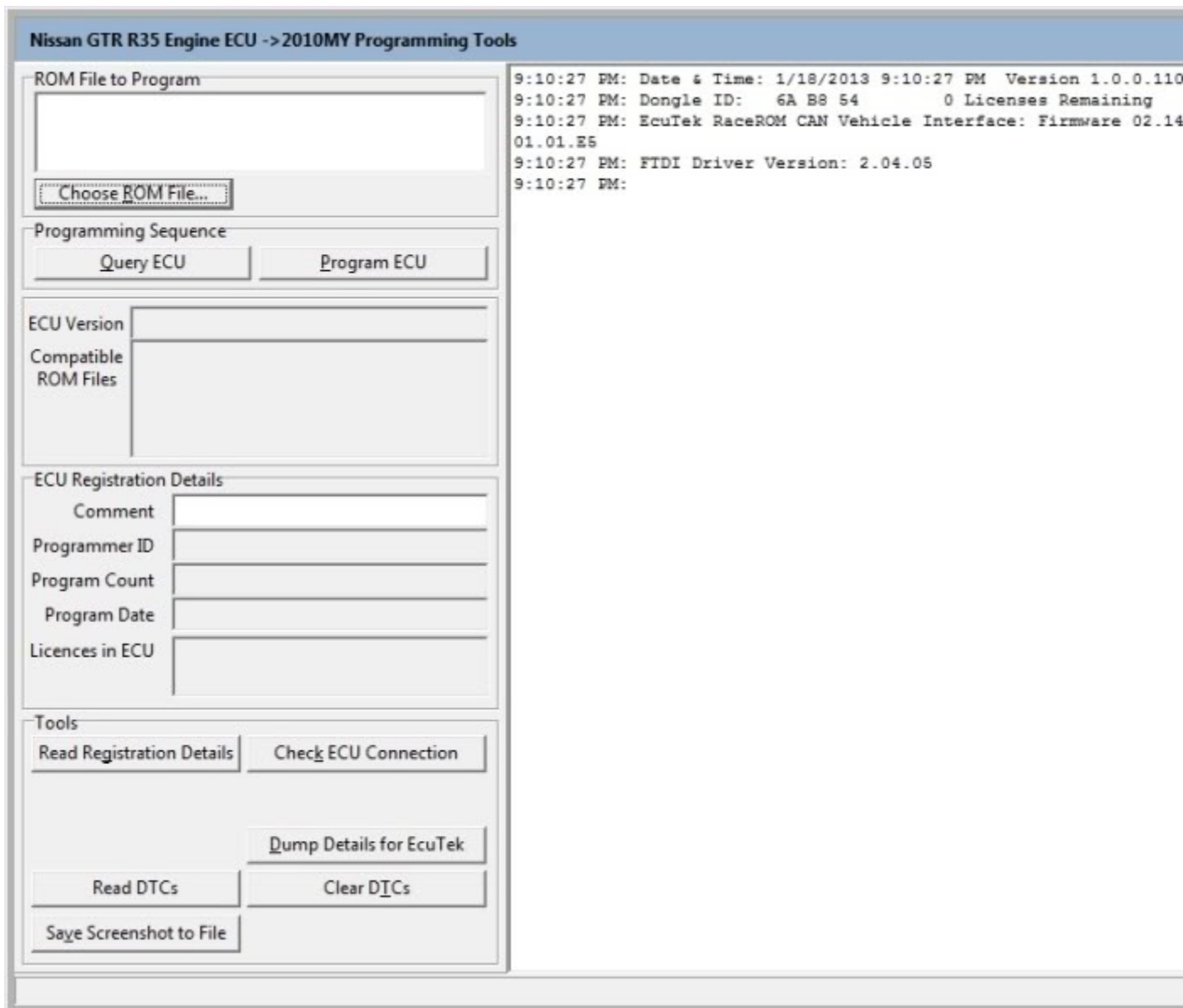
**STEP 1. and choose Detect Vehicle from the Tools menu:**



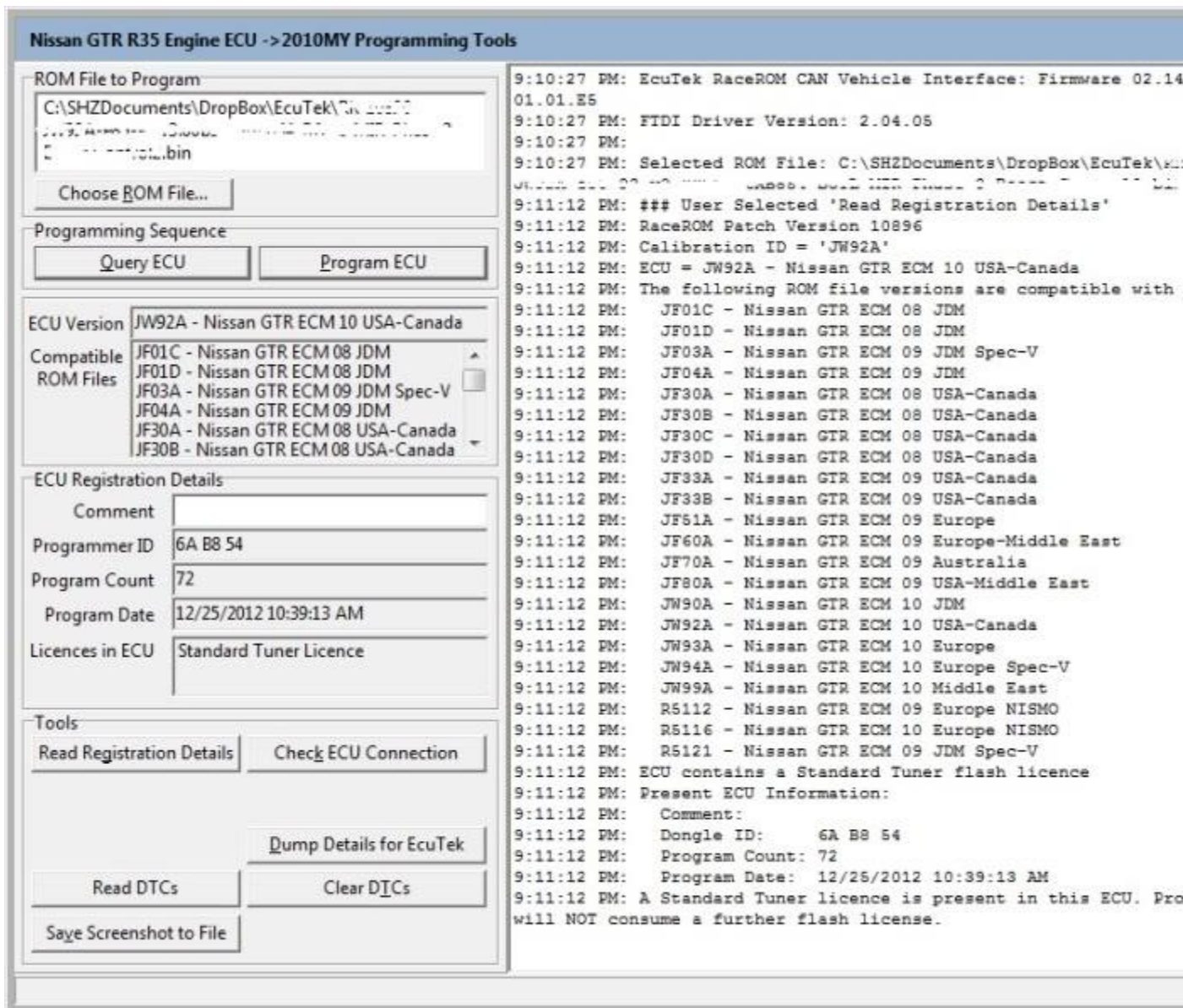
**STEP 2. After the vehicle has been detected, you will see the list of options below. Choose Program Engine ECU and click OK.**



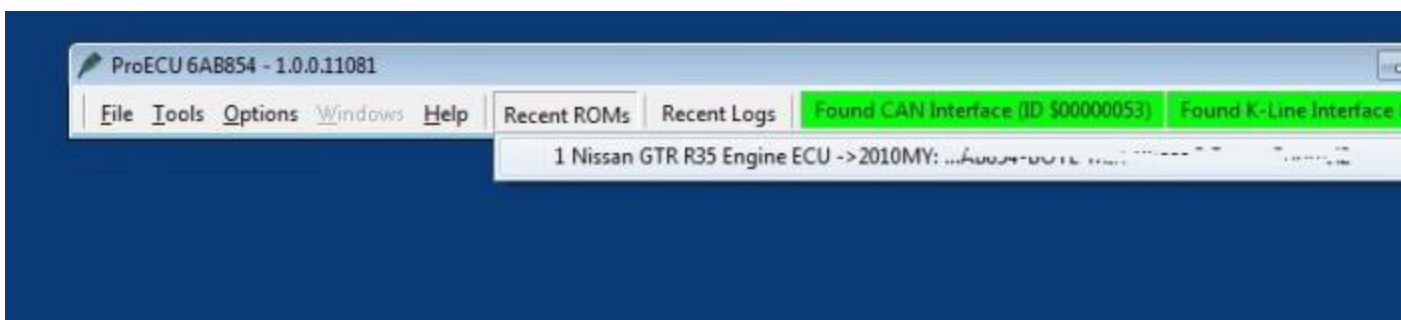
**STEP 3. A screen will appear like the one shown below. At this point, you need to click the Choose ROM File button and select the ECU tune file (it has .bin extension) supplied by your tuner.**



**STEP 4.** After you have selected the tune file, click the Query ECU button. The screen will update similar to the image below. After it does, click the Close button.

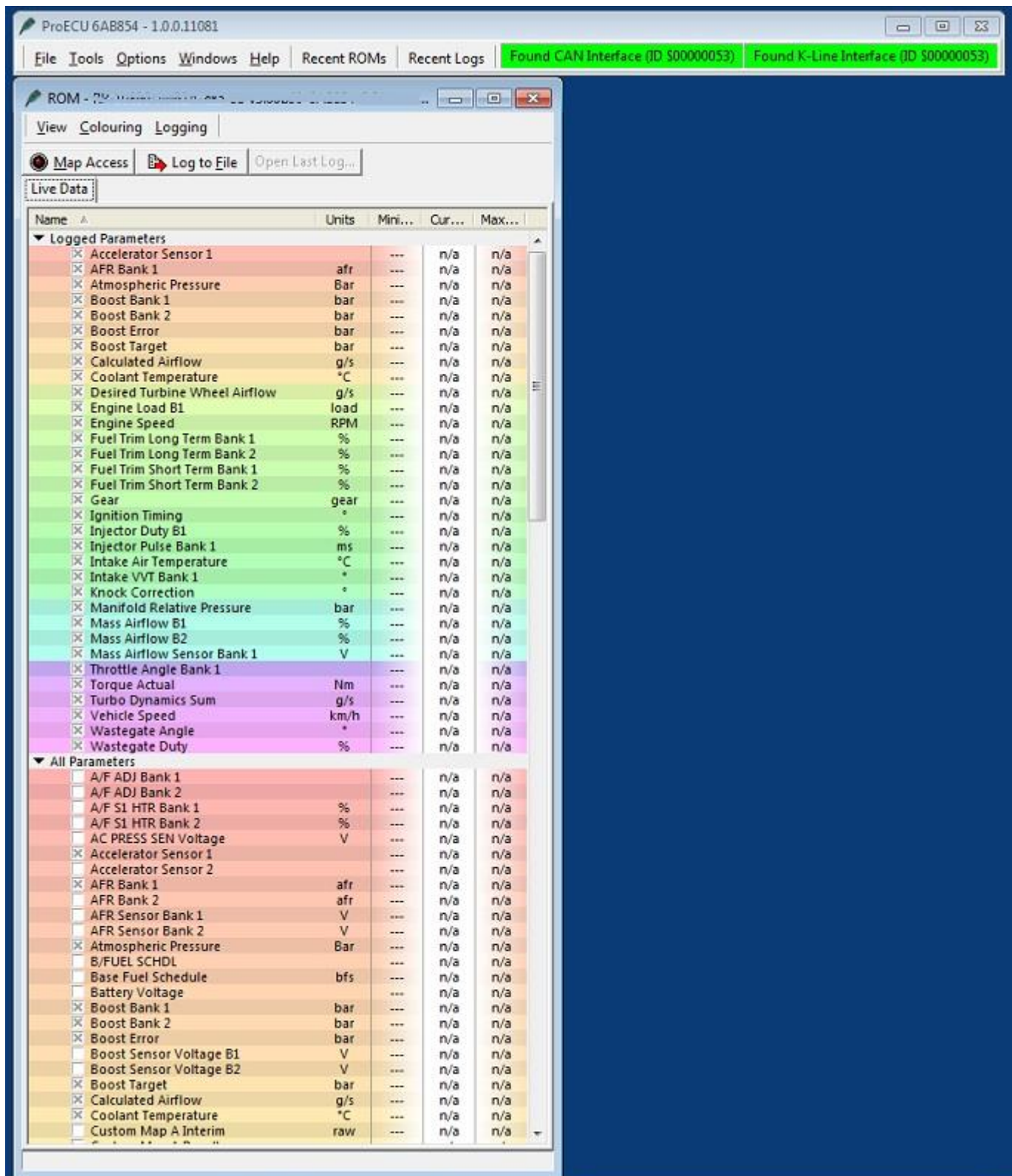


**STEP 5. When you click close, the ECU Programming Tools screen will disappear. You must then select Recent ROMs and choose the top item in the list, as shown below:**



**STEP 6: When you choose the top item from the Recent ROMS**

menu, a data logging window will appear like this. Click the Map Access button to begin reading live data.



**STEP 7.** The car is not yet storing the data to a file, but you can now see the live data along with a blue scrolling bar at the bottom

**of the screen letting you know that live data mode is enabled (see below). At this point, you are ready to data log as soon as you press Log to File.**

ROM - Win 2000 3102A [...]

View Colouring Logging

Map Access Log to File Open Last Log...

Live Data

Name	Units	Mini...	Cur...	Max...
▼ Logged Parameters				
<input checked="" type="checkbox"/> Accelerator Sensor 1		15.40	15.50	15.50
<input checked="" type="checkbox"/> AFR Bank 1	afr	14.7	14.7	14.7
<input checked="" type="checkbox"/> Atmospheric Pressure	Bar	0.99	0.99	0.99
<input checked="" type="checkbox"/> Boost Bank 1	bar	0.01	0.01	0.01
<input checked="" type="checkbox"/> Boost Bank 2	bar	0.00	0.00	0.00
<input checked="" type="checkbox"/> Boost Error	bar	0.01	0.01	0.01
<input checked="" type="checkbox"/> Boost Target	bar	-0.01	-0.01	-0.01
<input checked="" type="checkbox"/> Calculated Airflow	g/s	0.00	0.00	0.00
<input checked="" type="checkbox"/> Coolant Temperature	°C	61.00	61.00	61.00
<input checked="" type="checkbox"/> Desired Turbine Wheel Airflow	g/s	0	0	0
<input checked="" type="checkbox"/> Engine Load B1	load	31	31	31
<input checked="" type="checkbox"/> Engine Speed	RPM	0.00	0.00	0.00
<input checked="" type="checkbox"/> Fuel Trim Long Term Bank 1	%	100.00	100.00	100.00
<input checked="" type="checkbox"/> Fuel Trim Long Term Bank 2	%	100.00	100.00	100.00
<input checked="" type="checkbox"/> Fuel Trim Short Term Bank 1	%	100.00	100.00	100.00
<input checked="" type="checkbox"/> Fuel Trim Short Term Bank 2	%	100.00	100.00	100.00
<input checked="" type="checkbox"/> Gear	gear	1	1	1
<input checked="" type="checkbox"/> Ignition Timing	°	110.00	110.00	110.00
<input checked="" type="checkbox"/> Injector Duty B1	%	1	1	1
<input checked="" type="checkbox"/> Injector Pulse Bank 1	ms	8.81	8.81	8.83
<input checked="" type="checkbox"/> Intake Air Temperature	°C	53.00	53.00	53.00
<input checked="" type="checkbox"/> Intake VVT Bank 1	°	0.00	0.00	0.00
<input checked="" type="checkbox"/> Knock Correction	°	0	0	0
<input checked="" type="checkbox"/> Manifold Relative Pressure	bar	0.00	0.00	0.00
<input checked="" type="checkbox"/> Mass Airflow B1	%	1.06	1.06	1.06
<input checked="" type="checkbox"/> Mass Airflow B2	%	1.06	1.06	1.06
<input checked="" type="checkbox"/> Mass Airflow Sensor Bank 1	V	0.34	0.34	0.34
<input checked="" type="checkbox"/> Throttle Angle Bank 1		4.00	4.00	4.10
<input checked="" type="checkbox"/> Torque Actual	Nm	194	194	194
<input checked="" type="checkbox"/> Turbo Dynamics Sum	g/s	0	0	0
<input checked="" type="checkbox"/> Vehicle Speed	km/h	0.00	0.00	0.00
<input checked="" type="checkbox"/> Wastegate Angle	°	0.0	0.0	0.0
<input checked="" type="checkbox"/> Wastegate Duty	%	0.00	0.00	0.00
▼ All Parameters				
<input type="checkbox"/> A/F ADJ Bank 1		---	n/a	n/a
<input type="checkbox"/> A/F ADJ Bank 2		---	n/a	n/a
<input type="checkbox"/> A/F S1 HTR Bank 1	%	---	n/a	n/a
<input type="checkbox"/> A/F S1 HTR Bank 2	%	---	n/a	n/a
<input type="checkbox"/> AC PRESS SEN Voltage	V	---	n/a	n/a
<input checked="" type="checkbox"/> Accelerator Sensor 1		15.40	15.50	15.50
<input type="checkbox"/> Accelerator Sensor 2		---	n/a	n/a
<input checked="" type="checkbox"/> AFR Bank 1	afr	14.7	14.7	14.7
<input type="checkbox"/> AFR Bank 2	afr	---	n/a	n/a
<input type="checkbox"/> AFR Sensor Bank 1	V	---	n/a	n/a
<input type="checkbox"/> AFR Sensor Bank 2	V	---	n/a	n/a
<input checked="" type="checkbox"/> Atmospheric Pressure	Bar	0.99	0.99	0.99
<input type="checkbox"/> B/FUEL SCHDL		---	n/a	n/a
<input type="checkbox"/> Base Fuel Schedule	bfs	---	n/a	n/a
<input type="checkbox"/> Battery Voltage		---	n/a	n/a
<input checked="" type="checkbox"/> Boost Bank 1	bar	0.01	0.01	0.01
<input checked="" type="checkbox"/> Boost Bank 2	bar	0.00	0.00	0.00
<input checked="" type="checkbox"/> Boost Error	bar	0.01	0.01	0.01
<input type="checkbox"/> Boost Sensor Voltage B1	V	---	n/a	n/a
<input type="checkbox"/> Boost Sensor Voltage B2	V	---	n/a	n/a
<input checked="" type="checkbox"/> Boost Target	bar	-0.01	-0.01	-0.01
<input checked="" type="checkbox"/> Calculated Airflow	g/s	0.00	0.00	0.00
<input checked="" type="checkbox"/> Coolant Temperature	°C	61.00	61.00	61.00
<input type="checkbox"/> Custom Map A Interim	raw	---	n/a	n/a



**STEP 8. Now the car is logging data to a file. You will see the green scrolling bar at the bottom of the screen (as shown below). When you are finished logging, press the Log to File button again. When you are done viewing the live data, click the Map Access button again to turn OFF live data and then close out of the ProECU application.**

ROM: [unreadable] [unreadable] [unreadable] [unreadable] [unreadable] [unreadable] [unreadable] [unreadable] [unreadable] [unreadable]

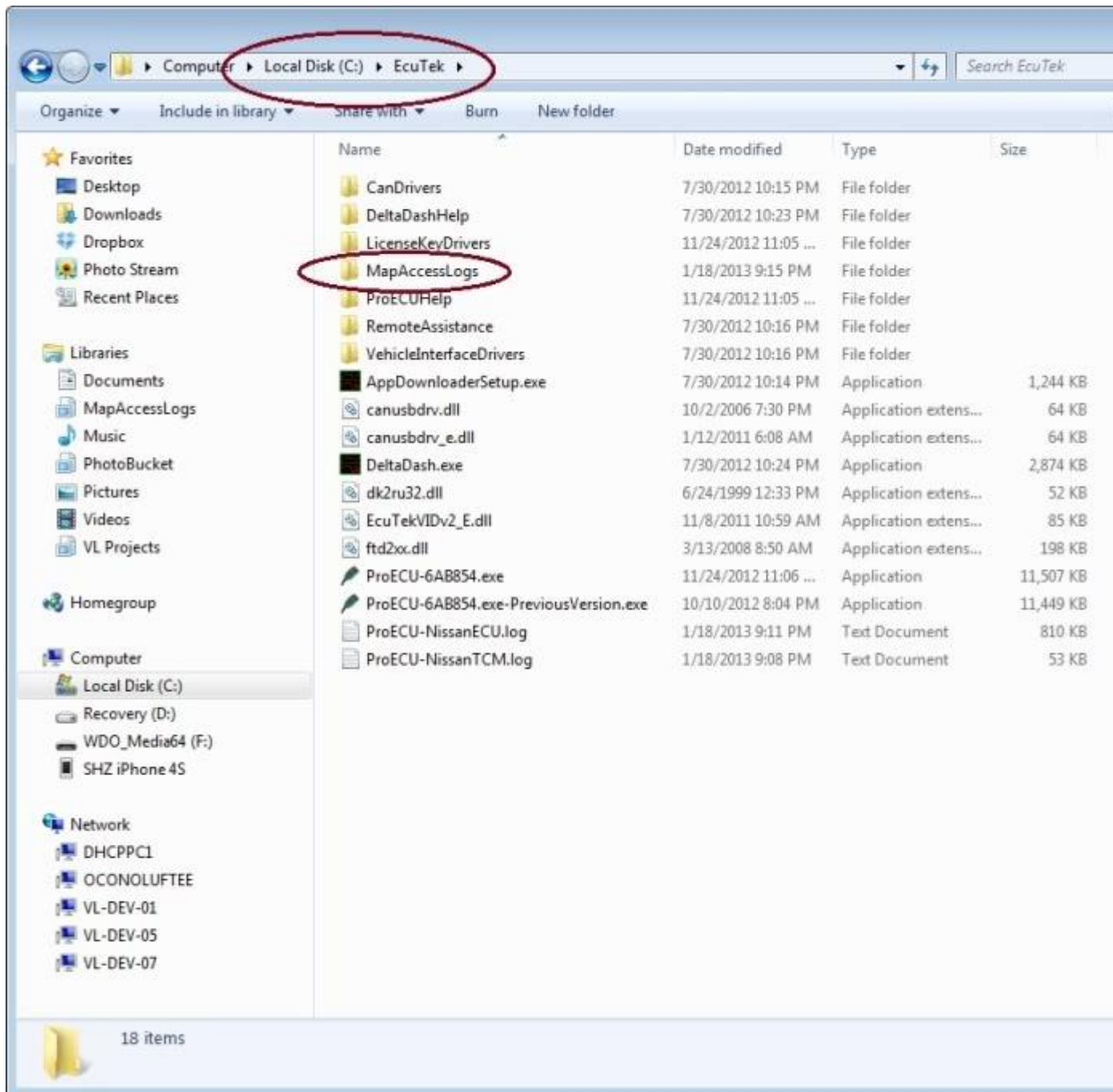
View Colouring Logging

Map Access Log to File Open Last Log...

Live Data

Name	Units	Mini...	Cur...	Max...
<b>▼ Logged Parameters</b>				
Accelerator Sensor 1		15.40	15.50	15.50
AFR Bank 1	afr	14.7	14.7	14.7
Atmospheric Pressure	Bar	0.99	0.99	0.99
Boost Bank 1	bar	0.01	0.01	0.01
Boost Bank 2	bar	0.00	0.00	0.00
Boost Error	bar	0.01	0.01	0.01
Boost Target	bar	-0.01	-0.01	-0.01
Calculated Airflow	g/s	0.00	0.00	0.00
Coolant Temperature	°C	61.00	61.00	61.00
Desired Turbine Wheel Airflow	g/s	0	0	0
Engine Load B1	load	31	31	31
Engine Speed	RPM	0.00	0.00	0.00
Fuel Trim Long Term Bank 1	%	100.00	100.00	100.00
Fuel Trim Long Term Bank 2	%	100.00	100.00	100.00
Fuel Trim Short Term Bank 1	%	100.00	100.00	100.00
Fuel Trim Short Term Bank 2	%	100.00	100.00	100.00
Gear	gear	1	1	1
Ignition Timing	°	110.00	110.00	110.00
Injector Duty B1	%	1	1	1
Injector Pulse Bank 1	ms	8.81	8.83	8.83
Intake Air Temperature	°C	53.00	53.00	53.00
Intake VVT Bank 1	°	0.00	0.00	0.00
Knock Correction	°	0	0	0
Manifold Relative Pressure	bar	0.00	0.00	0.00
Mass Airflow B1	%	1.06	1.06	1.06
Mass Airflow B2	%	1.06	1.06	1.06
Mass Airflow Sensor Bank 1	V	0.34	0.34	0.34
Throttle Angle Bank 1		4.00	4.10	4.10
Torque Actual	Nm	194	194	194
Turbo Dynamics Sum	g/s	0	0	0
Vehicle Speed	km/h	0.00	0.00	0.00
Wastegate Angle	°	0.0	0.0	0.0
Wastegate Duty	%	0.00	0.00	0.00
<b>▼ All Parameters</b>				
A/F ADJ Bank 1		---	n/a	n/a
A/F ADJ Bank 2		---	n/a	n/a
A/F S1 HTR Bank 1	%	---	n/a	n/a
A/F S1 HTR Bank 2	%	---	n/a	n/a
AC PRESS SEN Voltage	V	---	n/a	n/a
Accelerator Sensor 1		15.40	15.50	15.50
Accelerator Sensor 2		---	n/a	n/a
AFR Bank 1	afr	14.7	14.7	14.7
AFR Bank 2	afr	---	n/a	n/a
AFR Sensor Bank 1	V	---	n/a	n/a
AFR Sensor Bank 2	V	---	n/a	n/a
Atmospheric Pressure	Bar	0.99	0.99	0.99
B/FUEL SCHDL		---	n/a	n/a
Base Fuel Schedule	bfs	---	n/a	n/a
Battery Voltage		---	n/a	n/a
Boost Bank 1	bar	0.01	0.01	0.01
Boost Bank 2	bar	0.00	0.00	0.00
Boost Error	bar	0.01	0.01	0.01
Boost Sensor Voltage B1	V	---	n/a	n/a
Boost Sensor Voltage B2	V	---	n/a	n/a
Boost Target	bar	-0.01	-0.01	-0.01
Calculated Airflow	g/s	0.00	0.00	0.00
Coolant Temperature	°C	61.00	61.00	61.00
Custom Map A Interim	raw	---	n/a	n/a

**STEP 9. When you are ready to view the log or to send it to your tuner, you will find the log files in the following folder:**



Remember-

1. Please do not do multiply datalogs, we only need ONE datalog of idle/cruise/wot

2. please keep all communication to email and not via facebook/whatsapp

3. use a battery charge while flashing first time. and dont flash miles away from home/safe place if its risky battery will go flat

### **RaceROM Map Switch and Boost Control**

Changing the engine Maps and Boost control is made very straight forward using ECUTEK's latest RACEROM features.

We have various map setups our power packs, best to check with us first

#### **Pump gas maps-**

Map 1 91oct (U.S) / 95ron (Euro)

Map 2 93oct (U.S) / 98-99ron (euro)

We can also add in additional map selections such as race fuel, 100oct, lower octane fuels, toluene, methanol mixes etc

#### **Ethanol non flex fuel kit**

**If running upgraded fuel pumps with larger enough injectors and have supply of ethanol -**

Map 1 91oct (U.S) / 95ron (Euro)

Map 2 93oct (U.S) / 98-99ron (euro)

Map 3 E70

Map 4 E85

## **Ethanol flex fuel kit**

**If running upgraded fuel pumps with larger enough injectors and have supply of ethanol -**

Map 1 Automatic 91-ethanol

Map 2 Automatic 93-ethanol

To switch between the modes the driver just needs to hold down the Cancel Button on the steering wheel for 1 second with the engine running. To confirm the switching of the maps the Engine Coolant Display on the MFD will change to display which Map the car is set to before reverting back to the normal coolant temp after 5 seconds.

After holding down the cancel button the driver can adjust the Map number by pressing the Cruise Control Accel and Coast switch on the steering wheel controls to move up and down the maps. To confirm the map selection just press cancel again.

To adjust the boost within each of the modes you need to have the engine running, the Multi Function Display (MFD) showing the boost gauge (large or small) and have the Cruise Control switched off. Using the Cruise control Accel switch the driver is able move the Target Boost on the MFD between our pre-set upper and lower limits. When you press the Cruise Control is switched on the steering wheel controls revert back to the original function.

The Race Rom software will remember the settings the driver has assigned for all modes i.e if the engine is in map 99 at 1.2 bar then switched off and restarted later it will still be in the same setting.

### **Map 1 91/95 Octane Mode**

- This changes the MFD Coolant gauge display to 91/95
- This mode is designed for day to day driving and improves fuel consumption on normal unleaded fuel. It is always best to run the GTR on Super unleaded where possible but this map will ensure that the ECU does not have to make too many adjustments.

- 95 Octane Mode Boost is adjustable between 0.5 and 1 bar (7psi - 14psi)
- Special Features enabled are: Boost Off The Line and advance Linney Traction when suspension is in R- Mode

## **Map 2 93/97 Octane Mode**

- This changes the MFD Coolant gauge display to 93/97
- Fuel, Ignition, Variable Valve timing and boost control has been optimised for 97 Octane Fuel.
- 97 Octane Mode Boost is adjustable between 0.5 and 1.3bar (7psi - 18psi)
- Race mode requires Super unleaded fuel 97 octane or above
- Special Features enabled are: Boost Off The Line and advance Linney Traction when suspension is in R- Mode

**Note: We have designed the multiple fuel maps to give more driver choice and although Nissan's Knock control and engine safety strategies are very good driving the car hard on the wrong Engine map can cause engine damage. Driving the car with 99 octane fuel on the 95 octane mode will cause no damage but driving the car hard on the more aggressive 99 octane map with normal 95 unleaded fuel could cause engine problems.**

### **Special Feature information:**

#### **Boost Off The Line**

BOTL is enabled in all maps and will generate a pre-set level of boost during the Launch mode to help get the car started. This is particularly useful on big turbo cars or cars with additional grip from sticky tyres. There is a balance between using too much Rev's and too much boost during launch, practice and experience will help you find the sweet spot for the car and surface. Remember Launching will take its toll on the drivetrain if used excessively.

#### **Rolling Launch**

This clever feature should only be used in controlled and safe environments as when activated it will disable the Cruise Control.

Manually select the gear you want to launch in. Presumably 2nd or 3rd. turn off factory traction control VDC .

Drive the vehicle at your roll speed, switch on the cruise control and set it.

Floor the accelerator pedal to activate the feature (ECU will retard timing to build boost, cruise control will continue to hold the speed).

The system is activated by getting up to the required speed then turning on the Cruise Control and pressing set. At this point the car can only be accelerated or slowed by using the Accel & Coast button on the steering wheel. It can be deactivated by pressing Cancel. When you would like to enable the Rolling Launch Mode you fully depress the accelerator which will build the pre-set amount of boost (for a maximum of 7 seconds) but will maintain the vehicle speed. When you are ready to launch just press Cancel.

Press the cancel button to turn off the cruise control, car will launch.

### **Linney Advanced Traction Control**

This is our own Traction Control maps which work in conjunction with the Nissan VDC system. It can also work on its own by switch the standard VDC position to Off and R-Mode on suspension.

### **TCM Tuning Super R Mode**

We are able to make changes to the TCM to allow quicker gear changes and acceleration when in R-Mode (required Transmission map update for full effect).

Tip: The quickest way to check which mode you are in when starting the car is to flick up on the Cruise control button to see what boost level is displayed on the MFD.

### **Nissan Launch Control**

**WARNING: Launching you GTR is hard on the drivetrain and can cause damage, we take no responsibility for failures that occur during Launch. Due to the speed of acceleration only use on Private Roads.**

To put the GTR into the Launch mode you need to follow the this procedure

- The gearbox is in Drive in either Manual or Automatic mode
- Gearbox oil temperature is over 65 degree
- Transmission is put in Race Mode
- Traction Control is Race Mode
- Left foot on brake
- Right foot using full throttle

You will now be in the factory launch mode which will hold the revs at 4,100 rpm. At this point you come off the brake and hold on!

[Tip: The best point to release the break is as soon as the car has gone into Launch mode. This maximises the throttle opening and any pressure in the inlet manifold]

### **Launch Control**

In addition to the factory launch control settings we have added Adjustable Launch RPM and the option to switch of VDC/traction control.

The Launch RPM can be adjusted between 2,500 rpm and 4,500 rpm when in Launch mode by using the Cruise control switch on the steering wheel.

The VDC can be switch off if the car bogs down during launch but that this can increase the risk of damaging the gearbox.

**R-mode suspension = advanced traction control. Do not use this setting on dyno or the traction will fight the dyno load/wheel speed differences**