

## **Congratulations!**

Thank you for purchasing Adaptronic Modular ECU. This is a start up guide with step by step instructions that will guide you from installation of the software up to correct wiring configuration.

M1200 basic model ECU for 4 cylinder applications with high impedance injectors M2000 model ECU for 8 cylinder applications with high

impedance injectors and can use 1 upgrade board M6000 basic model ECU for 8 cylinder applications with high

impedance injectors and can have 84 maximum outputs Plug-in ECUs designed for specific vehicle

More detailed features and specifications of this product can be found in our online store at

#### http://www.adaptronic.com.au/ecus/



For more information on Adaptronic products kindly visit our website http://www.adaptronic.com.au

Email us for inquiry or technical support at tech@adantronic.com.au

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# LET US HELP YOU

For help generally with either setup or troubleshooting, just click the upper part of this button found in Eugene Software



Contact Adaptronic window will appear. Fill in the details required like your Name, Email Address and Subject. Providing attachments like your ECU file and log file are necessary for troubleshooting purposes. Without these two files, we would literally be guessing.

#### How to make a Log file?

Ctrl+L in the software, then save it to My Documents or any desired location folder, then reproduce the problem, then hit Ctrl+K to stop the log.



# **FRIENDLY REMINDER**

This is not an exhaustive list of ECU setup; it is a bit of a checklist to answer the most common questions. Detailed documents can be found in this link http://www.adaptronic.com.au/articles/

We recommend that you have your ECU set up by a professional; if you choose to do it yourself then be aware that by tuning badly or not checking things you can cause engine damage and personal injury. 8





With proper handling of this product 1 year warranty is granted after the date of purchase.

# **TRIGGER MODE**

To change trigger settings to a "standard" one (if you aren't starting with the base map set up for your existing trigger): 1. Go to the Inputs tab.

- 2. Click Triggering
- 3. Choose the preconfigured trigger for your engine
- 4. Start with the base angle of zero degrees. and then fine tune the ignition timing lock when the engine is running

For more detailed instruction read the article in this link http://www.adaptronic.com.au/triggering-on-modular-ecu/



# Start the car

Attempt to start the engine. If the trigger system is selected correctly, then it should fire up pretty easily. With correct fuel pressure and injector selection, engines work perfectly. If it doesn't, then you should check the triggering and ignition setup before going further.

# **IGNITION OUTPUTS**

The ECU has no built-in igniter. A separate ignitor or transistor must be used. Damaging the ECU outputs via misconnection will void warranty

WARNING! DO NOT connect ignition outputs directly to ignition coils.



#### **Eugene Software Minimun System Requirements**

Operating System: Windows XP / Vista / 7 / 8 / 10 Pentuim 4 / Atom / AMD etc, 1.5GHz Processor: 1GB RAM: 128MB graphics card Video Card:

2.0 USB: 300MB HDD Space: Min Screen Resolution: 1024 x 768 pixels

# EUGENE SOFTWARE INSTALLATION

- 1. Connect the included Adaptronic USB into your computer.
- 2. Open "Windows Explorer" or "My Computer" and find the Adaptronic USB drive.



- 3. Once drive is opened, find "Eugene.exe" file, double. click the icon to start the installation process.
- 4. Follow the software prompts to complete Eugene Software installation.



# WARNING!

DO NOT connect the ECU on the car until correct basemap was loaded.

## Wire up the ECU

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Perform any wiring modification to the factory loom (eg, adding extra sensors and outputs)

#### Power up the ECU

Provide Power to the ECU by turning the ignition key but do not start.

### Check inputs

Check if all the inputs are working. (Hit F2 to see the Live Guages Window)

### Calibrate inputs

Calibrate inputs such as TPS, manifold pressure, liquid pressure, temperature, lambda etc.

For more detailed instruction read the article in this link http://www.adaptronic.com.au/configuring-inputs-on-mo dular-ecu/

#### Check outputs

Invert each auxiliary outputs and verify that the actuators at least click, for example idle speed, boost control, and so on should all click when switched on and off.

**NOTE:** Follow any specific setup instructions for plug-in ECUs (eg testing the oil metering pump on the RX7s) (6)



(1)



(3)



Make sure Eugene has the latest firmware installed.

#### How can I know the current Firmware installed?



- 1. Connect ECU to your computer, automatically Eugene will open.
- 2. On the lower left of the screen you will see the current firmware version.

#### How can I know the latest Firmware installed?

If you are connected to the internet "Eugene Updater" will automatically download the latest firmware in your local C:\Users\Documents\Eugene\Firmware\Modular from there just click the 🚨 🖛 🔤 button in Eugene then Load, Program and Verify the file.

#### Note:

Eugene Software can also be downloaded in Adaptronic download page under Eugene Complete Pack (Eugene.exe, latest firmware, modular ECU basemap and Adaptronic Log Viewer) and latest modular firmware under Individual Download

http://www.adaptronic.com.au/newdownloadpage/

## **BASEMAP CONFIGURATION**



When using a plug and play ECU, start with the base map that best matches your application. It is located in the Modular>Basemaps directory after installing the software. Sometimes one ECU will have multiple base maps, so pick the best one for your vehicle. For example the Skyline ECU has base maps for the RB25 GTST, the RB26 GTR and the VG30 300ZX.

When using a wire-in ECU, there may also be a base map suitable for your engine, or Adaptronic support team might be able to make one.

Otherwise, if you're making a base map from scratch, you'll need to start with a generic base map and then set up the particulars of the engine.

#### Making changes in the basemap

Change anything in the base map that's different in your car compared to the factory car, that the ECU needs to worry about. This might include, but not be limited to: Injector type Pressure sensors Engine capacity Temperature sensors Stoichiometric ratio Target idle speed Any other outputs you've added

#### Save the base map

Create a new directory on your laptop and save it with a sensible version number.

