



Application Note: Using PGMFI ECUs with LogWorks

Important Disclaimer

This application note describes some of the basics of using an Innovate LC-1 (or LM-1), Innovate LogWorks software, a PGMFI serial logging cable, and a PGMFI compatible ECU for concurrent logging. By installing the software, you understand that Innovate is NOT responsible for the PGMFI ECU, or for any other 3rd party product. Most importantly, you agree that you are tuning your car at your own risk. Data logging is generally very safe. Adjusting your ECU, directly or indirectly, while powerful, can render your vehicle non functional. Follow all directions, read, think, and don't blame us if you corrupt your ECU or destroy your engine.

Introduction

Using an Innovate wideband (LC-1 or LM-1) with PGMFI vehicle is easy. With the PGMFI plug-in for LogWorks, "channels" from your ECU can be logged synchronously with channels from the Innovate modular tuning system (MTS). This can be as simple as 2 channels (i.e., air/fuel ratio plus RPM), or very complex (up to 32 channels maximum).

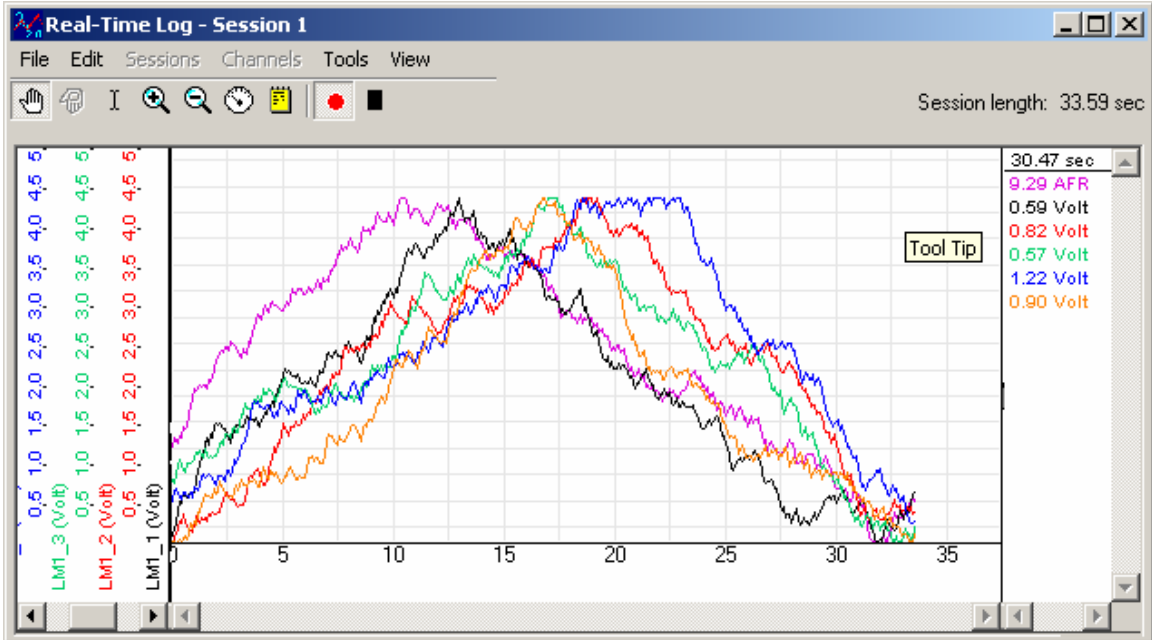
The PGMFI plug-in appears to LogWorks as a "virtual device." This device generates packets of data 12 times per second, regardless of the speed of update from the ECU. Depending on your particular ECU model and firmware, you can expect to get various data rates.

Basic Steps to Log

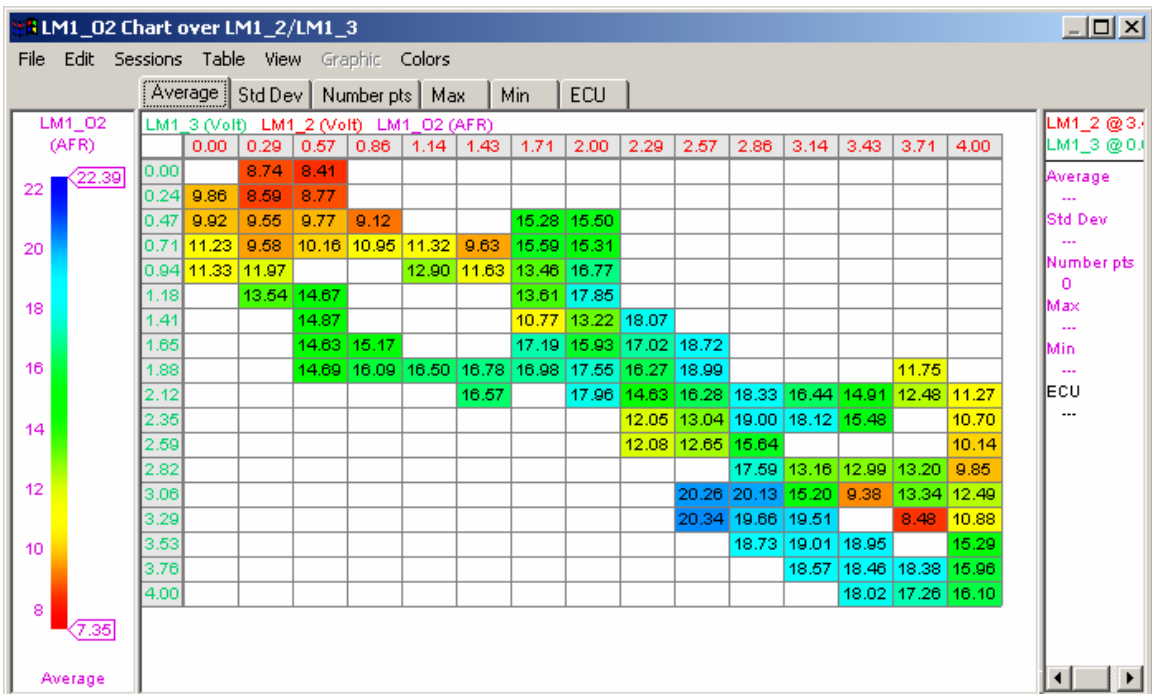
The basic steps are:

1. Install your Innovate hardware and all of the software
 - Install the latest version of LogWorks from Innovate (www.tuneyouengine.com)
 - Follow the instructions in the manuals for installing various Innovate hardware (at least one Innovate hardware piece must be connected in order to log).

2. Run the PGMFI plug in for LogWorks from Programs \ LogWorks2 \ Extra Devices \ PGMEFI
3. Select the appropriate serial adapter and protocol and connect to your ECU
4. Select up to 10 ECU channels to log
5. Run LogWorks from Programs \ LogWorks2 \ LogWorks2
6. Select the COM port to connect to your Innovate hardware (this is **not** the COM port assigned to the ECU)
7. Do real time logging per the LogWorks2 Manual



8. Once you have collected data you can use it to generate XY Plots, charts, calculated data channels, and so on, exactly as if the channels from the ECU had originated from Innovate hardware.



For more information, visit <http://www.tuneyouengine.com>, or

- <http://www.pgmfi.org>
- <http://www.tunewithcrome.com>
- <http://www.xenocron.com>