TechEdge 2J Configuration Guide

This guide aims to provide some information on how to install the TechEdge 2J data logger into an E-Series or AU Falcon.

Before following this guide, you will need to do some background work. Ensure you:

- read the 2J Webpage http://wbo2.com/2j/default.htm
- read the WinLog TechEdge supplement https://www.tiperformance.com.au/Documents/techedge.pdf
- read the WinLog Guide for info on how to create a log and use the realtime dash https://www.tiperformance.com.au/Documents/winlog.pdf
- read the WinLogView Guide for info on how to view a log graph or matrix https://www.tiperformance.com.au/Documents/winlogview.pdf
- read the Datalogger setup thread on Fordmods.com http://www.fordmods.com/ecu-fuel-system-eec-f21/datalogger-setup-t91422.html
- download the T.I. Performance dash and calibration files under Logging at http://www.tiperformance.com.au/library/diy-guides/

You may also need:

- A 2 Bar GM map sensor (only needed for EA-AU 6 Cylinder)
- About 2m of 7 core trailer flex to wire up the logger

Wiring up the logger
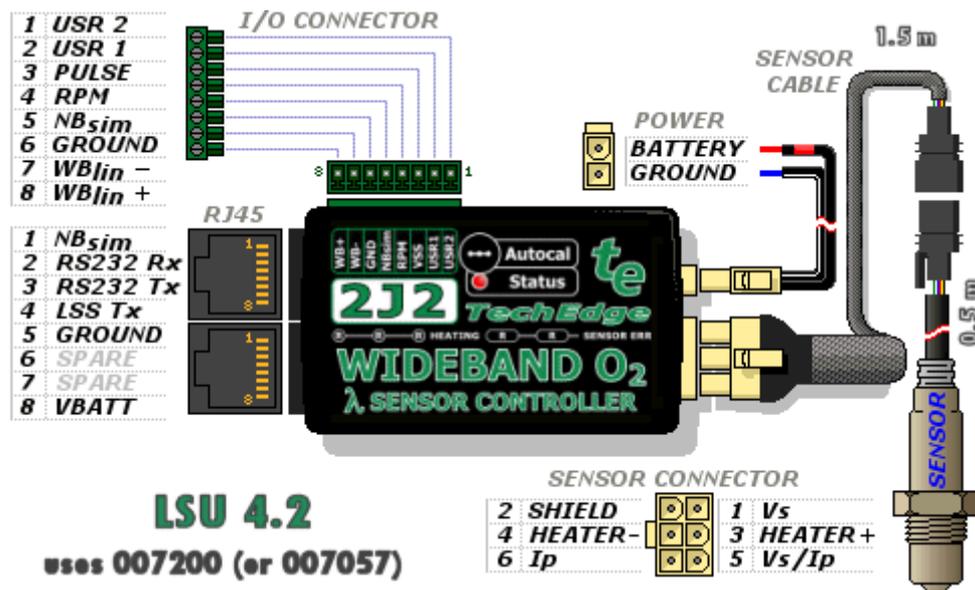
Start by getting a pinout for your ECU. We suggest you connect the following at a minimum:

I/O Connector
- **User 2** – Connect this to the TPS input on the ECU.
- **User 1** – Connect this to the MAP sensor output on your 2 Bar MAP sensor. This should be used for MAF voltage on a V8.
- **Pulse** – Connect this to the VSS input on the ECU.
- **RPM** – Connect this to the Tacho output on the ECU.
- **NBsim** – Connect this to the O2 input on the ECU if you use the factory O2 bung to fit the WB sensor. If you add a second bung in the exhaust, you can leave the factory sensor connected to it.
- **WBlin** – leave disconnected unless you are running an aftermarket ECU or a guage with a 0-5v wideband input.

Power Connector
- **Ground** – Ensure this is connected to a solid earth, close to the ECU.

- **Power** – Ensure this is connected to a solid +12V when the ignition is on.

We recommend setting up the 2J unit under the steering column. Use a short length of 5 or 7 core trailer flex to run across to the ECU.

Installing the software

Download WinLog from https://www.tiperformance.com.au/Software/WINLOGSETUP.exe. Install it using the default settings. Download the dash and calibration files from the T.I. Performance site at http://www.tiperformance.com.au/library/diy-guides/.

Configuring WinLog

Start WinLog, and configure the COM port WinLog will use to connect to the logger. Ensure this matches the COM port you have plugged the logger into. Check this in Device Manager if you are unsure. You can also set the Sparks per Revolution and VSS divisor while here. The screenshot below shows values to suit a 6 cylinder Auto with 3.9:1 diff. The divisor for a T5 and 3.45 diff is 0.0175.
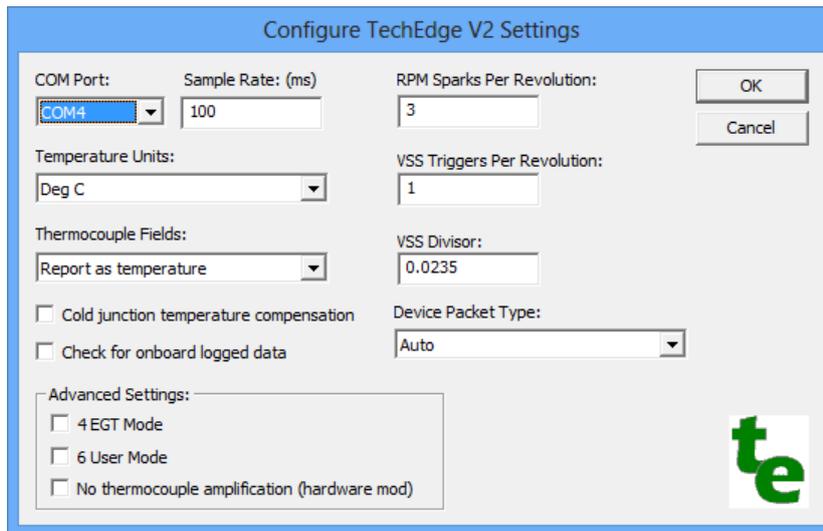
Note: Some users have reported issues with the "Device packet type" set to Auto. Use packet type "classic V2+VSS" instead of the auto setting if you encounter issues connecting to the logger.

Next, configure each input channel on the 2J.
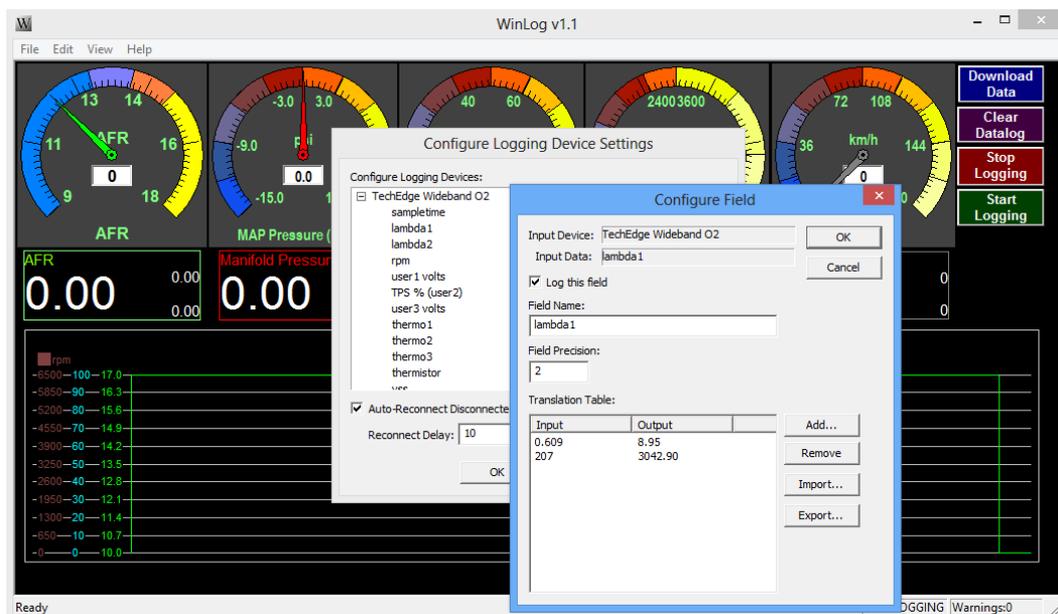
Wideband – load the AFR conversion of Gasoline/Petrol into the input configuration for lambda1.
User 1 Volts – MAP Pressure. Rename to "MAP Pressure (user 1)". Load the calibration file from the site - it is to suit a

GM 2 bar Map sensor. You will need to reconfigure this to suit a MAF if logging a V8.

User 2 Volts – TPS %. Rename to "TPS % (user 2)". Load the calibration file from the site

User 3 Volts – This can be used for whatever you like – Intake air temp, coolant temp, etc. It will not appear on the dash unless you add a dial for it.

Remember to use these names, otherwise the dash may not show any data.

Now you should be read to load the T.I. Performance Winlog dash.

Configure your Dash

To ensure the channels have all been configured correctly, connect to the logger and ensure the dials update. Below is a screenshot of the T.I. Performance Winlog Dash.

From the left, we have:

- **AFR – Air Fuel Ratio.** This tells us how healthy the fuel side of the tune is.
- **Manifold Pressure.** This is used to measure boost (where appropriate) and vacuum.
- **Throttle Position.** This tells us how wide open the throttle is.
- **RPM.** This tells us what RPM cell we are referencing.
- **Speed.** This tells us vehicle speed.

Viewing A Log

Log viewing is done using the companion WinLogView app. Make sure you load the data file and configure the graph to add the channels you want to see. Use the matrix view to show a table of values (histogram) – such as viewing AFR by RPM and MAP. For more information see the WinLogView guide mentioned above.

Good Luck

Remember - this is a fairly simple getting started guide - and requires you to do background reading of the documents linked above. If you find this guide useful or have any suggestions please contact us.

Happy Tuning!

Jason Bolger