SETUP GUIDE

Techmor AC-1-4 to CD Dash

Supported Devices

Techmor AC-1-4

CAN Bus Wiring

AEM CD has 2 separate CAN ports. For 3rd party devices, AEM recommends you use AEM CAN Bus 2, whose connections are contained in a 2 pin Deutsch DTM connector. On older harnesses it may be in an unterminated, twisted/shielded flying lead in the dash harness.

Techmor AC-1-4 Blue Wire (CAN HIGH) → AEM CD Dash "CAN 2" 2 Pin DTM Pin 1 (CAN 2+), Gray wire in twisted/shielded pair
Techmor AC-1-4 White Wire (CAN LOW) → AEM CD Dash "CAN 2" 2 Pin DTM Pin 2 (CAN 2-), Black wire in twisted/shielded pair

The AEM CD Dash has a software selectable CAN terminating resistor. Each network needs 2 terminating resistors, one at each end. The Techmor AC-1-4 does not have a built in terminating resistor and relies on external terminating resistors. We suggest using the internal terminating resistor of the AEM CD Dash and one external terminating resistor (120 ohm) located at the opposite end of the CAN bus. Terminating resistors are placed between CAN+ and CAN-.

Techmor AC-1-4 Setup

The Techmor AC-1-4 comes pre-configured. The .dbc file provided for the AC-1-4 by AEM matches this default configuration.

Supported Channels

The AEM CD Dash supports 32 4 unique channels transmitted from the Techmor AC-1-4.

| CH	CD Dash CHANNEL NAME	CH	CD Dash CHANNEL NAME
1	Chan1_raw	3	Chan3_raw
2	Chan2_raw	4	Chan4_raw

AEM Setup in DashDesign

AEM provides pre-configured layouts that can be easily adapted to accept, display and log (if using a logging CD Dash) the CAN bus channel data from the Techmor AC-1-4. The following steps will show you how to setup your AC-1-4 to work with an existing AEM DashDesign layout.

1. Visit www.aemelectronics.com/forum and scroll down to the CD Dash forum. This is a great place to find answers to all AEM Dash related questions you may have.
2. Open your layout in AEM dashdesignDashDesign.
3. Click the "**Setup**" drop down and then select "**Display…**"
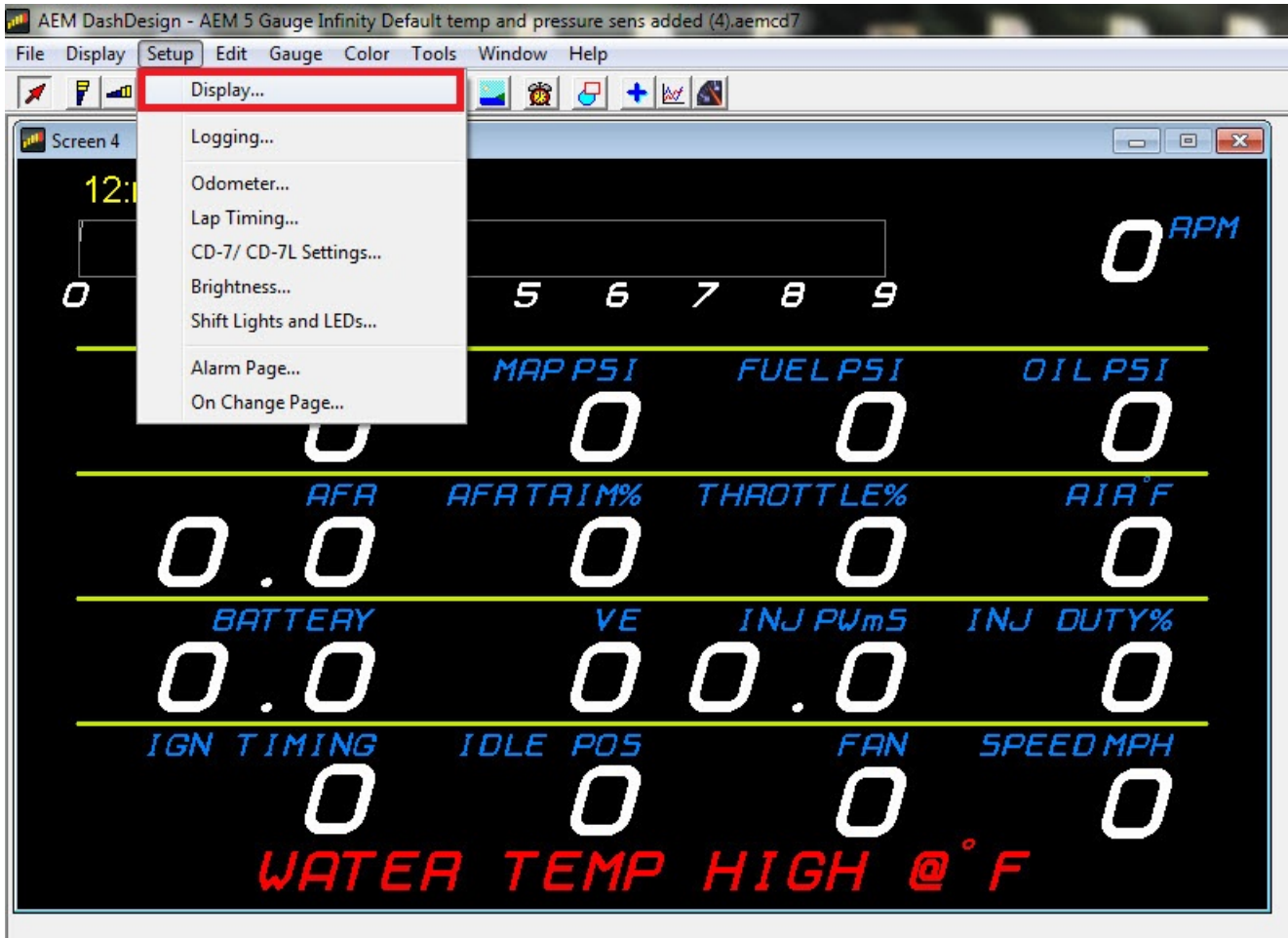
4. Under the "**CAN Receive**" tab, click the drop down next to "**Show**" and select "**Port 2**"
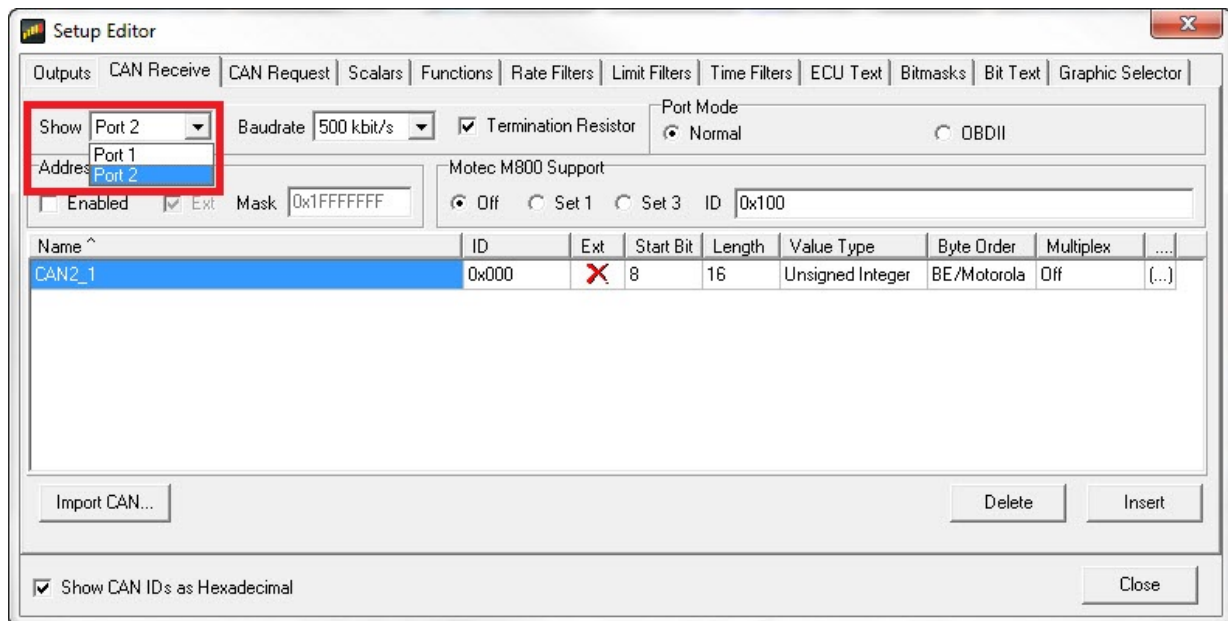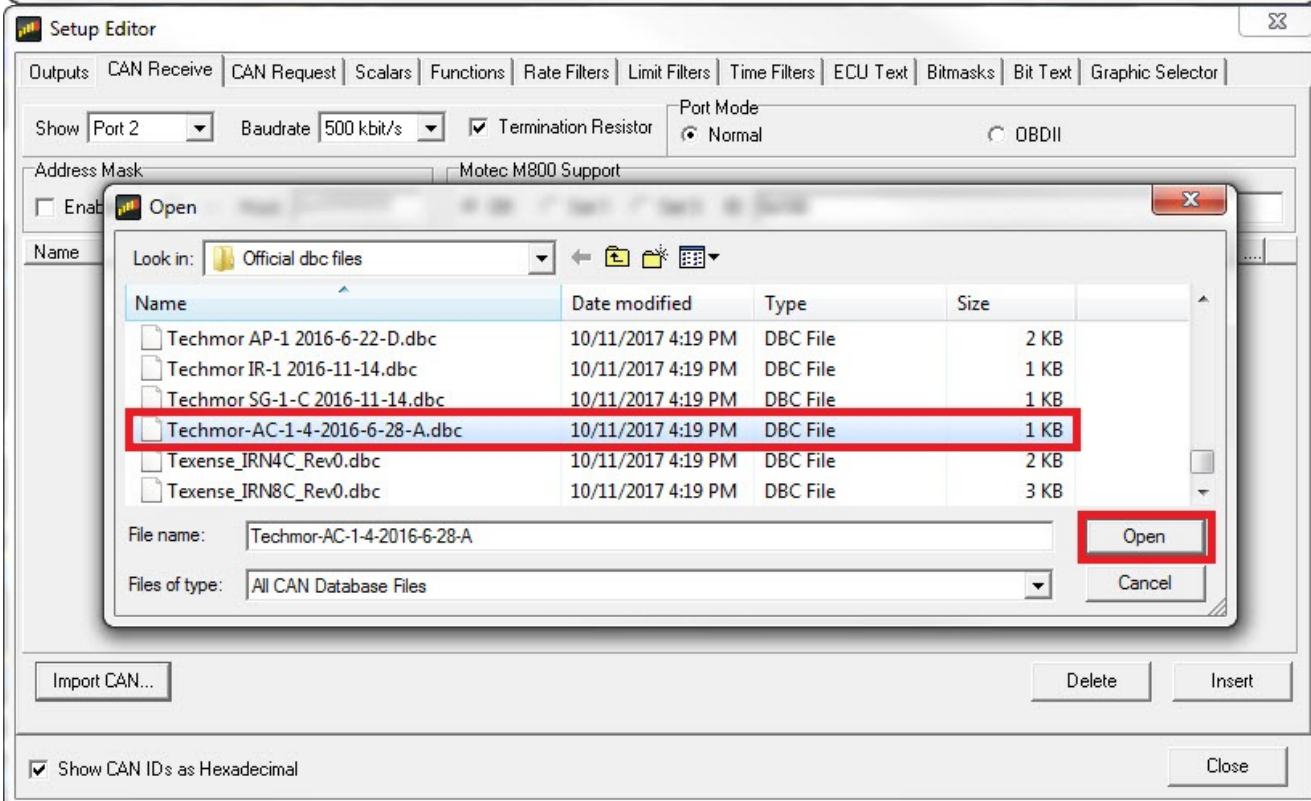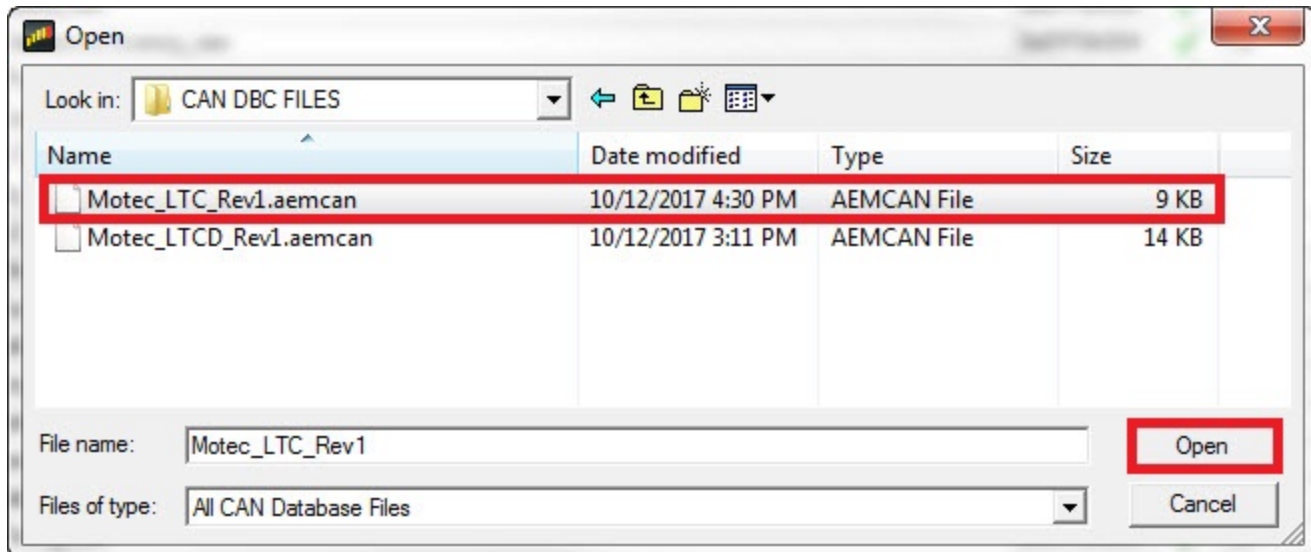
5. Under the "**CAN Receive**" tab, select "**Import CAN…**"
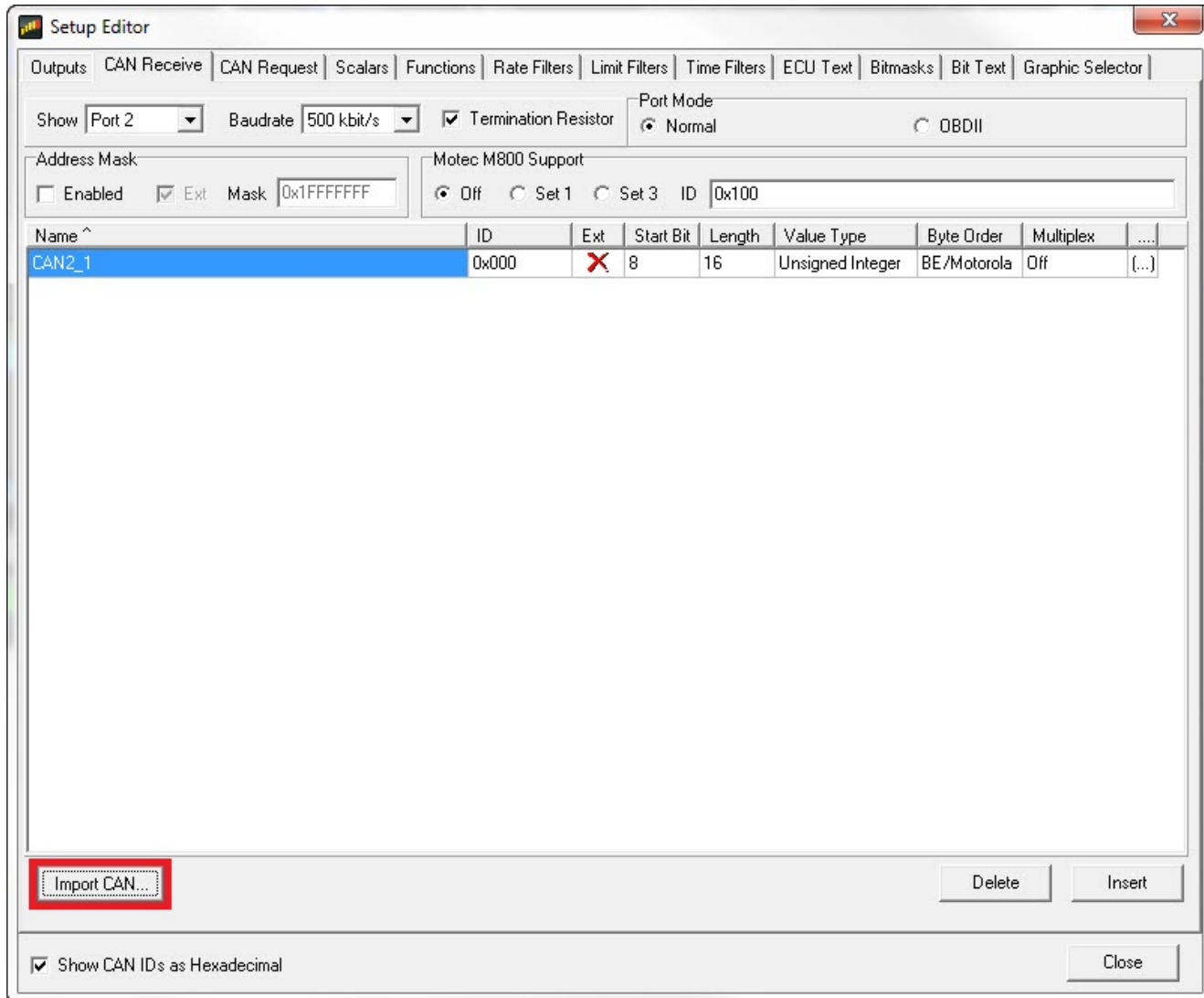
6. Navigate to the .dbc file you downloaded in step twofor your application. Select the file and click "**Open**".

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7. In the **"CAN Import"** window you may expand the drop downs to see all of the available CAN channels for your device. Make sure all of the channels are selected. Any unused channels can be easily deleted after the dash setup is complete. Once all channels are selected, click "**Import**".
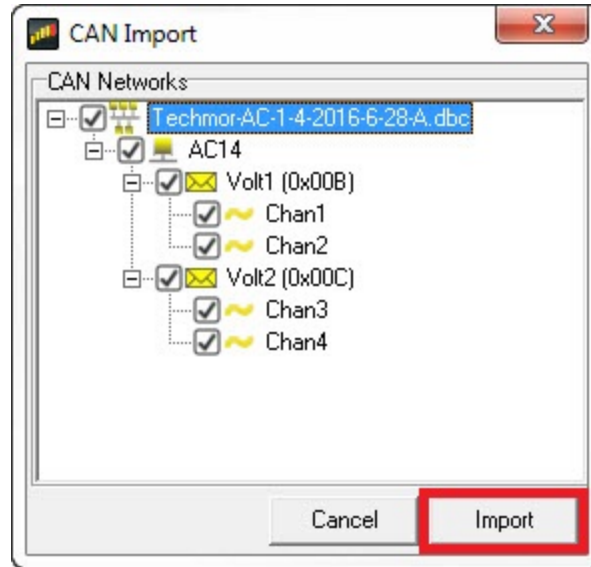
8. In the Setup Editor under the "**Outputs**" tab check that the channels channels selected to import are present. If they are not, go back to step 5 and try again. As you can see below the Techmor AC-1-4 channels are present.

9. For this example we will setup "Chan1" as fuel pressure using an AEM 150psi sensor. You will follow the same general steps to setup other pressure and temperature sensors with the Techmor AC-1-4 and AEM CD Dash. Find the output "**FuelPress**" in the "**Outputs**" tab and set its Primary Input to "**Chan1**".
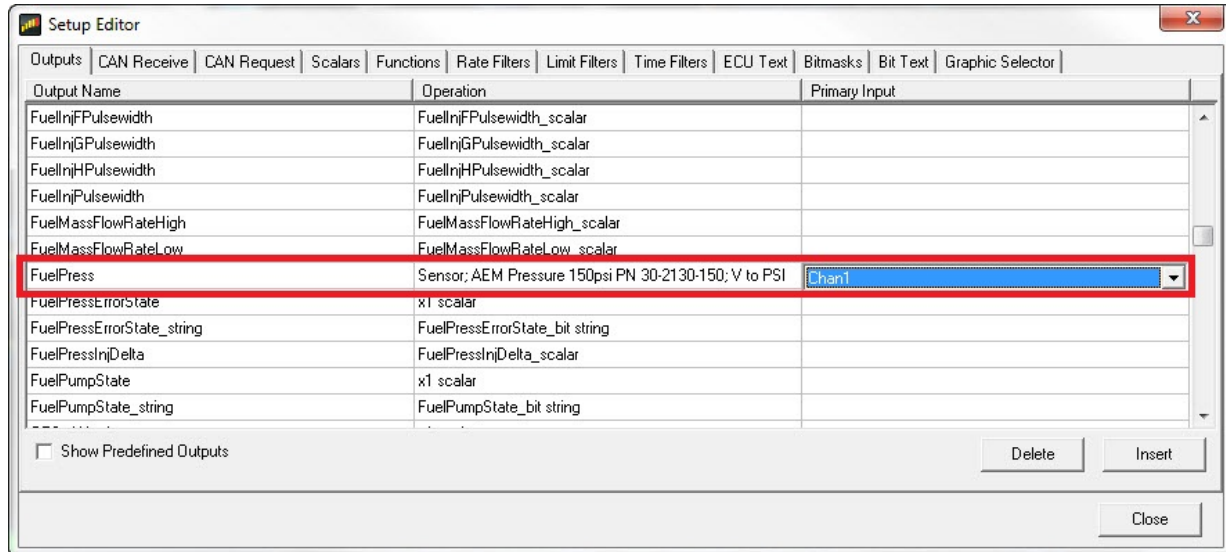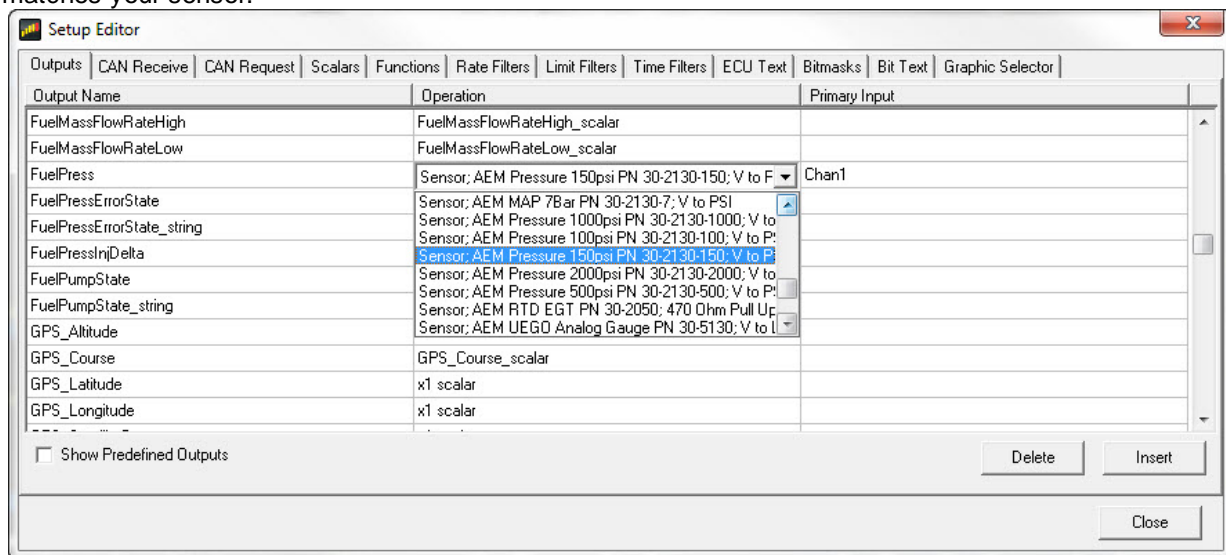
10. Select the correct conversion for your specific sensor. Select the drop down under the "**Operation**" column for the "**FuelPress**" output and scroll down to "**Sensor; AEM Pressure 150psi PN 30-2130-150; V to PSI**" or the one matches your sensor.

11. Navigate to a page in your layout that displays Fuel Pressure. Double click on the Fuel Pressure value or on the needle/bar graph you wish to use to display Fuel Pressure. This will open the "**Value Editor**", "**Dynamic Needle Gauge Editor**" or "**Bar Editor**" " window. Click on the "**Input**" drop down and select the channel "**FuelPress**". Click "**Ok**K".
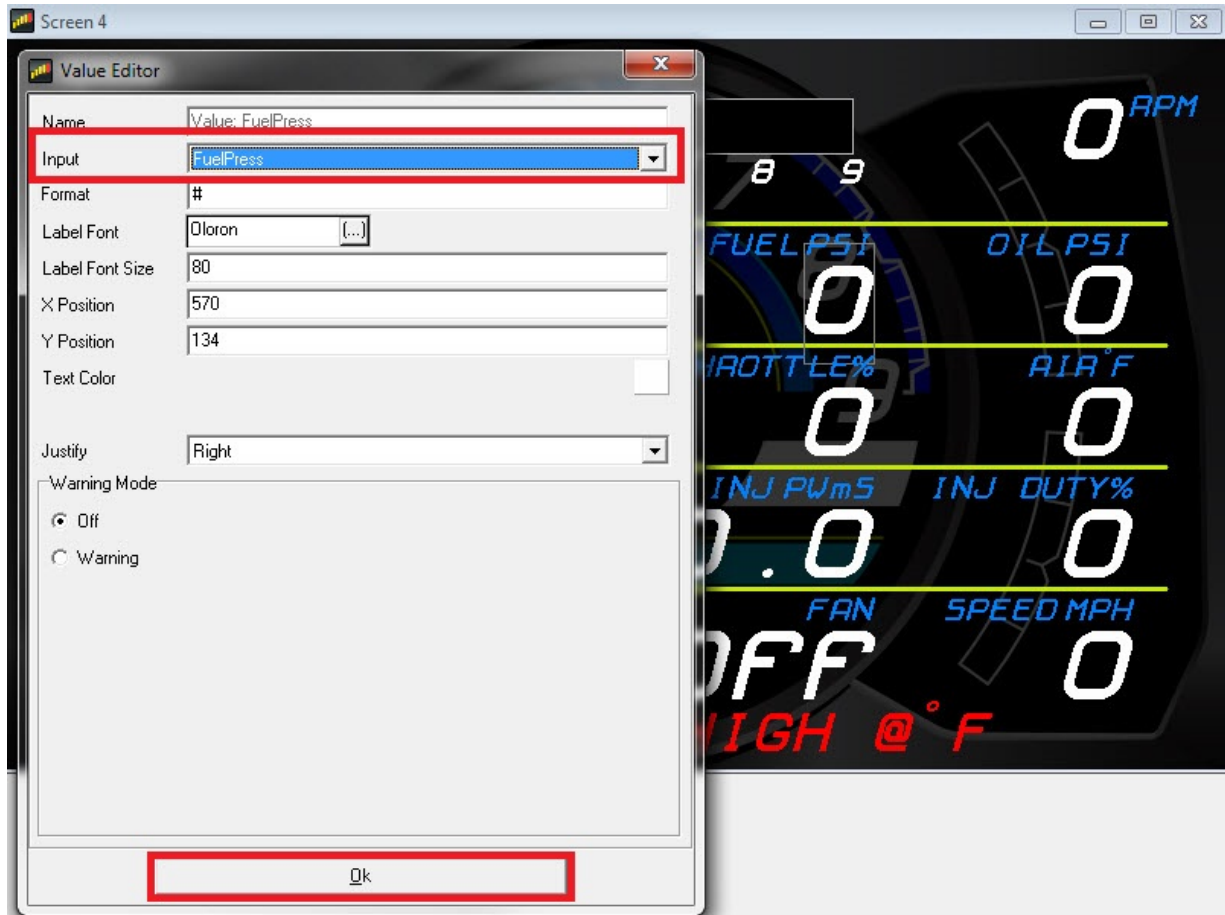
12. Save your the layout. Once the layout has been saved, connect the dash to your computer and press "**Ctrl+U**" or "**File>Upload to Display…**" Once the upload is complete you may unplug the dash from the computer. You should now be able to view the Fuel Pressure from your Techmor AC-1-4 Analog to CAN Converter on the AEM CD Dash.