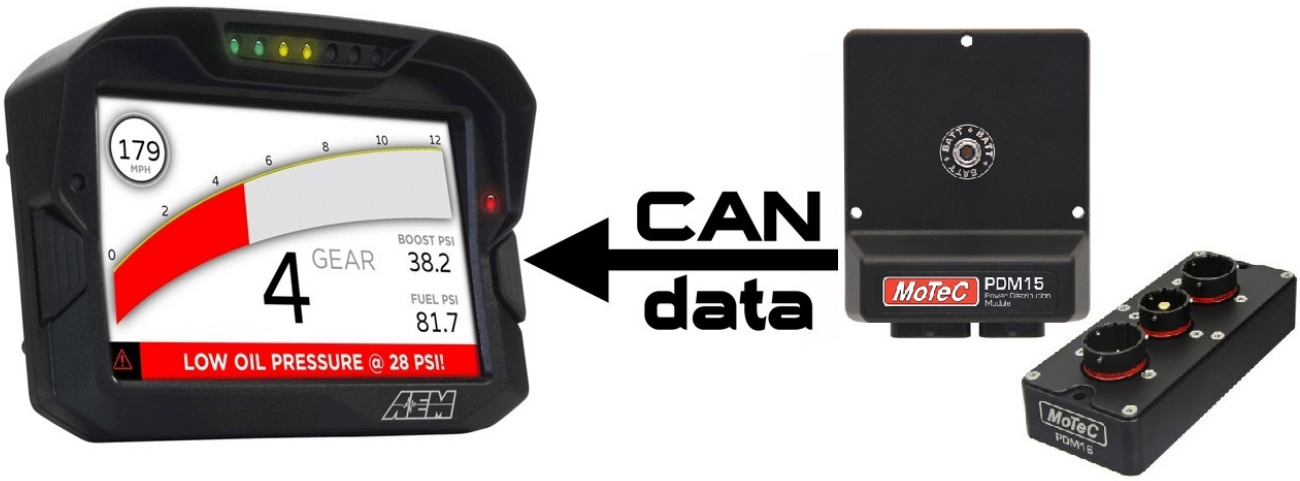
SETUP GUIDE



MoTeC PDM to CD Dash

Supported Devices

MoTeC PDM15, PDM16, PDM30, PDM 32

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.

PDM16 Pin A_J (CAN Low) → AEM CD Dash "CAN 2" 2 Pin DTM Pin 2 (Black wire in twisted/shielded pair)
PDM16 Pin A_J (CAN High) → AEM CD Dash "CAN 2" 2 Pin DTM Pin 1 (Gray wire in twisted/shielded pair)

PDM32 Pin A_10 (CAN Low) → AEM CD Dash "CAN 2" 2 Pin DTM Pin 2 (Black wire in twisted/shielded pair)
PDM32 Pin A_11 (CAN High) → AEM CD Dash "CAN 2" 2 Pin DTM Pin 1 (Gray wire in twisted/shielded pair)

PDM15 Pin B_25 (CAN Low) → AEM CD Dash "CAN 2" 2 Pin DTM Pin 2 (Black wire in twisted/shielded pair)
PDM15 Pin B_26 (CAN High) → AEM CD Dash "CAN 2" 2 Pin DTM Pin 1 (Gray wire in twisted/shielded pair)

PDM30 Pin B_25 (CAN Low) → AEM CD Dash "CAN 2" 2 Pin DTM Pin 2 (Black wire in twisted/shielded pair)
PDM30 Pin B_26 (CAN High) → AEM CD Dash "CAN 2" 2 Pin DTM Pin 1 (Gray wire in twisted/shielded pair)

The CD Dash has a software selectable CAN terminating resistor. Each CAN network needs 2 of these terminating resistors with one located each end. The MoTeC PDM 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 wired in connecting CAN+ and CAN-.

MoTeC PDM Software Setup

 AEM Performance Electronics, 2205 W. 126th Street Unit A, Hawthorne, CA 90250, Phone: (310) 484-2322 Fax: (310) 484-0152

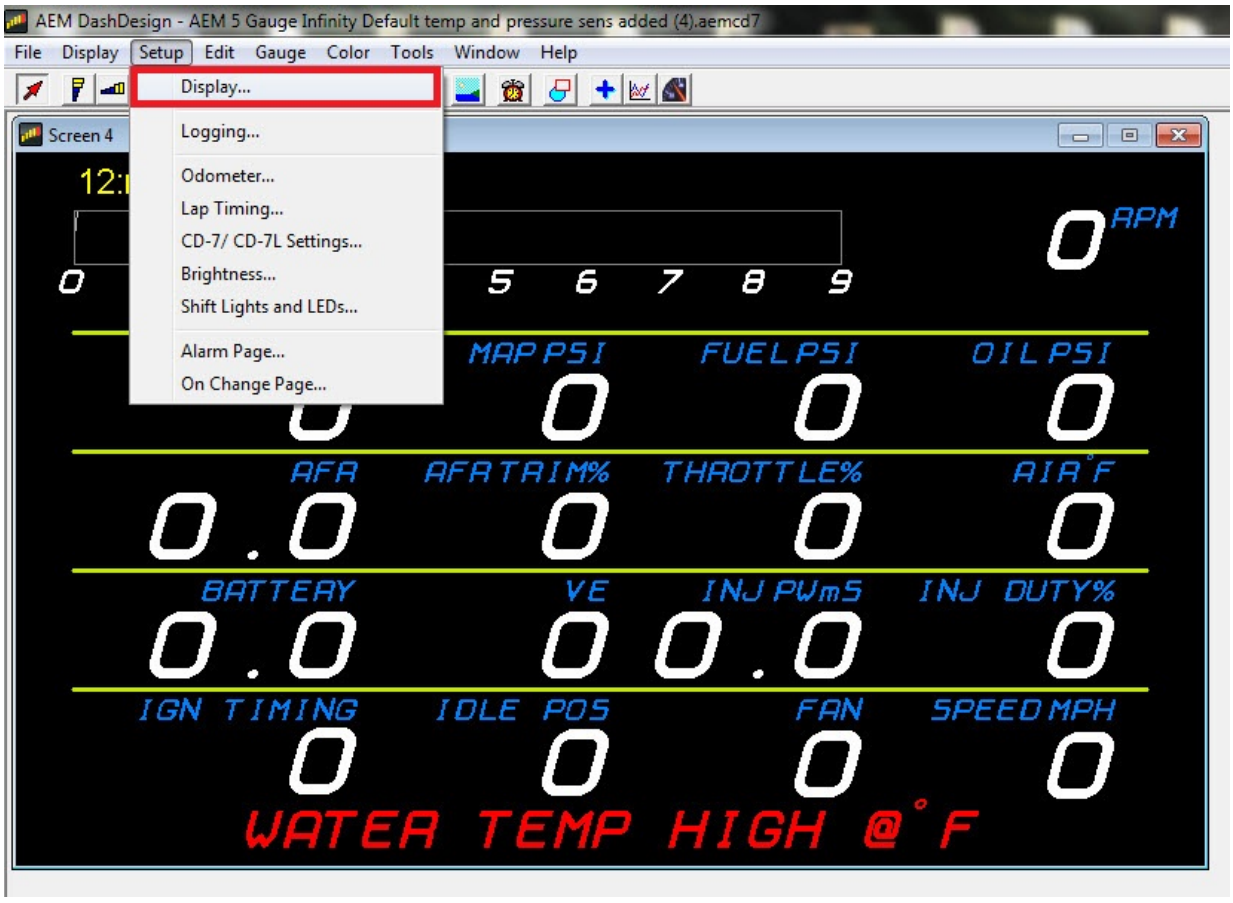
SETUP GUIDE

The MoTeC PDM Manager software is not required to display PDM CAN data on the CD Dash if using a single PDM unit preconfigured by MoTeC. The .dbc file provided for the MoTeC PDM by AEM matches the default configuration.

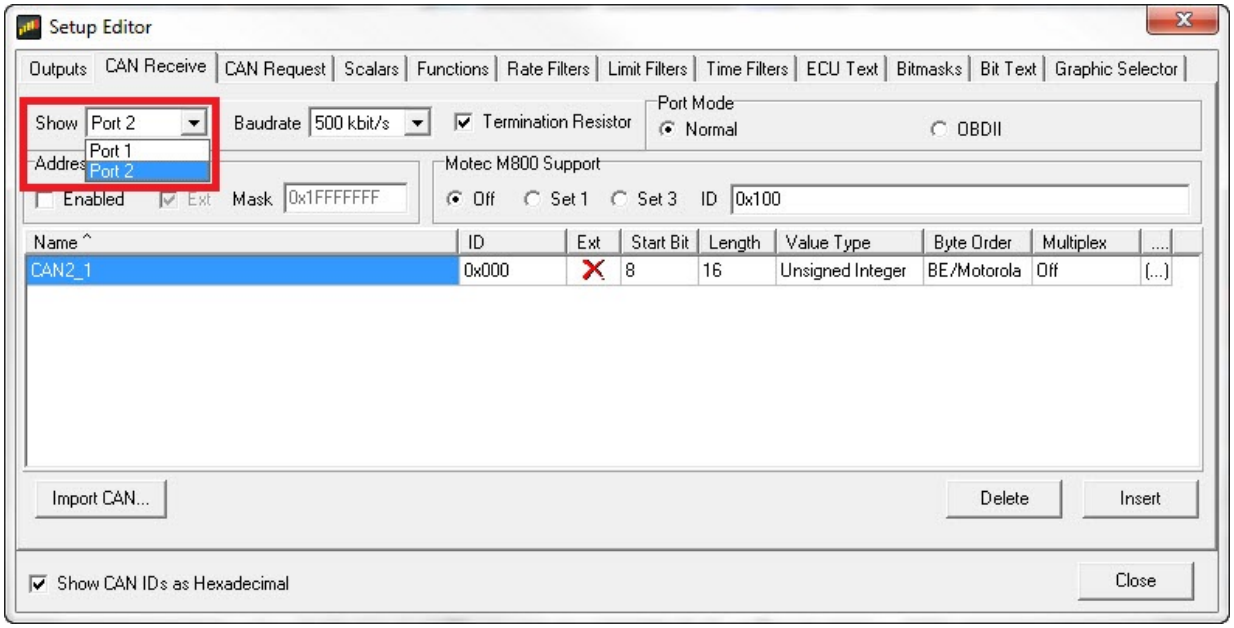
Setup in AEM DashDesign

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 a MoTeC PDM. The following steps will show you how to quickly setup your PDM to work with an existing AEM DashDesign layout.

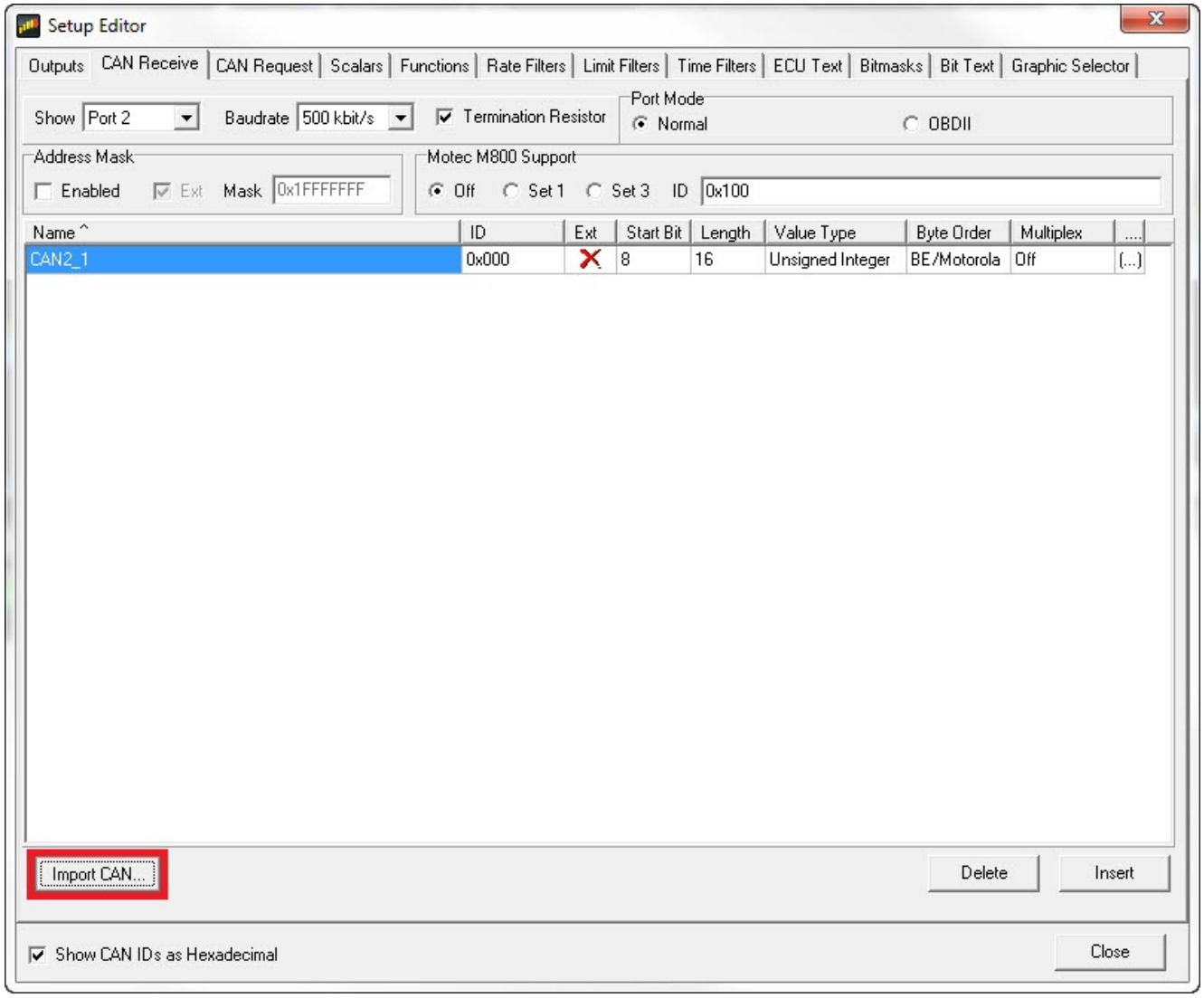
1. Visit www.aemelectronics.com/forum and scroll down to the CD Dash forum. This is a great place to find answers to all AEM Dash related questions you may have.
2. Scroll down to the MoTeC section and download the can configuration associated with "LTC, Lambda to CAN Module"
3. Open your layout in AEM dashdesignDashDesign.
4. Click the "**Setup**" drop down and then select "**Display…**"



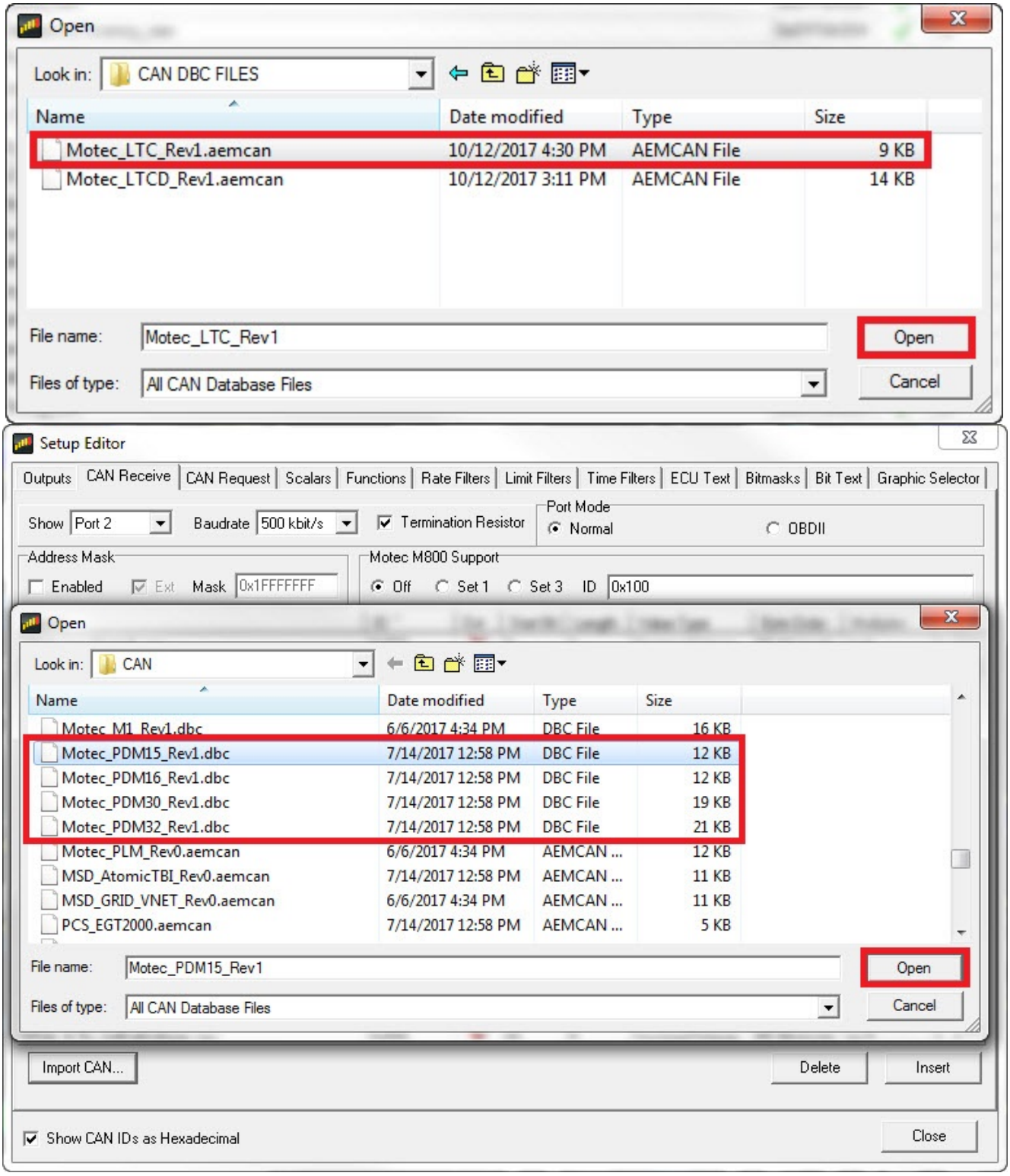
5. Under the "**CAN Receive**" tab, click the drop down next to "**Show**" and select "**Port 2**".



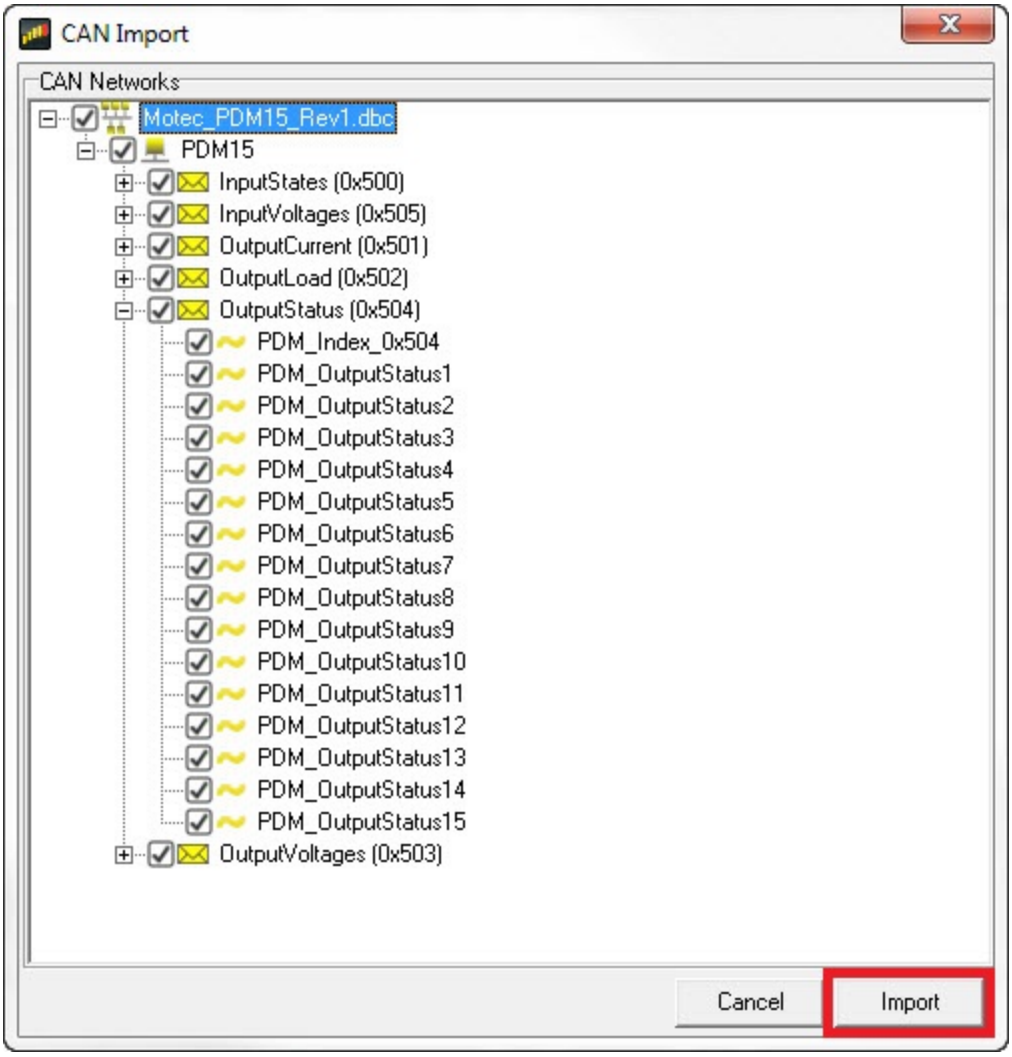
6. Under the "**CAN Receive**" tab, select "**Import CAN…**".



7. Navigate to the .dbc file you downloaded in step twomatching your application. Select the file and click "**Open**".

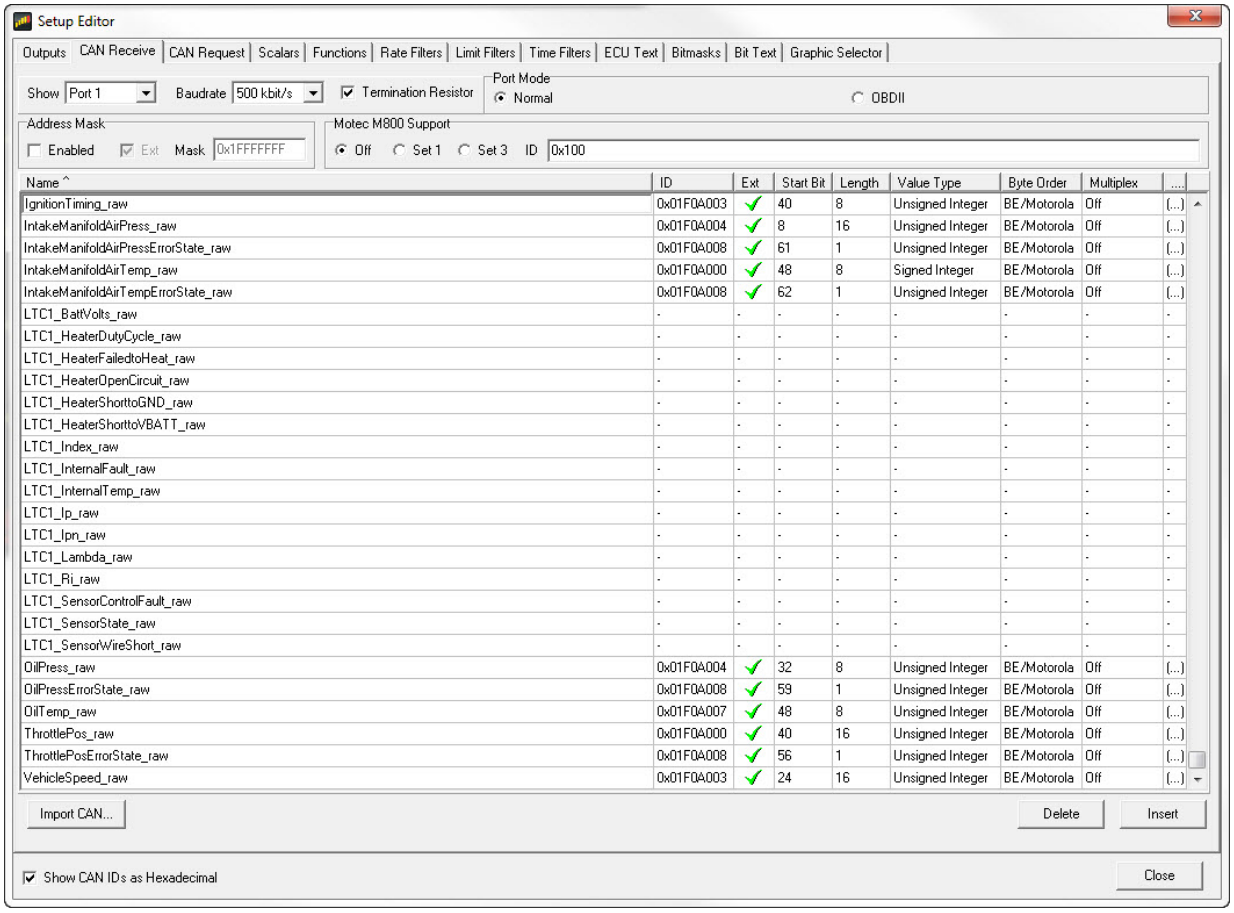


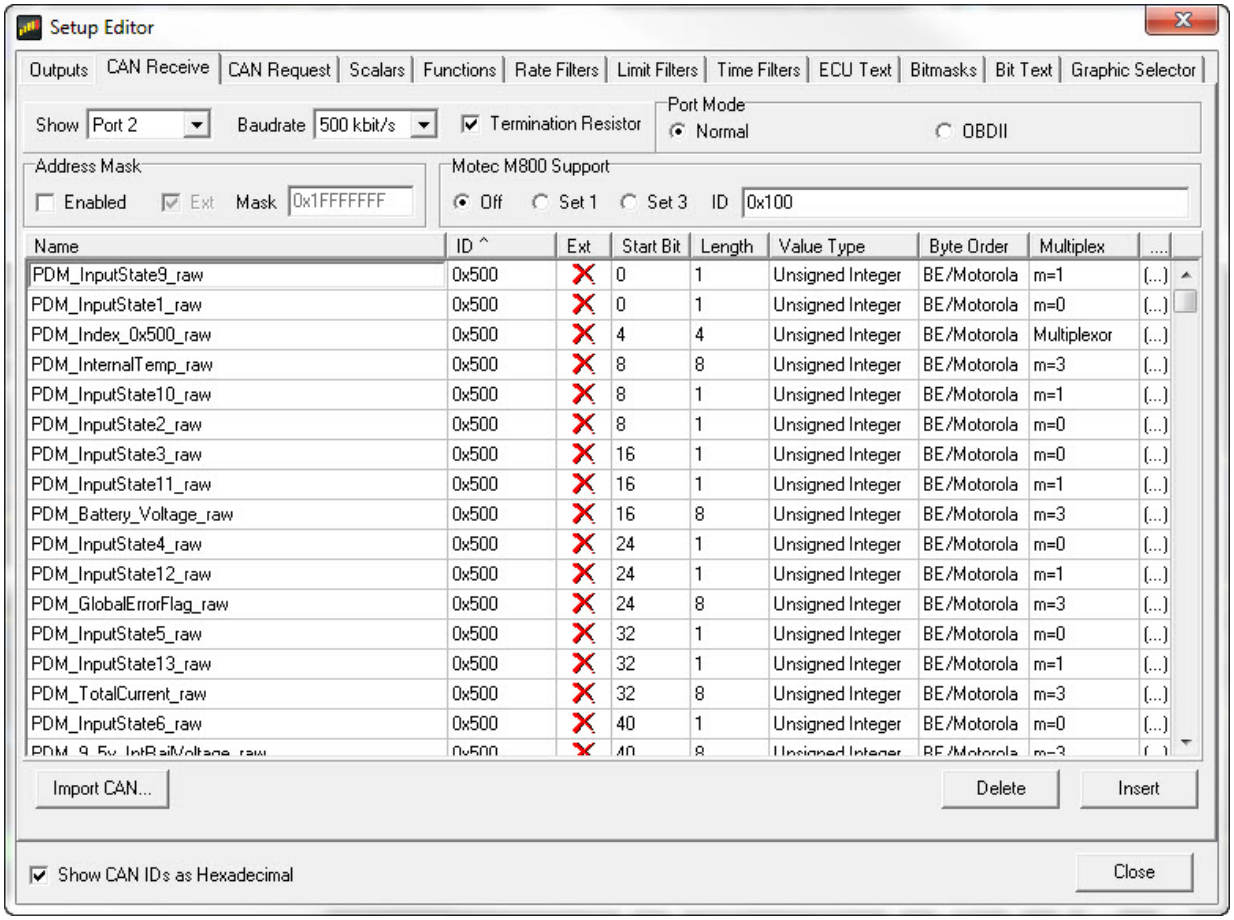
8. In the **"CAN Import"** window you may expand the drop downs to see all of the available CAN channels for your device. Make sure all of the channels you intend to use are selected. Any unused channels can be easily deleted after your DashDesign layout is complete. Once the channels are selected, click "**Import**".



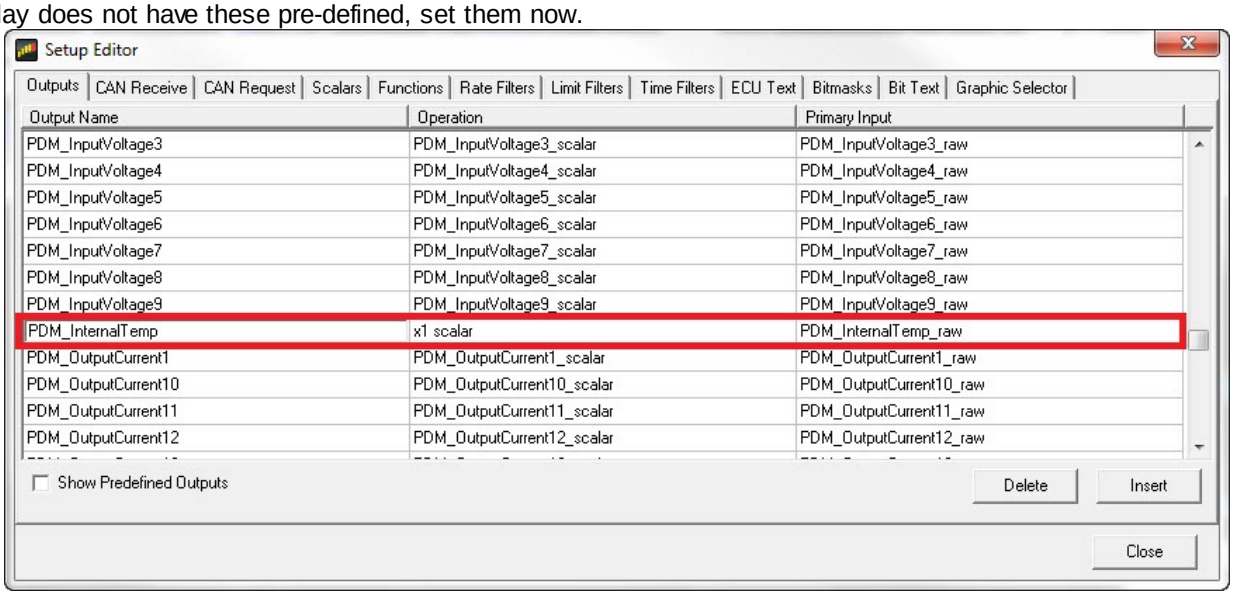
9. In the Setup Editor under the "**Outputs**" tab, check that the channels channels selected to import are present. If they are not, go back to step 5 and try again. As you can see below the channels for the PDM are present.

SETUP GUIDE



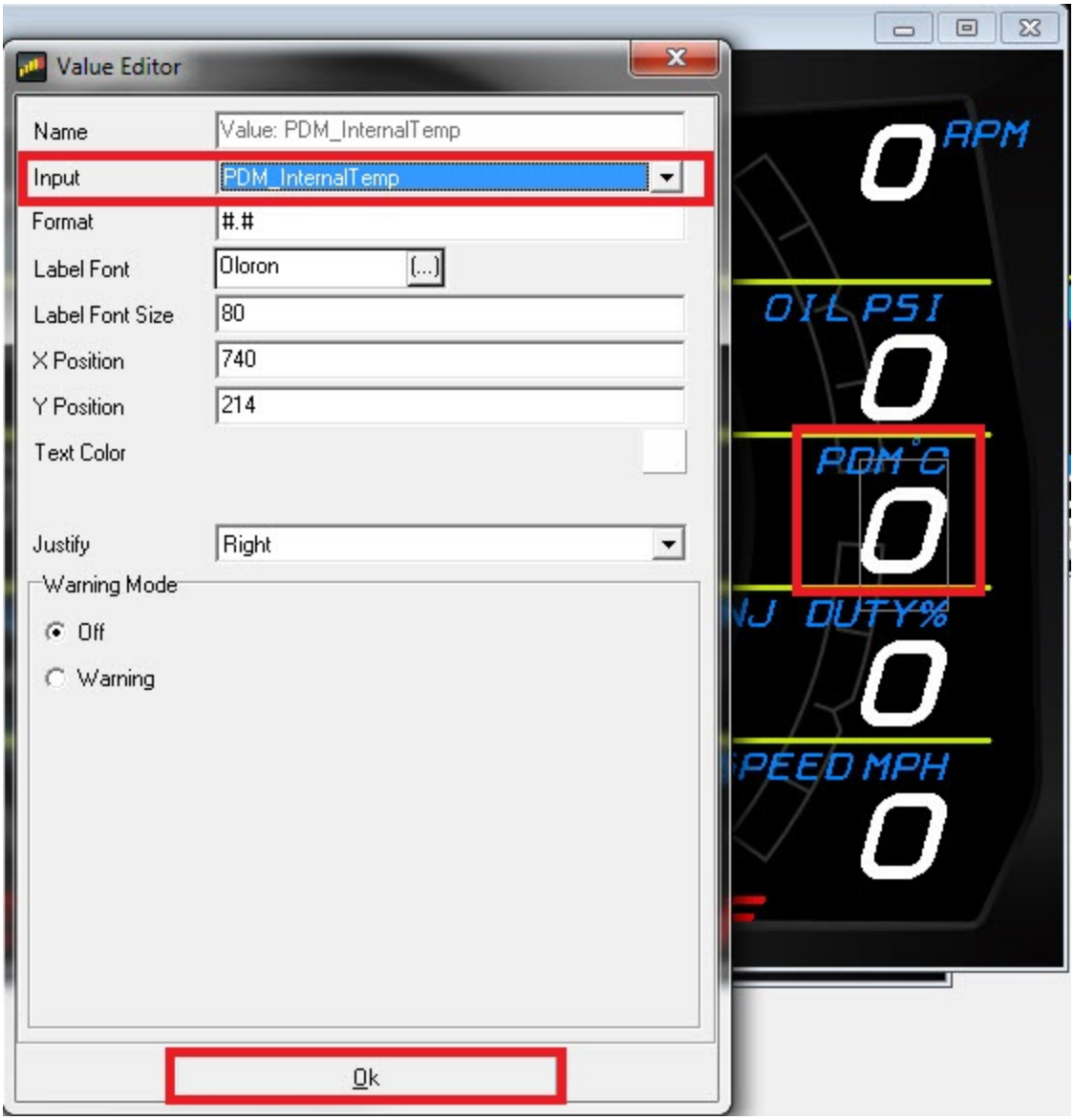


10. For this example we will setup the channel "**PDM_InternalTemp**". You will follow the same general steps to setup other PDM channels to display on the CD Dash. Under the "**Outputs**" tab you will find the Output Name "**PDM_InternalTemp**". This channel is created automatically during the import of the PDM's .dbc file. The correct scalar and primary input (PDM_InternalTemp_raw) are also pre-defined. If the channel you wish to display does not have these pre-defined, set them now.



SETUP GUIDE

11. Navigate to a page in your layout that will display PDM Internal Temperature. Double click on the value or on the needle/bar graph you wish to use to display PDM Temp. This will open the "**Value Editor**", "**Dynamic Needle Gauge Editor**" or "**Bar Editor**" " window. Click on the "**Input**" drop down and select the channel "**PDM_InternalTemp**". Click "**Ok**".



12. Save your the layout. Once the layout has been saved, connect the CD Dash to your computer and press "**File>Upload to Display…**" or "**Ctrl+U**" to upload your DashDesign layout to your CD Dash. Once the upload is complete you may unplug the dash from your computer. You should now be able to view the PDM internal temperature on the AEM CD Dash.