

V_Net Exhaust Gas Temperature Module

Part Number 230-VM-TC-1800

Module Configuration Setup:

Module Type: SC_TEMP1600

Serial Number:

Channel Name: _____

Channel Options:

V_Net ID: _____

Sensor Type: Type K thermocouple

V_Net Update Rate: 50 /second

Max Temp: 2200 Deg F

Logger Sample Rate: 50 /second

Module Record Rate: 25 /second

Scale:

Degrees Fahrenheit

Degrees Celsius

Module Installation:

The V_Net connector module can be inserted at any location in the V_Net cable in your vehicle. Select locations where the connector module can be mounted safely. Avoid mounting near heat sources and high voltage ignition wires. The connector module must be mounted in a location the temperature does not exceed 185 degrees or the module will be damaged. Route and secure the sensor cable from the module and connect to the thermocouple sensor. The interface cable can be shortened to remove excess cable. Before you shorten the cable, complete the module installation and be sure the module is functioning properly then shorten the cable. If you shorten the cable be sure to connect the wires to the same terminals on the connector. In addition be sure to put each terminal screw back into the same terminal lug. Each wire in the cable, terminal lug, and screw is made of a different metal. Mixing them will cause inaccurate readings.



Module Setup:

The module has been factory configured as described in the setup box located at the top of this page. If this information is filled out, no further setup is required to begin using the module. However, if the words **USER DEFINED** is circled this module has not yet been configured and must be configured by the user before this module can be used.

Before using this module you must also insure that no other modules in your system have been assigned to the same V_Net ID as this module. If you already have a module in your system assigned to this ID you will either need to change the ID as described on the back of this setup sheet or exchange this module for one programmed with an appropriate ID.

If you are using the RacePak DataLink program to configure your V_Net system or to upload data from the system using a V-Net Series data logger, you will need to update your car configuration file before you will be able to access the information from this module. Please refer to the setup instructions below.

Software Setup and Module Configuration

Before you can use this module as an upgrade to an existing V-Net Series data logger you will need to update the Car Configuration File in your PC. To perform this step you will need to connect the data logger to your PC using the units serial interface cable (See your units instruction manual for details). Next start the RacePak DataLink program. If you selected your car configuration file as the default configuration file, the file will be opened and the file tab for the car configuration file will be selected. If it is not, open your car configuration file by selecting the **Open Car Configuration** menu item located in the **Files** main menu selection.

Next apply power to your the board system, wait 10 seconds and select the **Read VNET Config** menu item located in the **Edit** main menu selection. The DataLink program will read in the configuration of your system. If

everything works properly, a new channel button will be added to the configuration file representing this module. For example, the button may be captioned “Cyl #1”.

However, if the new button is captioned as the module serial number (example: SN_12000), you have two modules in your system programmed using the same V_Net ID, in this example “Cyl #1”. You must change the V_Net ID on one of the modules to something else like “Cyl #2”. If you cannot find an appropriate V_Net ID in the list to match what the module is measuring you can use one of the User Custom ID’s found under the V_Net ID list.

To edit the setup parameters on this sensor module, position the mouse cursor over the channel button and click the right mouse button. The VNET Input Channel Parameters dialog box will be displayed. A Portion of this dialog box is show below.

Editing the Module Setup:

To edit the setup parameters on this sensor module, position the mouse cursor over the channel button and click the right mouse button. The VNET Input Channel Parameters dialog box will be displayed. A Portion of this dialog box is show below.

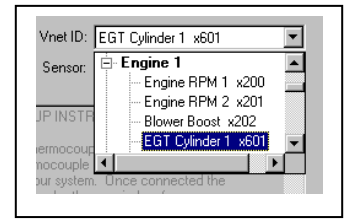
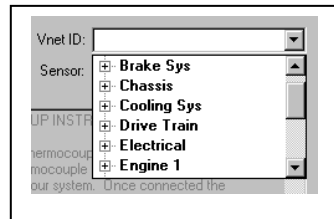
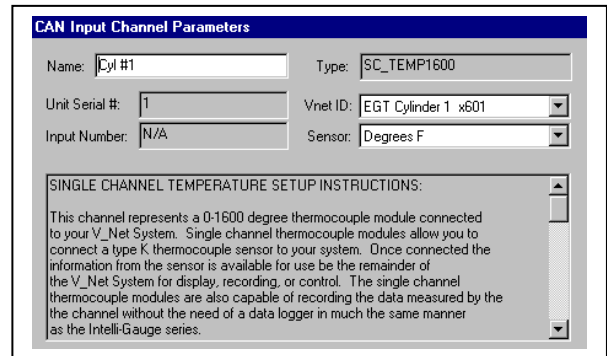
Locate the text box labeled **Single Channel Temperature Setup Instructions**. This text box provides online instructions for modifying the setup of this module. Read the instructions and modify the setup as desired. (Please note the scroll bars located on the left- hand portion of the text box is used to scroll through the instructions).

Programming the V_Net ID:

Every sensor device in your data logger system must be assigned a unique V_Net ID. This ID identifies to the system what the sensor is measuring. For instance Cyl #1.

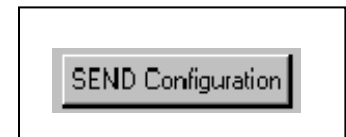
To set the V_Net ID click on the V_Net ID selection list located above. A list of sensor groups will be displayed as shown. Each group contains an extensive list of parameters associated with that grouping. To open a group click on the plus sign located in front of the group name.

The group will be expanded and individual parameters will be listed. Select the parameter that matches you application by clicking on it. The program will load the appropriate default values including the name for the selection. If you wish to modify the name change the name in the name entry box after you have selected the V_Net ID.



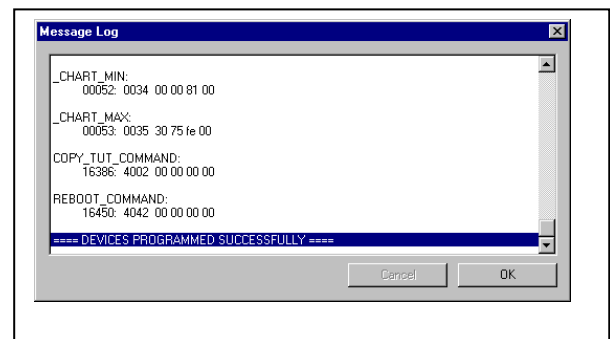
Sending the Configuration to the module:

When you have finished editing the configuration on your PC, you will need to send the information to the sensor module. Be sure the serial interface cable is connected to your V50 unit or data logger and power is applied to the system. To send the information position the mouse cursor over the **Send Configuration** button and click the left mouse button. The progress box as shown to the left will be displayed.



When finished sending the message “**Device Programmed Successfully**” should be displayed at the bottom of the progress box. If you receive an error message, turn power to the system off and then back on and repeat the send configuration process. If problems persist, check the troubleshooting section in your manual and then contact RacePak.

Save your configuration file to disk and update the Module Configuration Setup Box on the front of this worksheet with the new setup configuration.



IMPORTANT:

Save this Installation Worksheet in your System Manual in Appendix V. This worksheet is part of your system documentation. You may need this worksheet when modifying or trouble shooting your system.