

V_Net Air Sensor Module

Part Number: 220-VP-TR-AIR

Module Configuration Setup:

Module Type: SC_LOWTEMP

Serial Number:

Channel Name: Ambient Temp

Channel Options:

V_Net ID: Ambient Air Temp x580

Sensor Type: Temperature Fahrenheit

V_Net Update Rate: 50 /second

Logger Sample Rate: 50 /second

Sensor Scaling:

Module Record Rate: 25 /second

A 1.3551 will become 32

B 2.1882 will become 212

Graph Scaling:

Min Value 0 **Max Value** 300

Digits Before 3 **Digits After** 0

Sensor Installation:

Select a location to install the air temperature sensor element such that the wires connecting the sensor to the V_Net connector module can be routed safely, avoiding heat sources (exhaust manifold) and the high voltage ignition wires.

Install the temperature sensor element into the manifold using an 1/8 inch pipe thread adapter. Be sure to use an appropriate pipe thread sealant (Teflon tape) to insure no leakage occurs during operation. Tighten securely.



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 the sensor element. If there is excess cable the cable can be shortened using connector kit P/N 810-CN-LT2P. You should complete installation and verify operation before shortening the cable.



Module Setup:

The module has been factory configured as described in the setup box located at the top of this page. No further setup is required to begin using the module. In stand-alone V_Net system you must insure, however, 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 V300 or V500 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 on the back of this installation sheet.

Software Setup and Module Configuration

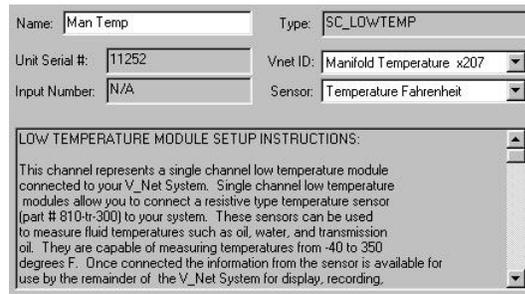
Before you can use this module with a V300 or V500 Data Logger you will need to update your Car Configuration File in your PC. To perform this step you will need to connect the data logger to your PC using the units serial interface cable (See your units instruction manual for details). Next start the RacePak DataLink program. If you selected the 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 on 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. The button will be captioned **“Mani Temp”**.

If a new button is added, however, and the button is captioned **“#2 Mani Temp”**, you have two temperature sensors in your system programmed to measure Manifold Temperature. You must change the V_Net ID on one of the sensors to measure the actual parameter measured such as **“Water Temp”**.

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.

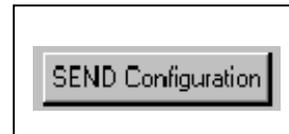
Locate the box labeled **Unit Serial #**. Make sure the serial number is the same as the serial number of the module as shown in the module configuration box on the opposite side of this installation work sheet. If it is not, you are not editing the correct channel/sensor module. Check the other channel buttons to locate the correct sensor module.



LOW TEMPERATURE MODULE SETUP INSTRUCTIONS:
This channel represents a single channel low temperature module connected to your V_Net System. Single channel low temperature modules allow you to connect a resistive type temperature sensor (part # 810-tr-300) to your system. These sensors can be used to measure fluid temperatures such as oil, water, and transmission oil. They are capable of measuring temperatures from -40 to 350 degrees F. Once connected the information from the sensor is available for use by the remainder of the V_Net System for display, recording,

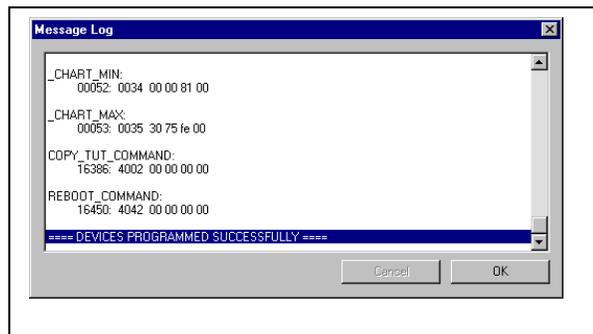
Locate the text box labeled **Low Temperature Module Setup Instructions**. This text box provides online instructions for modifying the setup of this module. Read the instructions and modify the setup as desired. (Please note the scroll bars located on the left- hand portion of the text box are used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

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 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.

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.